

**URBAN LAND DEVELOPMENT POLICIES:  
The case of Saudi Arabia**

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## ABSTRACT

The growth of population, the higher standard of living and all other changes associated with economic growth have been generating pressure on urban land, and consequently on urban land development policies. Under the continuous pressure of urbanization and urban growth, land policies have displayed several weaknesses. As a result urban growth has not been directed in a manner consistent with development goals, as been able to respond to social and cultural needs.

The aim of this dissertation is to explain existing land policies, identify the problems of urban land development, the weaknesses of land policies and attempt to find appropriate solutions.

This thesis comprises ten chapters. The introductory chapter presents the thesis. The second chapter looks into the phenomenon of urbanization and its impact on urban land. The third chapter defines land policies whilst the fourth discusses and presents the cultural and environmental criteria by which land development and land policies will be evaluated. Chapter five and six examining physical planning policies in Saudi Arabia . Chapter seven evaluate land development and define existing urban land problems;it contains three case studies for the purpose of evaluation. Evaluation of land policies against the generated problems of land development are discussed in chapter eight. The ninth chapter presents the thesis

recommendations and the final chapter concludes the work and presents some final remarks.

In brief, the study concludes that existing land policies are inadequate to meet the pressure of market forces and to facilitate land improvement. Nevertheless, existing policies have failed to produce an urban pattern compatible with cultural and environmental conditions. These weaknesses include :

- \* The failure to provide land for development and urbanisation
- \* The inadequacy of land use controls
- \* Deficient administrative system for development control

In order to overcome the above existing policies weaknesses, the thesis recommended several changes:

- To the administration system at the local and regional levels;
- To legal and administrative procedure of development controls; and
- To the system for providing land for development and urbanization.

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## CHAPTER I : INTRODUCTION

### 1.1 INTRODUCTION

Increases in total population are being accompanied by a much greater proportionate increase in urban population. In 1800, 2.4% of the world population were classified as urban, in 1960, the number had risen to 33%. It is projected that by the year 2000, about 51% of the human race will live in urban areas<sup>1</sup>. At the same time the space needs of urban dwellers and the accepted standards of provision are increasing for housing and related facilities as well as for industry. As the world is becoming more and more urbanized, the magnitude and physical scale of the urbanization process has clearly shown that urban land is a scarce resource that must be carefully and wisely allocated if the environment of man is to be improved.

As a result of these growing pressures on land, both within towns and on their outskirts, and the urgent problems to which these are giving rise, governments have been increasingly concerned with finding means to satisfy demands on land and provide controls and measures for its use in a way consistent with social, cultural, and economic objectives. The extent to which governments have instituted administrative and legislative measures for dealing with land development problems varies from one country to another, based on

its level of urbanization, industrialization, technology, and its cultural, social, and economic system. Nevertheless, the problems are becoming increasingly acute in virtually all developing countries, and are becoming of increasing concern to their governments.

Thus, as the world has become more and more urbanized, the effective control of urban land resources has become critical. The increasing demand for urban land is not only attributed to increased urban population but to changes in socio-economic levels, social and cultural habits, transportation and communication systems, changes in how people spend their leisure time and the changing needs of production processes.

The demand for urban land is growing, yet the supply is both genuinely and artificially limited. This situation radically increases land costs and, in turn, consumes scarce investment capital better used elsewhere. It also distorts planned pattern of urban growth and development. The cost of land influences the possibility of physical development since it is the principal and, in some cases, the major component of the total development costs. Thus, the extraordinary character of land speculation results in an inflated cost of land which often blocks development when it is most efficient and logical, and contributes greatly to the chaotic pattern of urbanization and its attendant loss of efficiency.

Since land is one of the fundamental elements in the development process, then the question of ownership matters a great deal to such

a process. At the United Nations Congress on human settlement, part of the conclusion was that land cannot be treated as an ordinary asset, controlled by individuals and subject to the pressures and influences of the market<sup>2</sup>. Private land ownership is also a principal instrument of accumulation and concentration of wealth and therefore contributes to social injustice; if unchecked, it may become a major obstacle in the planning and implementation of development schemes. Social justice in urban renewal and development, the provision of decent dwellings and healthy conditions for the people can not be achieved if land is used in the interest of individuals alone .

Operating a modern industrial and commercial complex requires installation of utilities, water supply, power, waste disposal, and transportation systems for people as well as for goods... If this infrastructure is to be provided economically and in an orderly manner, as required by the nature of utilities systems, the development pattern must be ordered. Unless activities are allocated and grouped on the land rationally and with sufficient room for expansion, the requisite utilities cannot be efficiently or economically supplied. The same argument goes for institutional development, as an urban society requires many social, cultural, and governmental institutions. These range from schools to hospitals, to public services, to recreation areas, to religious buildings...

While each society has its specific programmes and objectives for those institutions, the institutions themselves must be accessible to those they serve and their own personnel. If growth is a factor, they

must have opportunities to change and expand. If the disposition of land is left entirely to market of competitive forces, these institutions will be unable to compete for favourable locations and will be relegated to unsuitable sites or to those which are prevented from expanding. This will apply not only to institutional buildings but also to housing, especially for the poorer of the society.

Normally as a result of the free market the poor and even sometime the middle class are crowded into existing slums , or relegated to squatter housing at some distance from places of work and public services. If a nation has resources to devote to social housing, mechanisms must be at its disposal to direct, through purchases, subsidy and incentives or other means, the location of that housing so that is accessible to public and employment services and basic human amenities. Under no control and no policies for the availability of land for housing, its location and its cost will be increased.

Urbanization has been defined as physical , social , and technological changes. Since most of our urban areas owe their strong sense of identity to past periods, well before the advent of the motor car and the modern office and residential block, there are mounting pressures to adapt them to our contemporary requirements, which include the need for more space, light and air, better sanitation and, above all, the use of the motor car. As a result, old cores of cities are often opened up by widening streets, pushing buildings upwards, clustering office buildings and houses in a way that intensify traffic problems while parked cars litter the urban space. Identity is the consistency

between the physical form - shape, location and space - and topographical, climatological and cultural factors ; identity is also the response of the physical structure to social habits. In this context, four major forces are at work which have resulted in the loss of identity in most new urban development and redevelopment: the building programme, building technology, the impact of the motor car and land cost. Thus, it is essential in an endeavour to retain and enhance existing identity and foster the creation of a new one, for cities to work out and apply overall policies for such vital aspects of urban performance as building rights, locations of religious and institutional buildings, landscapes, and new structures to accommodate the motor car...

One area of the Middle East where especially striking changes have occurred is the Arabian Peninsula, especially Saudi Arabia, which occupies about 900,000 square miles. Before the discovery of oil in 1938, Saudi Arabia's economy was pastoral and based on primary economic activities. A large proportion of the population lived in small towns and villages scattered throughout the Arabian Peninsula. Agriculture and trade were the primary economic activities.

Following the discovery of oil, the country became one of the fastest growing nations in the world. With the increase in oil prices in late 1973, the flow of capital added further impetus to Saudi Arabia's economic development and diversification. Thus, major urban growth in Saudi Arabia is a recent phenomenon. In 1932, urban population was estimated at 300,000 people and only Makkah had over 50,000

inhabitants. Since then, the situation has changed extremely rapidly. The available data indicates that urban population (in settlements of 10,000 and more) increased from 980,694 in 1962/63 to 3,137,118 in 1974; while the total population increased by 104 percent, urban population increased by 316 percent. During the same period the growth of the five largest cities was phenomenal, particularly for Riyadh and Jeddah. According to the census of 1974, 38 percent of the total population was classified as urban . During the last decade (1970-1980), significant changes in the distribution of the population have occurred . This change may suggest that over 50 percent of the total population in 1980 was urban.

The development process has been proceeding rapidly increasing. For example, the budget of the first development plan in Saudi Arabia from 1970-1975 was \$50 billion, whereas the budget for the second development plan 1975-1980 was over \$140 billion. The third one is estimated to be \$285 billion. One result of this frenetic pace of development has been the transformation and expansion of urban areas such as Riyadh, Jeddah, and Dammam almost beyond recognition. Riyadh, the capital, is expanding in all directions. In addition to becoming larger and more densely populated, it is experiencing a total change in character. Eventually, the urban growth now centred here is likely to spread through the country to all of its cities and towns, thereby affecting the entire society.

The population of the city of Riyadh has increased twelvefold in less than 50 years, while the total area expanded from 4,250 hectares in

1975 to 12,000 hectares at the present time. Comparable increases have occurred in all urban areas of Saudi Arabia. For example, up to the end of the second world war, Jeddah was essentially a walled city. With the growth of national oil revenues, the city witnessed a remarkable period of expansion, growing from about 40,000 inhabitants in 1955, in an area of about 63 hectares, to a population in 1971 of 381,000 covering an area of 4,750 hectares. The present population of the city is now estimated to be about 1,037,000, extending over an area of approximately 10,500 hectares. Such a phenomenal growth rate has exerted extra pressure on urban land, its availability, and the way in which it has been utilized.

## 1.2 DEFINITIONS

Since urban land development policies are the focus of the thesis, it is necessary at this stage to highlight the terminology in the context of the study. The word development has, in the context of the study, the meaning of changes or alterations in existing conditions. It can also refer to new or anticipated events.

Often the use of the word development is conditioned by a special evaluation through which we may perceive development as having either positive or negative effects. In this study, development which has both positive and negative effects is considered. Naturally, however, the findings and later the recommendation deals only with development which is considered as having overall benefits for society.

If the word development is interpreted as referring to changes in conditions, LAND DEVELOPMENT is concerned with changes in those components of elements which are, in different respects, directly associated with land. However, the focus of the study is concerned with urban land in terms of urban vs rural. Urban land development is part of the general development of a city. Consequently, we can differentiate between various types of development, including land development (physical), economic development, social development, and cultural development. Of course, in practice there are no sharp boundaries between the different kinds of development as, for example, economic factors will obviously affect land, social, and cultural development. Thus, any analysis or evaluation of each of them should consider the interaction between all the components within the overall development process.

The concept of policies, in the context of the study, is a list of means ,measures ,and controls to achieve the policy' objectives of a plan (Plan: a set of specific actions to attain an abjective). Therefore, policies refer to control measures which relate the goals to a desired development, and the process by which the policies can be formulated, enforced, and monitored.

Thus, since policies may be defined as a set of measures aiming to achieve the goals formulated by public authorities, the goals and the measures are influenced by the social and economic structure of the country and by the level of development. Therefore, URBAN LAND



DEVELOPMENT POLICIES as implied in this study, are concerned with general and detailed laws, decrees, statements, directives, measures, and the administrative process by which they can be formulated and enforced, to guide or steer the process of urban land development in accordance with the goals which have been stated for such development.

### 1.3 THE PROBLEM

As Saudi Arabia continues the rapid pace of urbanization, and since urbanization is defined as concentrated population growth and social and economic change which, in the case of Saudi Arabia, reflects the desire to raise and improve the quality of environment and standards of living, so the importance of urban land increases accordingly.

The growth of urban population, the rise of living standards and other changes with which the urbanization process is associated, require that the country attempts to provide public facilities, institutional development, housing and urban renewal and rehabilitation programmes, all within the context of cultural and social values. Nevertheless, the fact of unbalanced growth, through which economic and physical development creates congestion in the centre of the cities and leads to an increase in population density in these parts, overloads public utilities and services. Urban sprawl results in haphazard growth along traffic arteries and consequently an under utilization of existing services and a lack of development coherence. This is due to several reasons including the types of building

constructed, the layout of streets, the withholding of land from the market, speculative investment and various deficiencies in zoning and by-laws and in their enforcement.

Thus, by the early 1970's, the Saudi government realized the need and the necessity to plan ahead for urban growth and to formulate policies to control the growth to provide sites suitable for urban development, to reserve land resources for future public services and to restore and improve the conditions of already developed areas, keeping in mind Islamic cultural and social values and the traditions and teachings of the Sharia laws. Therefore, a Royal Decree was made to up-grade the Department of Municipal Affairs to an independent Ministry called Ministry of Municipalities and Rural Affairs (MRA); a series of Master Plans and Action Area Plans have also been drawn up to coordinate and control growth of almost all urban areas in the country.

However, by 1980, several technical reports reported either implementation failure in some of the Plans or, in some cases, beside the failures of implementation there was also lack of understanding of the country's cultural, social, and environmental needs. Technical Report No. 8 for Al-Medina, 1980, argued that "according to the rapid rise in land prices, land withholding for speculative purposes, the scarcity of land to be readily available for construction are factors which necessitate laying down a land policy"<sup>3</sup>. In 1979, Jeddah Municipality asked a consultant to carry out a series of action plans to formulate a practical set of land development policies, by which

the Municipality could organize control and regulate land development in the city, sufficient to meet the requirements of the series of Master Action Plans. This action was due to the failures of the implementation of the former Master Plan. The consultant recorded in Report No. 4 that "the failure of implementation, may be generally attributed to inadequate enforcement of available development control regulations on the one hand, and to the lack of any other effective mechanism for guiding land development on the other hand"<sup>4</sup>. Whereas in Abha, Technical Report No. 8 argues that "in cases where the rate of development is as rapid as it is in Saudi Arabia, existing land development policies may quickly become out-of-date and need to be constantly revised and supplemented"<sup>5</sup>.

From a review of various technical reports and other governmental documents, various field works and meeting and interviewing of government officials, the problem of Saudi Arabian urban land development policies can be summarized as follows:

- policies inconsistent with land development goals and policy mechanisms inadequate to control rapid urban growth;

- existing policies have failed to control the rise in land prices and therefore, have not aided easy mobilization of financial resources for the provision of residential settlements and public utilities at a feasible cost, or in a way that enables the local governments to undertake urban renewal and reconstruction of badly built areas;

- policies have failed to address cultural and social factors; and they have been prepared with a lack of understanding of the physical conditions of the urban areas.

The inadequacy of urban land policies on the one hand, and the economic pressures for individuals to maximize their personal interests on the other hand, have resulted in the following four major problems:

- urban sprawl with high servicing costs, inefficient urban structure, and loss of agricultural land;
- lack of identity, sense of culture, and environmental compatibility; and
- lack of community services and public utilities.

From the introduction and the previous statements, it can be concluded that there are three major factors influencing urban land policies:

1. Land availability for development
  - a. scarcity of land available (time, location)
  - b. scarcity of serviced land for development (housing).
2. Inefficient and inadequate pattern of development
  - a. spatial pattern (land-use)
  - b. visual, formation pattern (urban design)
  - c. public programme allocation (schools, mosques..)

### 3. Shortage in resources

- a. skilled manpower for urban development

#### 1.4 HYPOTHESES AND ASSUMPTION

The main concern of this study is the investigation and examination of certain specific hypotheses, which deal with urban land policies in Saudi Arabia and with their relationship and effect on urban development in the country. The two major hypotheses of this study are:

1. Under rapid economic growth and , consequently , rapid urbanization , existing urban land policies are inadequate to meet the pressure of market forces and to facilitate land improvement .
2. Existing policies have failed to produce an urban pattern compatible with cultural and environmental conditions.

However, there are two facts and assumptions to be highlighted at the very onset, so that the two hypotheses become meaningful. The first fact is that all Saudi citizens without exceptions are Muslim and, consequently, the main goal of national and local development plans are to maintain the values of Islam. The second fact is that the Sharia (Islamic law and teachings) values and teachings are the only source of legislation and controls in Saudi Arabia. Therefore , policies must be consistent with Islamic Sharia ,hence, the degree of success

or failure of urban land policies is measured by the extent of success in directing urban land development in a manner consistent with Islamic Sharia .

The third fact is that from the beginning of the Five Year National Plan series in 1970 , the country has maintained a healthy economic position and surplus value which, in return, facilitated the allocation of the financial resources needed for development plans. Hence, it can be assumed that shortage of financial resources has not been a significant problem in the case of urban land development problems; this, however, does not imply that resources have been most efficiently employed.

Thus, for the purpose of testing the hypotheses, the thesis is committed to the following questions:

1. What are the Sharia Values and teachings relevant to contemporary issues of urban land development?
2. What are the environmental parameters relevant to urban land development policies?
3. What are the existing urban land policies in S.A.?
4. What are the urban land development problems in S.A.?
5. Do the urban land development problems result from a lack of effective policies and/or enforcement failure or not enough policies?
6. Do the existing policies in S.A. protect the Physical

environment as well as maintaining their conformity with Islamic Sharia ?

The methodological approach used for this purpose has three complementary parts. The first part is a cultural and environmental model for urban land development, consisting of evaluation criteria and general guidelines for formulating policies within Islamic principles - its political institutions, social-philosophy, and its economic organization. Thus, we will see that throughout the three Saudi Arabian Five Year Plans, the main goal has been the maintaining of Islamic culture and laws. On the other hand, recognising policies defined also as a means to achieve planning goals, the purpose of the first part of the methodology is to achieve principles for a "physical pattern compatible with Islamic culture and guided by policies consistent with Islamic Sharia", by which the success and suitability of the existing policies can be determined. All information and data necessary for this part has been collected from secondary sources, such as books, scripts, periodicals, and government documents.

The second part of the methodology aims to understand the recent phenomenon of rapid urban growth and general land development in Saudi Arabia. Haim Darin-Drabkin argues that "An examination of the underlying factors in urbanization patterns will help to determine to what extent they can influence land use, thus creating the problems which land policies are trying to solve"<sup>6</sup>. From the definition of urbanization as a process of change in social, cultural, physical, and economic conditions, it can be added that an understanding of the

urbanization process will help to determine other aspects of urban land development beside land-use, which land policies are trying to solve. Data and other information for this part has been collected from both primary and secondary sources. The latter are government documents and other publications about Saudi Arabia, whereas the primary sources are various field interviews of governmental officials and some related consultants. However, some of the numerical data which could have helped to bring about more description and analysis to the argument could not be obtained and, in some cases, does not exist.

The third part of the adopted methodology consists of two approaches. The first approach is the choice of Jeddah, as a case study by which existing policies and other related issues of land development have been analysed and evaluated. There are several reasons for choosing Jeddah as a case study. After the capital, Riyadh, it is the largest city in the Kingdom and the one of the first highly populated cities. Its Master Plan has been in course of implementation and monitoring since 1973, where as, with the exception of Riyadh, the rest of the countrys' urban areas did not have Master Plans until the late 1970's. Since the First National Five Year Development Plan, Jeddah has experienced continual financial support which makes it possible to assume that urban land development has been relatively little influence due to lack of financial resources. It is also the case that Jeddah has more than any other municipality in the country, documented and available data and other needed material. However, there are some issues of land development policy which could not be



found in the case of Jeddah. Therefore, a second approach had been adopted to complete the analysis and evaluation model by examining the Al-Medina area, as an example of urban sprawl and pressure on agricultural land; and for its lack of coordination in policy implementation, the Yanbu sub-region was chosen.

The methods used in gathering data and information, for the case studies, were primarily the following:

1. Actual observation of operations in the Jeddah and Makkah municipalities. These observations provided opportunities for informal conversations with various staff members, and the raising of questions with them. Also, field observation were made of the physical development in the two cities.

2. Informal interviews were conducted with officials in Jeddah, Makkah, and Yanbu Municipalities, and with planners and architects in Jeddah municipality, (to which the consultant was Robert Matthew Johnson-Marshall and partners). The second part of the interviews was a field survey conducted in Jeddah, Makkah, and Al-Medina, incorporating thirty eight interviews. The number of the interviews do not represent any predetermined statistical significance, being the number who were approached and accepted to be interviewed. The need for this survey was raised by the lack of written material in the area of Saudi Arabian sociological and cultural behavior, which form main influences on land development policies. However, the purpose of the survey were twofold:

- To understand and explain the contemporary Saudi ways of living, uses of free time, and other aspects of life-style.

- To explore the directions in which these patterns might change under the pressure of urbanization and growing wealth.

3. Documentation through access to files, plans, maps, and technical reports available in Jeddah, Al-Medina, Yanbu, and Al-Khouber municipalities. Also, material from the Institute of Public Administration Library, and the research and public relations department of the Ministry of Municipal and Rural Affairs.

Naturally some methodological difficulties were encountered in conducting this research, due to the lack of written documents dealing with the subject and some antipathetic behavior by respondents towards interviewing.

## 1.5 ORGANISATION

The thesis is composed of ten chapters. The introductory Chapter consists of four sections. The first section introduces briefly the issue of urban land development in Saudi Arabia and the problem confronting it caused by urbanization, especially rapid urbanization, as well as the need for urban land policies as a means to control urban growth so that it fulfils its national and local objectives. The second section incorporates definitions of the essential concept. The third section reviews the methodological issues of concern to the thesis. Finally, the fourth section briefly mentions the subject dealt with in the remaining chapters and the organization of the concepts.

The second chapter deals with the phenomenon of urbanization, establishing the fact that urbanization is the major factor which influences the demand for land and explaining the impact of the urbanization process on land use behaviour, thus creating the problems which land policies are trying to solve. A global approach is taken to understanding the problem, with more reference to the Gulf countries.

The efforts made in the First Chapter aimed to link the problems of Saudi urban areas to the rapid continued urbanization process, but this by no means eliminates other factors nor implies that the problem of urban development is solely a product of rapid urbanization. The second part of this chapter, accordingly, examines the recent phenomenon of rapid urbanization and the various government efforts to deal with it. The Chapter consists of four sections, of which the first two look at urban growth, the source of growth and the resulting pattern of growth. The remaining two sections look at the problem generated by rapid growth and at government programmes to influence and direct the growth.

The third chapter deals with the issues of land development policies, covering the fundamentals and scientific basis which should be taken into account while analysing existing policies and, later, for formulating the recommendations. That means the definition of elements by which a piece of land, whether large or small, can be described and through which changes can be analysed separately and in detail, together with the general features of the changes within

the different elements. For this purpose, various experience and theories have been reviewed, with more focus on those areas from which Saudi Arabia adopted most of its existing policies.

The Arabian Peninsula is the birth place of Islam and includes the two holy cities of Makkah and Medina. An essential Islamic religious tenet is the absolute pervasiveness of God, who legislates for mankind through his prophets, the last of whom is Mohammed. Islam means "whole" approach, for the individual as well as the community and for his or their lifestyle and spiritual practices, since in Islam there is no difference between the two. Thus, Islamic beliefs have a major influence on various aspects of Saudi Arabian social, political, and cultural behaviour. As a result, the social and physical fabric of its cities has become interwoven with Islamic values and teachings. Hence, any examination of a deliberate policy of land allocation and distribution of right to use and how to use land must recognize the fundamental legal, social, economic and cultural aspects of Islam. Nevertheless, Saudi Arabia is located in the hot arid zone of the Arabian peninsula, therefore, any attempts to control land development must consider the environmental factors of such zone. Chapter Four establishes the necessary understanding of Islamic social values, laws and cultures; examines the general Islamic point of view on and legal understanding of the relevant issues of urban land development policy, all this, to formulate cultural evaluation criteria. Also, it examines the hot arid zone and provides a set of evaluation criteria.

The definition of land policy in the context of this thesis includes the administrative system by which policies are formulated. Thus, Chapter Five examines the structure and responsibilities of the various agencies involved in the procedure of physical planning in Saudi Arabia. The Chapter looks at the planning machinery at the national and local level; and at the functions of municipalities in Saudi Arabia; it establishes the linkage between the National Plans (socio-economic plans) and local plans (physical plans).

Chapters Six present the existing land policies in Saudi Arabia And evaluate the mechanism of land market in Saudi Arabia.

Chapter Seven consists of three parts, of which the first looks at the case study, Jeddah, to identify the various problems of urban land development .The second part looks at those problems of urban land development which the case study did not address. The final part summarizes the findings of the analysis and the problems of policy.

Chapter Eight evaluates the outcome of Chapter Five against the policies reviewed in Chapter Six . The aim of this chapter is to assess the policies in terms of existing land problems.

The main objectives of this thesis are: to suggest a framework for formulating land policies in Saudi Arabia; and to formulate land policies to control the existing conditions and to direct the land development process in a manner consistent with physical and cultural traditions. These two objectives are the main issues of Chapter Nine. Finally ,Chapter ten presents the final remark.

**Notes To Chapter I :**

1- Growth of the World's Urban and Rural Population, 1920-2000, United Nations publications, 1971.

2- United Nations Congress on Human Settlement, 1976.

3- Land Development Policies, Technical Report No. 8, Project No. 202, 1979, pg. 8.

4- Land Development Policies, Technical Report No. 4, Jeddah Master Action Plan, 1978, pg. 4.

5- Land Policy, Technical Report No.8, Abha Master Plan, 1981, pg. 3.

6- Haim Darin-Drabkin, 1977, pg. 9.

## CHAPTER II: URBANIZATION AND URBAN LAND

### 2.1 INTRODUCTION

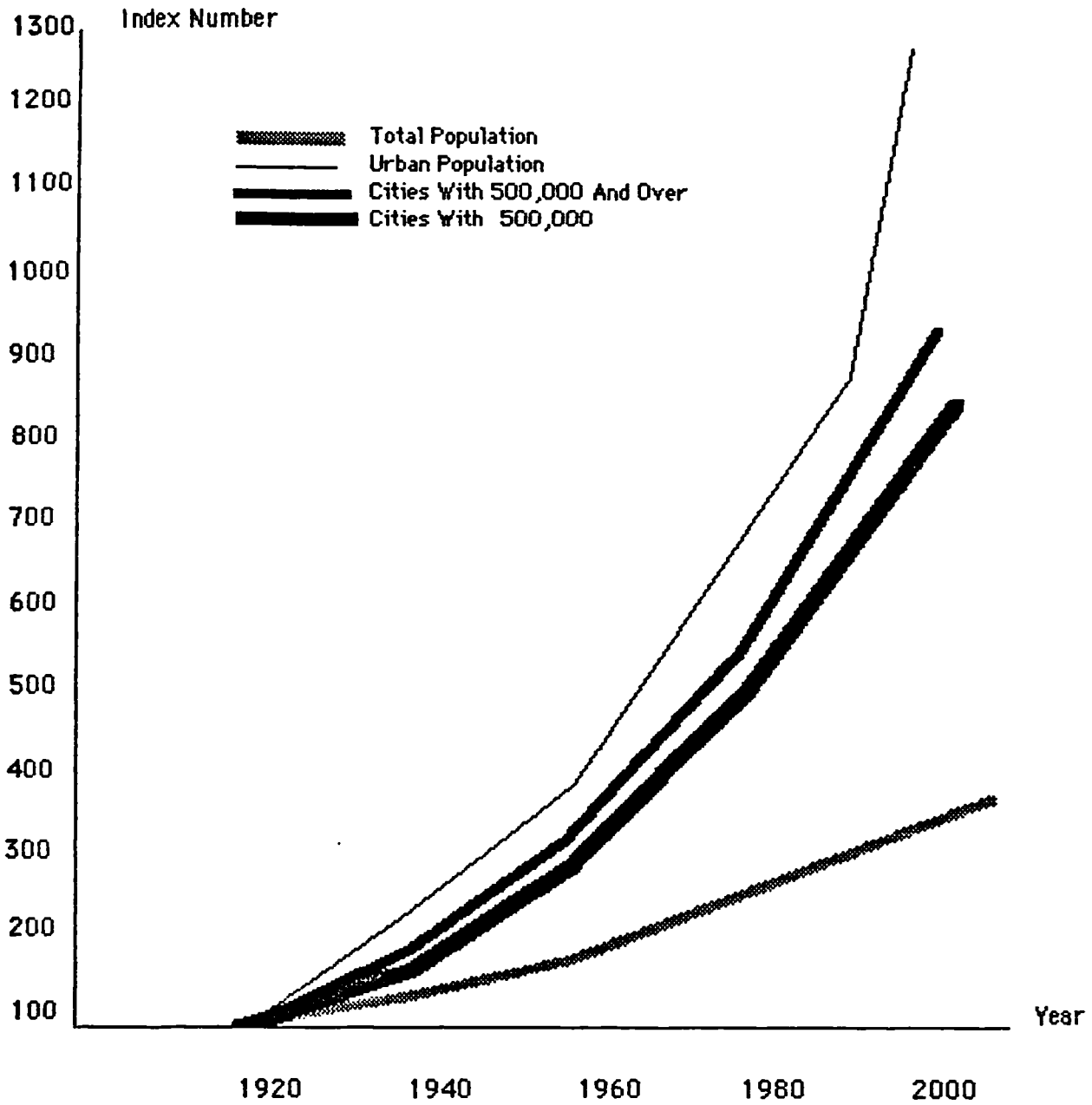
Urbanization, as a process, involves people and land. In the case of people the process means changing their way of life and in the case of land, changing its use.<sup>1</sup> Urbanization can be the direct result of economic growth, as in the oil producing countries or it could take place without economic growth, as in India and South America.<sup>2</sup> In the two cases the process by itself can be a problem. However, our concern is the process as a cause of a problem. The process of changing ways of life whether associated with growth or without growth, creates a great demand for urban land and the way it is being used.

Thus, the objective of this Chapter is to examine the underlying factors in urbanization patterns and their impact on urban land, firstly, in general, then with regard to Saudi Arabia.

### 2.2 AN OVERVIEW

The present patterns of urbanization are the result of the interacting forces occurring in both pre - and post industrialization periods. Although many experts have tended to emphasize post-industrial settlement patterns, in many parts of the world the structure of urbanization was established by the pre-industrial city which was by modern standards relatively small. For example, by 1800 only 3 percent of the world's population was

Figure 2.1 : Growth Of Total World Population And Urban Population



Source: Growth of the world's urban and rural population, 1920-2000  
United Nations publications, 1973.



**Table 2.1 : Level Of Urbanization Growth Rate**

	Population 1980	% Of Urban Pop. 1960-1980		& Total Change
Low Income Countries	2300	15	17	13.3
Middle Income Countries	1008	37	50	35.3
Oil Exporter Countries	334	33	45	36.3
Oil importer Countries	674	39	52	33.3
Capital Surplus Countries	26	37	69	86.4
Industrials Market Countries	675	68	77	13.2
Total Urban		43,56	Changes	

Source : Adopted From World Bank , World Development Report,  
1980. New York : Oxford University Press

located in urban places of 5,000 or more inhabitants (United Nation definition 1976).<sup>3</sup>

Thus the beginning of the process of urbanization can be traced to the origins of capitalism and the rise of the Italian City-States; but since about 1950, the process has been gaining momentum and has reached unprecedented magnitudes. By the year 2010 it will reach its peak and by the year 2080 it will be essentially completed. A global survey of the growth of the urban population shows that at the end of the nineteenth century, out of a world population of 1,650 million, only 250 million was urban. By 1960, the urban population passed the 1,000 million mark, out of a total population of 3,000 million. By the year 2000, out of 7,000 million humans on earth, 4,000 million will live in cities. In the next twenty years, the cities of the world will have to accommodate an increase of nearly 2,000 million inhabitants. Over the next fifty years, we are going to build two and half times the equivalent of all cities today in existence.<sup>4</sup>

Globally, the rate of urbanization is much greater than the growth rate of the world's population and far greater than that of rural areas (see figure 2.1). Between 1960 and 1980 the urban population increased by 81 percent (see table 2.1). Moreover, urbanization rates amongst regions of the world, amongst countries within any region, amongst cities within a country, and can produce differential consequences. These differences are vividly portrayed when one contrasts urbanization patterns in the developing world with those in the developed regions. Of the many differences, the fact that the former must cope

simultaneously with increases in both the urban and rural population. Further, urban population increases are largely due to rural urban-migrants who generally lack the skills needed to participate in an urban economy. The situation is aggravated because urban economic growth cannot in any way provide employment fast enough to absorb the population increases. Hence, poverty is the overwhelming characteristic of these cities, and this is manifested in the increasing size of slum and squatter settlements in various cities of the world. While population in developing countries grows at 2 to 3 percent annually and many city populations grow at rates exceeding 6 percent, slums and uncontrolled settlement in urban areas commonly grow at rates of 12 per cent and sometimes exceed 20 percent. Not only can these countries not provide jobs but also they lack resources to meet the minimal standards.

Three forces have shaped the patterns and nature of urbanization, these are: advancing technology, changing concepts of social equality and the appropriation of unearned income. Together these have produced competing demands for scarce resources; of which urban land is crucial. Changing technology, such as the utilization of automobiles, has produced a large demand for land while simultaneously opening up areas for development and extending the size of urban areas by improving accessibility. In this case, both the demand for urban land and its supply are affected. As living standards improve, the amount of land needed per person increases. The market mechanism has long been the primary means for allocating land, but the reliance on this is changing because concern has developed over the public-private

distribution of "unearned increases in land values". Attitudes are shifting towards the realization of a better balance of the distribution of the benefits resulting from development and urbanization, particularly since increases in land values are largely correlated with public investments and improvements. Hence, there is a growing recognition that the public should recover land value increases, or at least a fair fraction. And finally, land, like other resources, can be monopolized and used for economic gains. Indeed, urban land particularly lends itself to monopolization because it is fixed in space preventing the entry of new producers in response to rising prices. Hence, land prices and land speculation leading to windfall, profits have become suspect as these have significantly increased development costs and in other ways frustrated and distorted the development process needed to sustain and meet the needs of a growing urban population. All of these factors characterize the current urbanization process and they influence the pattern and the change of urban growth.<sup>5</sup>

The world urbanization process can be summarized as a transformation both of a quantitative and a qualitative nature. This transformation may produce adverse results including, excessive size, overcrowding, shortages of urban services, urban sprawl, traffic congestion, unemployment, racial and social issues and environmental degradation. In the context of urban land, this means a great demand for urban land as quantity and quality. In the former case, it is required to accommodate the growing population and/or the rise in living standards that is generated by urbanization and in the later to upgrade the condition

**Table 2.2 : Population of Gulf States in various Years(in Thousands)**

Years	Kuwait	UAR	Oman
1961	321	86	500
1970	750	190	660
1980	1,372	796	891
Ave. ann. rate of increas	6.29	7.11	3.02
Urban population 1980%	83.8	65.3	16.1

Source: Demographic Year Book (United Nation, 1980)

**Table 2.3 : Rate of Growth In The Gulf States , 1960-1980**

Country	Total Of Pop.(000)		Rate Of Gro.%		Level Urbanism		Rate Of Increas ave.	Urbn
	1960	1980	total	urb	60	80		
Kuwait	278	1.372	4.4	7.4	72.3	68.3	16	190
Oman	494	891	14.4	44.4	75.9	3.9	3.9	119.4
UAE	119	796	33.0	17.5	40.3	72	31.5	278.8

Source : UNI Patterns Of Urban and Rural Population Growth (new York, 1980), PP.128-43.

of urban land especially so where slums and squatter settlements occur.

### 2.3 THE OIL URBANIZATION<sup>6</sup>

Where the most obvious and immediate result of the urbanization process of most of the developing countries is the rapid deterioration of the human environment, caused by the increasing gap between economic growth on the one hand and population growth and concentration on the other, the case is different in the oil producing countries of the Middle East. Here the impact of population growth and urbanization is associated with economic growth that has accumulated surpluses of \$270,000 million (Azzam 1981).

At the turn of the century, one in ten people living in the Middle East could be classed as urban dwellers. According to the United Nations, by 1970 this had risen to an average of 37 percent. By 1985 it is estimated that 68 percent of the population are living in urban centres (Demographic Year Book, United Nations 1981) (see Table 2.2, 2.3). In number, the rate of urban population growth in the whole Gulf region of the Middle East, is nearly half a million annually. This requires almost 100,000 additional dwelling units, corresponding to an annual increase of 91 sq.km. of prepared urban land, with roads, water, drainage and other services.

In new settlements, the impact of development on the land and the living patterns of the inhabitants, in terms of infrastructure and plant, is likely to be considerable. Also, in almost all cities

dramatic changes have to be considered in dealing with outdated engineering infrastructure, such as roads, water distribution, sewerage and drainage facilities and housing. Under these conditions, associated with lack of controls, the demand for urban land is greater than the market by itself can provide, and the quality and the pattern of the urban fabric lacks compatibility.

For instance, at the beginning of the twentieth century Kuwait city was a small fishing town of 35,000 at the head of the Persian Gulf. Today, the modern metropolis has a population of over one million. *This growth represents one of the most spectacular examples of the effect of vast oil revenues.*

Kuwait's population, with oil exports commencing after the war grew quickly. By the first census of 1975 the nation's population was over 200,000 and this reached 1.3 million by 1980, representing 9.1 percent per annum increase. The vast majority of the inhabitants of this small nation live in Kuwait City. This growth has resulted from the great number of foreigners who have flocked for employment to the rich country. Indeed by the 1960s the alien population outnumbered the native Kuwaities.

The physical expansion of Kuwait City has been largely directed by a master plan drawn up by a foreign city planning firm. The implementation of the 1952 master plan included acquisition of land within the "madina" by the government. The land owners were offered inflated prices, not only to induce the Kuwaities to move to the new government residential superblocks that have no sense of tradition and environment, but also to provide capital for



investment in the private sector. As a result, land prices increased over 30 fold, speculation became the dominant nature of the market and housing costs increased over 15 times as the inflation was fueled by the increasing oil revenues. Despite the oil revenues and the housing programmes the rapid growth of the city has created shortages in housing and community services. Shanty towns have developed around the city. It is not, however, the foreign workers who mainly occupy such dwellings, but Bedouins. The shanty towns are built illegally on government or private land and hence are squatter settlements. As space is not a problem, these settlements are built at considerable distances from one another and at low density, making it impossible to provide them with the needed services and community facilities.

The overall pattern of the city has little resemblance to any traditional Middle Eastern Islamic madina. It is a city which has been designed for the automobile and in which that vehicle dominates. The new residences tend to be outward looking and detached, instead of the compact, inward looking tradition house centred on a courtyard, and the overall urban fabric lacks any sense of the cultural and social habits of or environmental concerns of the society.

In summary, urbanization in the Gulf region of the Middle East is characterized by excessive size, both in population and geographical area occupied by cities; temporary urbanization as a result of foreign workers most of whom will leave by the end of the development plan; shortage of urban services as a result of urban sprawl and squatter settlements; traffic congestion; lack of

environment considerations; the rapid conversion of agricultural land; and a divorce from traditional cultural and social norms.

#### 2.4 THE DEMAND FOR URBAN LAND

With the phenomenon of urbanization and its associated rapid urban growth, the demand for urban land is increasing at a very rapid rate in virtually every urban centre throughout the world. This has two primary dimensions:

1. the demand for land to meet individual needs; and
2. the demand for land to meet the needs of society.

Aggregate demand has resulted from a series of global national forces that have tended to concentrate on human activities in urban centers, thus creating intense pressure on the supply of urban land. The manifestation of increasing demand for and decreasing supply of land, is reflected in free market economies by extraordinarily high land price.

Within this context land generally, and urban land specifically can be viewed as both a "good" in an economic sense and as a scarce natural resource. Land is not created by human effort and it exists without being produced. It is a "good" when man transforms it through labour or capital into a commodity which satisfies some human need. It is essential to distinguish between land as a "good" and as a natural resource because these two characteristics differentiate it from other commodities when the market process is considered. These unique characteristics, when combined with

a demand sector that consists of both private and collective needs, implies that normal market mechanisms cannot be relied upon for the allocation and utilization of land, and that a third party is needed in order to meet individual and collective land demands at the appropriate location and at the needed time.

Urban land demand, in general, is influenced by the level of development of a country, the urbanization process and the spatial structure of a country . The most important factors influence variations in the demand for urban land are:

- the rate at which a population is urbanizing;
- the distribution among human settlements;
- the nature and types of activities occurring within a city;
- the intensity of density of land usage for various activities;
- individual and collective investment capacities;
- and
- the techniques and technology used in town buildings.

Of the various factors influencing the demand for urban land, none is more significant than the rapid rate of urbanization . In several locations, such as the Middle East, the pressures on existing land supplies suitable for development are particularly severe. Concentration coupled with uneven distribution of the population produces intense demands for space.<sup>14</sup> Many land analysts seem to agree that in theory at least there is no absolute shortage of land

to accommodate urban growth, but that there are both technical and artificial shortages.

A technical shortage exists when land in its present condition is not suitable for urban uses; although this may result from a lack of appropriate public investments making possible its use for urban purposes. On the other hand an artificial shortage may exist because available land is being withheld from urban development at a particular time because of expected future profits, or because it is serving as a form of investment savings. Both technical and artificial shortages may also exist because of the peculiar nature of a parcel's size, location and/or shape.

The density of settlement of both population and activities which is characteristic of urbanization process has been associated with increases in the demand for land. Density levels can directly influence the amount of land needed, depending on the social and economic conditions which establish acceptable or necessary density standards. In developed countries, the majority of cities have reached an extremely high density in both residential and employment areas, especially in central cities. With the spatial expansion of the urban area outward from the centre city, such as in North America, density tends to decrease for both residential uses and commercial and service uses. Thus, changes in the density of development and in concentration, which in turn modify land use patterns, increase the demand for urban land despite changes in the rate of population growth.

Given the pressure on land caused by urban growth, and the virtual cultivation of virtually all arable land, technological advance may be the only means for meeting the future needs of population. Merely attempting to increase the stock of cultivated land in such countries as India and the Republic of Korea, will be impossible or economically unfeasible. In this context, land is needed for both agricultural and urban uses but it may not be either desirable or possible to remove cultivatable land from agricultural production and use it for urban purposes. Yet, as economics become more diversified, less land may be needed than for a purely agricultural economy.

Technological changes can also significantly influence patterns of urban land demand. For example changes in the size of the labour force and in production processes may directly influence the need for land. In turn, these changes may be directly traced to technological advances. In North America, the older cities that experienced industrial growth in the early or mid-nineteenth century found that the sites of their plants could not accommodate the spatial requirements of advances in production techniques, with the result that industry has moved to the fringe of urban areas. Similarly, technological changes in communication and transportation networks, although resulting in improved services, have required more land as in the case of urban expressways. Also, changes in building and construction technology have affected urban development and altered the demand for land. However, these changes have also made available new forms of structures and roads that in turn have made possible developments of higher density of use. Indeed, techniques of construction may be

a major contributor to the demand for urban land. In summary, technological changes have a variety of implications for urban land demand.

Another factor influencing demand is the rate of economic development in both developed and developing countries. Besides removal of arable land, rapid growth in the metropolitan areas of developed countries has greatly increased demand for land. Today, new industry is locating on the fringe areas, rather than solely within the city proper. Also, another effect of economic development flows from its impact on income levels. As income increases, the standard of living improves, so does the demand for land for such uses as housing, open spaces, parks, highways and other public services. A permanent growth in national income increase the desire to improve standards of living. This is manifested not only in demands for different land uses but an increase in the amount of space for living, including the space within the dwelling, and a reduction in the number of residents per unit. Higher standards of living tend to require increased amounts of land, especially in urban areas, because here the standards are the highest, especially for new construction. The stage or level of development is thus a major contributing influence to the demand for urban land.

The availability of land itself contributes to patterns of demand. Location and accessibility have been cited as characteristics of urban land that determine its demand. However, the centre city is no longer the sole location of urban land, as changes in technology have opened extensive fringe areas to development.

This process of suburban land conversion has consequences for demand. Where prices remain significantly lower on the urban periphery than in the town proper, demand increases for land in the metropolitan area beyond the city boundaries, and this may extend into neighbouring rural areas.

Moreover, as demand increases for greater quantities of land, both residential and employment densities decrease. This process precipitates the lowering of urban densities throughout the metropolitan region, a phenomenon observable in many cities of developed nations. Thus, the demand for urban land spreads throughout the entire metropolitan region, frequently embracing large portions of the rural hinterlands.

The market mechanism has been relied upon to balance the demand for and supply of, land. But in this case, because of the peculiar nature of urban land, the market as a means for allocating this resource may influence demand. In some parts of the world, such as Africa for example, the supply cannot function to meet demand within a market context. The institutional barriers are enormous. The traditional land tenure system, with its vague land titles, works to prevent exchange, and when this does occur it takes months to complete the transaction because of the complexity of the system. The elements necessary for the operation of the land market are lacking, including real estate agents and the availability of mortgages. Therefore, where the market mechanism is functioning as a means for allocating resources, it may produce economic trends which in turn may influence the demand for urban land. Long-term inflation or the

reduced purchasing power of a currency will promote investment in land as a source of savings. In some countries lacking a stable monetary system and alternative investment opportunities, land becomes a primary means for accumulating and protecting capital.

## 2.5 IMPACT OF URBANIZATION ON LAND USE

Since urbanization is the process by which changes are induced in the way of life of a group of people. These changes imply three aspects: physical, social and economic. Thus, it is normal, to see that urbanization has the effect of increasing almost all forms of land use. This is expressed both in the intensity and the extent of land consumed, especially where urbanization has been rapid, and land has not been placed on reserve for that purpose. The type of city in which urbanization occurs along with the types of government and economy present, affects the way the factor of urbanization influences land use.

There are four basic elements which determine the use made of urban land:

- the spatial structure within which urbanization takes place;
- the stage of development;
- the major activities conducted in the urban area;
- the size of the city

Size has two quantitative aspects in reference to land use, one is the density of use and the other is the amount of land consumed. Urbanization has generally had the effect of increasing the



intensity of land-use. In many areas, this led to overcrowding, congestion and the development of slums. In some parts of the Middle East, one of the major expressions of urban growth has been the sheer physical congestion prevalent.<sup>8</sup>

Urbanization has had the general effect of creating new needs for land. The increase in national income that has been the result of urbanization, especially in the developed and Oil Producing nations, has produced a desire for a higher living standard. This factor has placed pressures upon such uses as housing and open space. Expectations have been altered, and households have changed in numbers, as has what is valued; so that increase has occurred in the amount of land required, the size of residence desired and the number and quality of services demanded.

An important aspect of the urbanization process is its localized impact on land demand, which may be fairly circumscribed in terms of concentration. Where vacant land does exist within the city itself, often it is not of sufficient quantity in any given location to permit the appropriate development or it may be under restrictive controls. Where this is the case, land demand is high and prospective buyers and developers are pushed into the suburbs. Explicit efforts have been made in some very crowded cities to control this process by promoting development in specific suburban locations. New towns around older cities in Italy, the Netherlands, Spain and the United Kingdom, have been created for this purpose. In France, (planned areas of priorities) , have been defined as a means of concentrating new construction.<sup>9</sup>

The concentration of jobs in the city has had important implications for land use. Service employment at present represent the major source of demand for land in the city. With "clientel in-migration" and the services already present, the increased demand inflates land values. Services themselves become specialized as a result of the competition, thus those located in the centre of urban areas are so specialized that they depend upon a central location for survival. Residential construction in the City declines, except for luxury apartments for the economically well off or public housing for those too poor to move elsewhere. Concentration begins to take multiple forms, but with one common theme, new structures within the city proper are most likely to be multiple-story buildings. Thus density increases are reflected in the concentration of buildings, employment and people.

At the same time, urbanisation consumes a great deal of land, as the physical size of cities increases. In the Middle East for instance, a number of cities have experienced significant area growth. The city of Kuwait, which encompassed 15 square miles in 1960, now occupies an area of 150 square miles. A much more sudden growth occurred in Riyadh, where the city expanded from 25 square miles in 1960 to 210 square miles in 1980.<sup>10</sup> Much of this new growth, especially in some parts of Asia and Africa, has taken the form of suburban sprawl which is unplanned and unregulated with little respect for externalities. Land is wasted and, amenities and services are lacking. In Europe, while the city and

urban area grows, land in the centre becomes so scarce as to be unable to house the cities residents. Thus the physical expansion of cities frequently characterized by sprawling developments in suburban areas has generated much concern as government seek to provide services to their new developments.

The rapid growth and urbanization has promoted slum areas and "shanty towns". As a result of Job Concentration in the centre and the competition between services for land, land prices have been rising sharply. In return, the services that can compete replaced those which cannot compete. This encourages exclusively business commercial functions. Thus residential uses decline, because of the cost of land, air pollution and noise.

The high land prices make it impossible for new residential building to replace existing ones in the city centre. As a result, there are many old houses in poor condition in and around the city centre. These areas are characteristically occupied by foreign workers, students and people who need to live in town, even though in houses of low maintenance.

While the city centre expands, the need for more urban areas increases, to accommodate the residents of the centre. Such demand in some countries is met by conversion of agricultural land, where in other countries urban sprawl is the direct result. Such growth generates increased transportation demands within the metropolitan area and unjustifiably high costs of services and utilities arising from the low density of development.

## 2.6 THE IMPACT OF URBANIZATION ON AGRICULTURAL LAND

One of the site factors that accounts for a city's location is its proximity to the best agricultural land, (in the pre industrial era). This factor contributes to the conversion of agricultural land to urban as urban growth continues its demand for land. This process of conversion of agricultural land into urban uses has appeared almost universally. The exceptions are where urban growth has extended into areas of non-agricultural use or desert. In some countries, such as United States with its relative wealth of land resources, the problem is seen by some as unfortunate but not life-threatening. In many other countries, however, where land resources are less favourable in relation to population, and to the need for agricultural production, the loss of agricultural land to urban uses is of more concern. Many countries in Asia and the Middle East in particular face this problem, perhaps none worse than Japan. On the one hand, these countries use land for industrial growth and economic advancement, while at the same time losing part of their ability to feed themselves.

The development of agricultural land for urban uses has implications for both the rural and urban sectors at all levels, from local to national. Not only may physical development replace agricultural uses but speculation may remove land from agricultural production. Further, the land market is altered by the process of conversion, as pressure is exerted to develop land which is at urban rather than rural use value. This removes land from agricultural production and promotes premature construction.

**Table 2.4: Distribution of urban population by size of settlement 1962/63 and 1974**

Size of Settlements	Number of Set.		Population of Settlements			
	62/63	74	62/63	%	74	%
100,000 and more	3	7	505,206	52	2,234,215	71
50,000-99,999	3	3	178,308	18	198,016	6
20,000-49,9995	5	9	148,590	15	405,904	13
10,000-19,999	12	17	148,590	15	298,983	10
<b>Total Urban</b>	<b>23</b>	<b>36</b>	<b>980,694</b>	<b>100</b>	<b>3,137,118</b>	<b>100</b>
<b>Total Population</b>			<b>3,302,000</b>		<b>7,012,000</b>	
<b>Percentage of Urban Population</b>				<b>30</b>		<b>45</b>

Source: For 1962/63 see J. Clarke "Introduction" in Population of the Middle East and North Africa, A Geographical Approach, (eds.) by J. Clarke and W. B. Fisher, N.Y. Africana Publishing Corp., 1972.

For 1974 (a) The Central Department of Statistics, The Population Census, 1974,  
 (b) Societe D' Etudes Pour Le Developpement Economique Et Social, Study on Changes in Urban ,  
 Rural and Bedioun Communities, (Unpublished Paris 1979)

The public costs may be large as developments may occur far from existing urban settlements and these are difficult and costly to service.

With speculation, inflated prices and controlled uses of urban land, on one hand and urbanization on the other, the conversion of agricultural land becomes the only way of providing for the various urban land use needs. However, the development that has occurred on converted land has tended to be at a low density which has meant high costs in terms of services and land itself. Another important consequence is that access to such land is frequently limited to the middle or upper income groups. Thus, the pattern of development promotes socio-economic segregation as well as increased service costs.

## 2.7 URBANIZATION IN SAUDI ARABIA

It has been established that the process of urbanization creates demands and induces changes in land-use, if these changes and demands have not been met by appropriate policies, several problems will occur.

The rapid pace of development and increasing population growth are now having an important effect on the patterns of urban development in Saudi Arabia. Table 2.4 shows the percentage of national population in urban environments between 1962 and 1975. Over this period Saudi Arabia maintained a high ratio of growth to urban population. Also, it can be seen that, generally speaking, Saudi Arabia maintained a continued growth in the gross national product simultaneously with urban population growth. A series of

national and local development plans have been drawn up to simulate economic, cultural and physical development.

Since the inception of the National Development Plans, Saudi urban growth became inevitable, as a direct consequence of the approach to development which has been adopted. Implicitly, one of the major factors that enhance urbanization is industrialization. Thus, both the industries developed and their infrastructure requirements make it inevitable that most of the new activities promoted or simulated by the development plan would take place in urban settlements rather than in rural areas. The speed at which urbanization has taken place can be seen from the following data. In 1932 the urban population was 300,000 or 20 percent of the total of 1,500,000; by 1962 it had risen to 800,000 or 24 percent out of a total of 3,300,000; and by 1974 it was 2,900,000, or 42 percent out of a total of about 7,000,000. It seems inevitable that there will continue to be a very close relationship between the level of industrialization and the level of urbanization in the country.<sup>11</sup>

Most of the industries which are being developed in the Kingdom (with exception of the hydrocarbon - related industries) are concerned with transformation of both local and imported raw materials into goods for the domestic market. As the major part of this market is in the existing urban centres, the pattern of industrial development can be expected to largely reinforce the existing settlement pattern. This trend will be reinforced by three other factors. First, the public utilities (particularly water and electricity) required for industrial development are more

**Table 2.5 : Distribution Of Total Population**

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	1970	1975	1980
Percentage living in metropolitan centers (population more than 100,000)	20	35	42
Percentage living in small towns	20	16	12
Percentage living in rural areas	60	49	46
	<hr/>	<hr/>	<hr/>
	100	100	100

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Source : THird Development Plan , P . 56



readily available in the main urban centres, and this existing situation is being reinforced by the extensions and improvements to the existing utility networks. Thus, although it is true that utilities are being introduced to the more remote parts of the Kingdom in accordance with the Plan's aims to distribute the benefits of development equitably, the level of supplies necessary to support extensive industrial development will continue to be found only in the major center for sometime. Secondly, the major supplies of labour which are necessary to support the development of an industrial base exist only in the major center of population as well as the necessary housing to accommodate them. Third, the dependance on imported materials provide considerable advantages for industrial development to the Kingdom's major ports and the urban centres close to them.<sup>12</sup>

However, the government has taken at least one major policy decision that may counteract these trends and have a direct and significant effect on the settlement pattern - the decision to establish the new industrial cities of Jubail and Yanbu.<sup>13</sup>

### 2.7.1 Source of Growth

The recent phenomenon of urbanization in Saudi Arabia started with the increase of oil revenues in 1973. The 1932 urban population was estimated at 300,000 persons and only the Holy City of Makkah had over 50,000 inhabitants. Since then the situation has changed extremely rapidly.

**Table 2.6 : Population Of Major Cities**

	1962	1974	increase	%Inc.
Riadh	169,185	666,840	497,655	294
Jeddah	147,859	566,104	413,245	279
Mecca	158,908	366,801	207,893	130
Medina	71,998	198,186	126,188	175
Taif	53,954	204,857	150,903	279

Sources:

1962: Normal C. Walpole et al., Area Handbook for Saudi Arabia, Washington , D.C. ,U.S. Government Printing Office ,1971, p. 19.

1974 : CBS, Statistical Indicators , 1934 H. , 1974 . Riadh, 1975 ,p. 112

The available data indicate that urban population, in settlements of 10,000 and more, increased from 980,699 in 1962/63 to 3,137,118 in 1974, most of it after 1970; while the total population increased by 316 percent (tables 2.4 & 2.5). During the same period (table 2.6) the growth of the five largest cities was phenomenal, particularly for Riyadh, Jeddah, Taif. According to the census of 1974, 38 percent of the total population was classified as urban, defined as population who are living in cities of 30,000 and more. During the last decade (1970-1980) significant changes in the distribution of population have occurred as shown in table 2.5. The percentage of population living in the large cities in 1980 reached 42 percent, and that of small towns decreased from 20 percent to 12 percent. This change, in general, may suggest that over 50 percent of the total population in 1980 were urban.

Urbanization is strongly associated with economic development and the rate of economic growth. Thus countries with high GNP per capita tend to have a higher urbanization level, and rapidly growing economies are expected to urbanize rapidly. Although Saudi Arabia enjoys one of the highest GNP per capita among developing countries, its high urbanization level may not be a sound indicator of the level of development. However, the country, during the last 15 years, has been urbanizing at an extremely high rate. A study made by the United Nations measures the base of urbanization in individual countries as the difference between the growth rate of the urban population and that of the rural population.<sup>13</sup> The same study estimated the differential rate for Saudi Arabia for the period 1950-1970 at 4.43, and by cross-

country comparison Saudi Arabia was ranked 24 among the 124 countries reviewed.<sup>14</sup>

Basically, there are two major sources of urban growth: natural growth and rural-urban migration. For some countries like Saudi Arabia, international migration is an additional source. Unfortunately, the relative share of each source is unknown because of the lack of adequate and reliable data.

Migration plays a critical role in the growth process of national economies and urban development. *The historical experience of the developed countries suggests that rural urban migration was an indispensable result, and at the same time an important source of economic growth.*<sup>15</sup> The modernization of agriculture made farm labour abundant, and the rapid growth of manufacturing and later services required the transfer of the surplus labour from rural areas to cities where the demand for labour exceeded the available supply. Migration had influenced the industrial and urban development. Rural migration in Saudi Arabia because of its late urbanization, is a major source of urban population growth, however, unlike that of the developed countries, it has been caused by two different factors: the stagnation of agriculture (in the last five years, agriculture has developed rapidly but with highly modernized systems); and the rapid growth of the service sector (and not much of manufacturing).<sup>16</sup>

It is suggested that in the free market and mixed economies the decision to migrate rests on the individual. The case of Saudi Arabia suggests that factors which influence rural-urban

**Figure 2.7 : Distribution Of Allocation For The Second  
Five- Year Plan(In million of riyals)**

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Economic resource development	92,135.0
Human resource development	80,123.9
Social development	33,212.8
Physical infrstruction development	112,944.6
administration	38,179.2
Defense	78,156.5
Other	63,478.2

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Total	498,230.2
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Source : R. Looney , Saudi Arabia's Development Potential, LexingtonBooks , 1982

migration are predominantly economic: a combination of wide differences in the level of income and wages between rural and urban areas.

Social factors have an influence on the migration decision. One of the major forces of the rural-urban migration in Saudi Arabia is "the availability of better social services...medical services are free everywhere, but they are substantially better in the urban areas". *Cultural and recreational factors in Saudi Arabia, unlike many countries, play rather a minor role in attracting rural migrants to the cities. This is attributable to the fact that the typical city entertainments found in other countries such as theatres, movies, bars, etc., are prohibited by Islamic law.*

Second, the flow of rural-urban migration is heavily directed towards the large urban centers. The official study of migrants who were employed in the private sector in 1973 indicates that 61 percent of migrants went to Makkah, Taif, Medina, and Al-Khobar.<sup>17</sup> The percentage of the population living in these cities, as it was shown in Table 2.7, in the last decade increased substantially (more than doubled), while that of intermediate and small-sized cities decreased noticeably. The rapid rate of rural migration to the cities has created tremendous pressure on the social services and the urban infrastructure. According to the Area Handbook of Saudi Arabia, "the rural to urban shift was greatly increasing the growth of cities which were not prepared to handle this population influx".<sup>18</sup>

### 2.7.2 The Context Of Urban Growth

Urban land development in Saudi Arabia, to a large extent, is a direct response to economic and social changes which are largely stimulated by government development plans. The pressure for urban growth and consequently the development of urban land and its patterns which emerge, cannot be properly understood without an investigation of the broader development policies which are being pursued. Oil revenues have enabled Saudi Arabia to embark on development plans which are dramatic by any standards. The action result on a series of Five-Year National Plans. The first one from 1970 to 1975 and the second one from 1975 to 1980. By the end of the Third Development Plan, the country will have experienced growth, since 1970, over 13 percent per annum in the output of goods and services, excluding the petroleum sector. By 1980, the First and the Second, already concluded a decade of explosive growth and changes in every sector of life, economic, physical, and social.

### 2.7.3 Development Plans

The first step in the creation of a planning apparatus was taken in August 1958. Formal planning began when the Supreme Planning Board replaced by the Central Planning Organization, the head of which had direct contact with the King, and by 1975, the CPO was elevated to the Ministry of Planning. By then, however, the country was prepared to assimilate efficiently the vast increase in oil revenues.

The general objective of economic and social development policy has not fundamentally changed over three plan periods. They are to maintain its religious and moral values and to raise the living standards and welfare of its people. The First Plan, approved in 1970 was based on a very general statement of goals. Where the Second Five Year Plan articulated these general aims more clearly, although still in very broad terms. The total plan expenditure for the public sector was set at SR 498.2 billion, with the amount allocated for economic, manpower, and social development at approximately 64 percent of the total outlay (table 2.7 ). The main features of the plan can be seen through the following goals:

- To maintain the religious and moral values of Islam.
- To assure the defense and internal security of the Kingdom.
- To maintain a high rate of economic growth by developing economic resources, maximizing earnings from oil over the long term, and conserving depletable resources.
- To reduce economic dependence on the export of crude oil.
- To develop human resources by education, training, and raising standards of health.
- To increase the well-being of all groups within the society and foster social stability under circumstances of rapid social change.
- To develop the physical infrastructure to support the achievement of the above goals.



In general, the Third National Plan can be seen as a continuation of the Second Plan. However, while the First and Second Development Plans often have been characterized as infrastructure building, the Third Development Plan has been more for industrial building and a period of initial consolidation, the elimination of most physical infrastructure bottlenecks, and the initiation of a more comprehensive data collection and planning process. The expected expenditures of the Third Plan, beginning in 1980, amounted to SR 782.8 billion . The following are some of the relative section goals:

- Agriculture: The goals for this sector are an increase in domestic food production, reclamation of land and irrigation projects and development of large farms.
  
- Roads: Construction is projected for 28.085 kilometers of roads.
  
- Municipalities: There will be improvements and development of towns and cities Kingdom wide.
  
- Housing: Construction is projected for 35,853 houses, primarily in urban areas.
  
- Industrial: Allocations are projected for the continued development and expansion of the industrial base via light industry, located in cities and towns throughout the country, as well as heavy industry, primarily at Jubial and Yanbu.

#### 2.7.4 Urban Development Patterns

One of the marked characteristics of the urbanization process in Saudi Arabia is its extremely rapid and strongly polarized growth toward the metropolitan centers or the seven biggest cities (with population of 100,000 and more). Urban polarization is reflected in the less rapid expansion of these cities, particularly in the last decade. The distribution of urban population by size of settlement, Table 2.5 shows a high degree of concentration in a few large cities.

Another important characteristic of the urban development pattern is the excessive concentration of the country's industry, finance, commerce, physical and social overhead capital, private investment, capital assets, higher educational facilities, and educated and skilled labour in the few large cities, and particularly in three metropolitan centers, Riyadh, Jeddah and Makkah, and the adjoining cities of Damman and Al-Khobar. Indeed, these centers have a substantial share of the country's non-farm economic activities far greater than their share of the national population.

However, the national settlement policy which supposes to guide the development of urban areas in Saudi Arabia can be summarized in the following paragraphs. As a result of the development policies and the natural constraints on development in a country with a generally harsh physical environment, Ministry of Municipal and Rural Affairs (the main ministry responsible for urban planning) has formulated a National Settlement Strategy. This

was completed by 1978, and it is not clear how far the strategy is used to coordinate or influence decisions of other government agencies, or the extent to which it is merely an expression of the basic trends identified above. However, it certainly appears to be consistent with these trends, and has as its two major objectives: the identification of the settlements, that have positive growth potential, and a clarification of their economic functions; and the promotion of a pattern of settlements which provides an economic and sufficient distribution of basic services in the urban and rural areas, and linking those settlements by the most appropriate means of communications.

The major elements of the National Settlement Strategy involves identification of a number of development areas into which, it is hoped, new development will be concentrated. There are, broadly, four types of development areas. The first is the group of settlements in the Eastern Region closely related to the extraction processing, and distribution of oil. Although it is the Kingdom's intention to diversify its economic base, clearly it is the oil-related industries that are in the foreseeable future, and this significance is reflected in the development area centered upon Damman and Dharhan.<sup>19</sup>

The second major industrial development area is in the Western Region, with Jeddah as its commercial and industrial centre. Jeddah is already one of the most important urban centers in the Kingdom, and its port continues to be improved and as large scale petrochemical industries and other non-petroleum based industries are developed.<sup>20</sup>

Other major developments in the Western Region relates to the continued development of the Holy City of Makkah and the expanding role of Taif as a tourist and government center. The third category of development areas has already been mentioned: the deliberate creation of new industrial centers at Jubail and Yanbu as part of the policy of economic spatial diversification. (Although investment in the new cities will initially concentrate on industrial development.) The fourth category of development areas is really a special case, the administrative and political capital of Riyadh, and its surrounding areas. Clearly, this area will gain in importance as the government's role in economic and social development continues to increase.<sup>21</sup>

The final category of development areas is that comprising the rural service center. Saudi Arabia is a large country, and much of its population still lives in areas which are sparsely settled. The National Settlement Strategy recognizes the impossibility of providing very small villages with the range of services and facilities which are needed to improve the standard and quality of life. The approach which is being adopted as an alternative is to identify one or more "major" rural settlements as the center of a rural development area, in which offers as full a range as possible of service and facilities will be provided.

However, the actual pattern of urban development is not consistent with the above strategy, with exception of the two new industrial city Yanbu and Jubail. Indeed, it can be argued that the present pattern of urbanization is incompatible with the long run

national policy objectives. The national urban system, as was shown before, is characterized by a few large cities that overdominate the entire system in terms of the distribution of urban population and economic activities, fewer intermediate size cities, and a relatively small number of markets and rural towns. It will be argued here that the problem is not the urbanization per se, but rather its rapid pace and strong polarization towards the large cities on the one hand, and its excessive concentration in the core region on the other.

Despite that, the urbanization process as a problem of itself is not our interest and what we are concerned with is the consequences and the impact of the process of the urban land development. Yet it is of an importance to understand at this stage the nature of the urbanization process which could help assist and explain the actual problems of urban land development as a part of the overall development-social, economic and cultural. Thus, the following section will look at the consequences of the urbanization process.

#### 2.7.5 The Problem Of Urban Development

The growth of urban areas in Saudi Arabia has been rapid, especially in the last decade, and as a result serious social, economic and physical problems have developed. It can be argued that many of these problems have resulted not so much from the strategy of urbanization per se but rather from the fast rate of growth coupled with lack of efficient urban planning and urban land management policies.

Growing at 7 or 8 percent, cities such as Riyadh and Jeddah may double themselves every nine or ten years and may become very difficult to manage and too costly to develop given the existing planning and institutional structures. Harry Richardson points out that "very rapid urban growth may make it difficult for city governments to keep pace in supplying urban infrastructure and basic services and may lead to a deterioration in environmental quality standards".<sup>22</sup>

The OECD in *Managing Urban Change* states three types of problems that typify the situation in countries undergoing rapid continued urbanization:<sup>23</sup>

- The difficulties and cost of providing adequate infrastructure and other public services, especially in areas of rapid urban growth and particularly when it involves introducing services into areas already developed. Related problems include how much users and developers should pay for the benefits they received, coordination among different services provided as well as between land development practices and service provisions.
- The lack of effective land management, leading in many of the rapidly urbanizing countries to residential expansion outstripping and impeding the provision of public infrastructure, neighborhood amenities and open spaces.
- The insufficient supply of land and shortage of adequate low-cost dwelling units and scarcity of neighborhood services. The quantity of housing in relation to the anticipated growth of the urban population, as well as the quality of the housing, have

become important issues, to avoid the problem of illegal development and squatting as well as urban sprawl.

In Saudi Arabia, the present growth rates of urban areas, may exceed their absorptive capacity. It is inevitable that serious urban problems, would accompany the very rapid urbanization. It was reported that rapid expansion of the major city of Jeddah, Riyadh, Makkah and Taif have put considerable stress upon the social infrastructure. Water and sewer lines and electrical supply have not kept up with demand resulting in overloaded sewer pipes and numerous brownouts. Thus, the main urban problem which has been experienced during the last decade are: urban sprawl, lack of community facilities and services, the difficulty in providing essential public utilities, especially water and sewerage networks, in step with the rapid pace of development, traffic congestion, the dimensions of development which can be gauged from the fact that imported cars increased dramatically from the average of 6,000 cars per year in 1960 to more than 100,000 annually by 1974 and by 1980 this number doubled more that twice and new development as well as the already developed lack of cultural and environmental considerations.<sup>24</sup>

Urban sprawl is perhaps the most serious urban problem in the Kingdom. It arises from the rapid rate of urban growth and a sharpe increase in the cost of land and the speculation activities, this causes other problems to emerge:

1- Low density development, which does not economically justify the extension of public services.

2- The monotonous nature of the development and lack of community identity and inadequate social and cultural opportunities.

3- The waste of land resources in bypassed areas suitable for non-economically productive uses.

The second major problem - lack of community facilities and services: (this problem is different in terms of location and cause from the above mentioned one, which is associated with urban sprawl) many towns and cities in the Kingdom are experiencing a great shortage of utilities and community facilities. These shortages are existing in the old parts of the cities and towns and those with high densities. Under the uncontrolled growth many areas have changed their original land-uses and far exceeded their original densities; consequently, these areas are experiencing shortages in community facilities as well as their utilities capabilities. For example, one observer wrote "although considerable progress was made between 1970 and 1975, safe water supplies and sewage networks in urban centers remained sufficiently unsatisfactory to be considered a major health hazard. The system in Jeddah may have been one of the worst having capacities seriously below the level needed. Cesspools and septic fields are the most common means of waste disposal".<sup>25</sup>

An urban society requires many social, cultural and governmental institutions. These range from schools to public services, administrative headquarters, recreation areas, etc. Saudi urban areas, in the light of the highly rapid urbanization and urban



growth on one hand and the shortage of adequate supply of urban land, because high cost or lack of means of acquiring land for public purposes on the other hand, institution building like in schools and other public buildings were not able to compete for favourable locations and were relocated to unsuitable sites. In some cases, when more space needed for school, the only alternative was to overcrowd the already existing schools.<sup>26</sup>

Traffic congestion is one of the more recent problems to emerge in Saudi Arabia. The dimension of the problem is, or has been noted, indicated by the dramatic increase in car imports. However, the problem is not only a rapidly increasing number of vehicles, but also is compounded by the fact that existing urban patterns of most towns and cities in the Kingdom is completely unsuited to vehicle traffic.<sup>27</sup>

Several processes are at work affecting the identity of Saudi Arabian urban areas and are developing a pattern that is inconsistent with cultural and environmental factors. The government programmes to accommodate the rising number of vehicle and other urban renewal plans. The efforts to widening streets, pushing buildings backwards, light regulations, opening the old city core and other land use plans and controls all of which to accommodate the vehicle traffic without, almost, any consideration to the other criteria, such as cultural, social habits and environmental conditions. Another factor influencing urban patterns, a manner contradictive with cultural and environmental conditions, the nature of development of urban sprawl. Also, the

government intervention to control land use has been lacking an element such as social habits and climatical conditions.

The fourth, even though it has a limited implication at our time, the future consequences have a strong negative impact on the country's major development policy, the conversion of agricultural land to urban uses. Under the continued pressure of growth and the limited availability of urban land, urban development has spread over the adjacent agricultural areas. The process of conversion has been encouraged by three factors: (1) greater return from urban development than agricultural; (2) lack of government control measures ; and (3) the suitability of agricultural land for urban development.

In summary, the rapid rate of the urbanization process which is taking place in Saudi Arabia since the late 1960's has generated a great impact on urban growth. The feature of this impact reflects the general theory relating to the nature of change as discussed in the first part of the Chapter. The distinguishing nature of the Saudi phenomenon is the rate of change and the astronomical growth in the country's wealth.

## Notes To Chapter II

- 1- L. S. Bourne and others, 1984, pg. 5.
- 2- For more information on this subject see: Ronald Johnes, "Essays On World Urbanization", 1975.
- 3- V. Castello, 1977, pg. VIII.
- 4- World Bank, World Development Report, 1981.
- 5- For more information see: H. Caminos and R. Goethert, 1978.
- 6- See: V. Castello, "Urbanization In The Middle East", 1977.
- 7- L. Bourne, 170-179.
- 8-D. Drabkin, 1977, pg. 9-23.
- 9-The issues of new town, settlement policies, etc. discussed in G. Golany, "International Urban Growth Policies: New Town Contributions", Wiley, 1978.
- 10- Al-Qadi, 1979,pg.
- 11-Central Department of Statistics, The Population Census, 1974.
- 12-A. Al-Ibrahim, "Regional And Urban Development In Saudi Arabia", unpublished PhD., 1982, pg. 230-270.
- 13-Second National Plan, 1975, pg. 98.
- 14-United Nations, Urban Rural Projections From 1950 to 2000, 1974. Cited from: Bertrand Renauds National Urbanization Policies in Developing Countries, pg. 22.
- 15-Al-Ibrahim, pg. 246.
- 16-Third National Plan, pg. 61-68.

17-Al-Ibrahim, pg. 249.

18-Nyrop, Area Handbook, pg. 65.

29-Abdal-Majeed Daghistani and Colin Lee, "Urban Planning And Development In Saudi Arabia", 1982, pg. 142-143.

20-Ibid, pg.146-148.

21-Ibid, pg.149-150.

22-Harry Richardson, pg. 15.

23-Organization for economic co-operation and development, "Managing Urban Change", Vol. I Policies and Finance, Paris, 1983, pg. 10-11.

24-Al-Qadi, 1979, pg. 17.

25-Abdal-Majeed Daghistani, 1982, pg. 142.

26-Al-Qadi, 1979,

## **CHAPTER III: LAND DEVELOPMENT ELEMENTS AND POLICY ISSUES**

### **3.1 INTRODUCTION**

The following sections of this Chapter discuss the different elements of urban land development by which a piece of land, whether large or small, can be described and through which changes can be analysed separately and in detail. Land can be defined as a piece of ground and, in the context of this study, the definition refers to all sizes of land from small plots to large areas such as cities or regions. The concept of land includes not only the ground but also the earth below and the air above it. However, each section covers the fundamental and the scientific bases which should be taken into account while reviewing, evaluating and formulating or modifying the policies of urban land development in Saudi Arabia.

### **3.2 PHYSICAL ENVIRONMENT**

The physical environment of land is one of the major elements that influence land development, and consequently it plays an important role in formulating urban land development policies. Physical environment includes ground conditions of a piece of land-soil conditions, geotechnical condition, groundwater, mineralogical conditions, ground levels and land form (see Chapter 4).

### 3.3 LAND OWNERSHIP

The social, economic, cultural and political structure define the concept of ownership. The extent to which an individual has rights to land is related to its socio-economic context within which rights are defined and the accessibility to ownership is determined. Darm-Drabkin argued that the concept of land ownership is dependent upon the means used by government to control it.<sup>1</sup> For example, the extent to which governments can expropriate land is a control mechanism that defines the concept of private ownerships. In general, a variety of ownership concepts exists, ranging from individual to communal to public, and in some cases the ownership form is associated with the use that can be made of the land. Also, the idea of ownership is related to land titles. Where the registration system is loose and obscure the exchange of land and the acquisition of large quantities of land or a group of parcels may be quite difficult. However, there has been a growing concern that the concept of land ownership should emphasize the role of land as a natural resource, and that its use should benefit the whole of society.

Land ownership (tenure) systems embody those legal, contractual or customary arrangements whereby individuals or organizations gain access to economic or social opportunities through land. The precise form of tenure is constituted by the rules and procedure which govern the rights and responsibilities of both individuals and groups in the use and control over basic resource of land. A distinction can be found between the group of systems that

separate property from possession and those that do not. The western tradition of Napoleonic and English common law defines property separately from possession, with the latter considering rights in terms of what use may be made of the land. African tenure systems, as a whole, do not make such a distinction, due to the basically communal organization of land ownership. Cultural traditions can determine both modes of ownership and the restrictions that exist on the use of land.<sup>2</sup>

### 3.3.1 Factors Influence The Concept Of Land Ownerships

**Socio-Economic:** The concept of land ownerships has responded to the changing role of land in the socio-economic environment. For example, the concept was quite different in the time when people wandered about, surviving by means of hunting, from what it became when they eventually settled down and developed an agricultural economy. Later, with the advent of urbanization, the concept was again altered to encompass industrial and other urban use and needs. In Europe, for example, ownership rights became an inherent part of the rights of the individual. This was in reaction to the feudal situation where in the individual retained rights of land use but not ownership. With the coming of the Industrial Revolution and its consequent development, needs arose which could only be met through collective actions. Such public works as roads, power stations, government buildings and efforts towards urban reconstruction and renewal, required some degree of governmental control of individual rights. Thus, although efforts have been made to ensure the rights of private ownerships, these must not be in contradiction with community needs.

Government Control and Regulation: The degree to which government exercises the control of land, by regulation or by retention of property rights, determines practically the way the concept of land ownership is defined. Governments may define ownership either constitutionally or legislatively, and by the powers they can use to acquire private land for public use, such as expropriation. It may entail the designation of the individual versus collective rights. In some countries, land is considered to be given in part to individuals. In North America, the right of eminent domain allows governments (local, state, federal), to acquire private property for public purposes with compensation. This procedure can involve the procurement of some or all property rights, and can be forced by means of condemnation. Two other means of government control that affect land ownership are taxation and escheat. Escheat is a power reserved by man's government's throughout the world, and means that if parties possessing legal title to land fail to hold it, the property reverts to the state.

Recently, the notion of land ownership has been undergoing change and is causing much concern. Property rights, in this context, would relate to the role land has had for society, rather than merely for the individual owner. Although, a distinction has been made between ownerships of land and the possession of property rights, the question remains as to who shall benefit from land use. The concept of land ownership may be viewed as encompassing those rights which the individual retains. In the case of urbanization, the problem has been the rigidity of property rights



and their regulation by legal controls. They "are not adoptable to the dynamics of urbanization and they have a pernicious influence on shaping the environment in human settlements, as they only respond to narrow profit motives of individual owners and disregard the need of the environments and societies".<sup>3</sup> With the rapidity of urban development, the need has been recognized for the acquisition of land for the implementation of development plans, and that this is a legitimate public purpose. This trend indicates that such a concept of land ownership entailing its considerations as a natural resource is similar to the original concept of communal land ownership.

### 3.3.2 Basic Proprietary Categories

**Non Formal:** Land occupied and used without permission from its owner - a form of tenure known as "squatting" - represents a high proportion of the residentially occupied area of most cities in developing countries; specifically, slums and shanty towns of, those cities, have been built on land acquired by "De Facto". However, this form of ownership and use is not recognized by law.

**Private Freehold:** The most familiar form of tenure is private freehold, in which a private individual or corporation owns outright, and market forces dictate land use and disposition, except to the degree that public controls apply.

**Private Leasehold:** In private leaseholds a private owner leases to a private individual or firm for a given term of years, possibly

with restrictions it can be applied to all categories of property: residential, commercial, and industrial.

**Public Freehold:** Public freehold exists when a government agency is full owner of the land. In an urban context, it generally applies to land directly used by the public, such as parks, roadways, and sites for public buildings. Nationally the government may own vast areas of the country for forestry, conservation, mineral and oil resources, recreation or other uses. As urban areas spread, these nationally owned areas, once considered completely rural, may take on great importance for orderly urban development. One problem, therefore, in many countries is to establish institutions that will permit the efficient transfer of such public land into urban areas when appropriate. Another form of public freehold is the new town. A public agency may acquire the total site, hold it during major construction, then dispose of it, for example, through public leasehold, to allow further private-public ownership is the "company town" but it is dying out almost everywhere.

**Public Leasehold:** When a public agency owning land leases or rent to a private individual or firm for a specific period of time the tenure created is called public leasehold. One of the most frequent proposals for tenurial reform is that most developable urban land should be held in this type of tenure. Public agencies may also lease from private owners, but this rarely occurs.

**Communal Ownership (Tribal):** Probably the oldest form of land tenure is communal or tribal ownerships. Territory controlled by the tribe is considered the personal property not of any firm or

family but of the group as a whole, with the tribe allocating specific sites for housing and agriculture to individuals and resolving any disputes. Where this concept has changed radically, overtones still remain in the doctrine of expropriation and in modern arguments that all land ownership is a type of stewardship, a public trust under which private persons must have due regard to the general rights of society. This applies particularly when other national resources are involved.

**Communal Ownership (Neighbourhood):** A small but possibly growing phenomenon in developing countries is that of low-income neighborhoods pooling land ownership and giving control over alienability and price to some self-created neighborhood organizations.

### 3.3.3 The Impact Of Ownership Patterns On Urban Development

Land ownership patterns are a major factor influencing urban growth and urban structure, because the concept of land ownership responds slowly to socio-economic changes. Ownership has been defined as the possession of rights, and the extent to which government or an equivalent coordinating group retains part or all of these rights. Thus, the effect of ownership patterns on urban structure relates to the ability of government to regulate the patterns of development. In many countries, the concept of "public purpose" has been expanded so as to encompass the implementation of urban development schemes. This definitional change permits governments to acquire land, obtaining ownership rights, for purposes of development. Ideal for this purpose is the pattern of

land ownership that appears in some of the socialist countries. In Eastern Europe, the governments have acquired considerable amounts of land, available for both rural and urban uses, above and beyond those currently in such usage. In these nations where private land ownership persists, various legal means appear for the expropriation of land for urban purposes.<sup>4</sup>

In contrast, the power of the government to control or direct the formation of urban structure is more restricted in those countries where is a greater retention of ownership rights by individuals. In these cases government influence development through the prosecution of some public purpose project and through regulatory powers. Such powers like zoning, subdivision controls and the more indirect tools, such as taxation, annexation and the provision of public services, influence not only the location of uses but also the form in which they occur. For example, a major problem encountered in many countries is sprawl, the wasteful consumption of urban land. Zoning and other means of land-use controls have encouraged this pattern of urban development by such restrictions as minimum lot sizes and set-back controls. The same methods have promoted single-family housing at the expense of multiple family units, which represent a potentially more efficient use of land. Governments have, in this case, acted so as to promote this form of ownership, of single-family units on large lots, by individual owners, which has produced a sprawling urban structure. It might be concluded, depending upon one's attitudes towards this development pattern, that the use of some regulatory measures have been counter-productive.

A number of consequences are associated with ownership patterns. They include the ways in which land ownership can prevent the provision of adequate urban services, including housing and the disruptive effect that individual decisions can have on urban structure. When ownership decisions are not coordinated by some sort of land policy, a situation that exists in some parts of the Middle East and the Far East, intense overcrowding results. In this situation, the poor cannot afford any mode of ownership, and are forced into the already insufficient supply of housing units. In contrast, the oil producing countries where urban structure experience the two extremes, low-density and high-density. This is produced by individual decision making and a pattern of ownership which limits and restricts the housing supply available to a significant portion of the population. In any case, it seems clear that ownership patterns have a direct impact on urban structure.

#### 3.3.4 Public Ownership Of Land

The Declaration of Principles which resulted from the United Nations Conference stated that "public ownership transitional or permanent, should be used, whenever appropriate, to secure and control areas of urban expansion and protection; and to implement urban and rural reform process, and supply serviced land at price levels which can secure socially acceptable patterns of development".<sup>5</sup> For this reason and others, governments in various countries have been exercising the right of appropriation as well as the participation in land markets by purchasing or selling land for the purpose of land development control. In the following

sections I review most of the general methods and rights of public ownership of land.

### Expropriation For Public Purpose

A major right of public authorities in terms of acquiring the ownerships of land for public purposes is that of expropriation. The common law of England specified that authorities may exercise the right of eminent domain for public purposes, and this precedent has been followed by a number of nations. Individual nations determine which level of government and which specific agencies therein may exercise such a right and under what conditions. Justification for such rights varies from country to country, due to the differences in tradition and ideology.

Generally, the procedures in countries providing for the power of expropriation provide a vehicle by which the designation of public purpose may be contested, thus requiring the taking authority to justify its decision. Consequently, there is considerable debate over what does not constitute a public purpose. The notion of public purpose will vary through time and among different countries.<sup>6</sup>

### Pre-emption Rights

Pre-emption rights are a variation of the public acquisition of land and are also known as the right of first priority. This allows a public authority a greater opportunity to acquire land when a private owner desires to sell. Where such rights exist, the owner

of the property must first offer his land for sale to the public authority before offering his land for sale to the public or other private parties. If the public authority expresses no interest in the property then the owner may sell the property to a private party. Such rights are of particular importance to urban development because in anticipation of growth land may be specified, and planned areas of the requisite size needed for the implementation of long-term development programmes may be delegated and once this is done, the area is restricted in terms of the transportation that can be made.

#### Compensation

The matter of compensation did not appear with the initial exercise of eminent domain, but appeared after its designation in the "Magna Carta". In the United States, the Supreme Court did not hold the payment of compensation to be necessary until 1897. Countries designate within their legislation the bases for determining the amount deemed to be just compensation. The generally accepted standard is the market value of the property. But the problem is to reach agreement on what the market value of the property is, and this has caused considerable difficulty since there is no scientific procedure for determining market value in the absence of a sale to a willing buyer. Generally, the opinion of experienced real estate appraisers is used, but other procedures have also been applied.

Frequently, in order to expedite the process and arrive at a reasonable and fair price, transactions made recently on similar sites in close proximity to the property being considered are used to establish a benchmark value. However, variations may among cities are many and it is difficult to find any direct correspondence, and even then, two individuals may value the same article differently. Thus, establishing a price almost inevitably leads to a great time consuming processes.

Establishing compensation normally revolves around expert opinions, whose findings may be disputed through either administrative means or in the courts, and the process is generally costly in terms of time and financial expense. However, in most countries compensation is required for the exercise of the right of expropriation.<sup>7</sup>

### 3.4 LAND VALUES AND LAND PRICES

The term "land value", and "land price" are often used to identify the price of land prevailing in the market. Although in practice no distinction is frequently made between land value and land price, the two terms actually refers to different things.

Urban land value is the expression of highest and best use. In other words, the most intense use of which the plot of land is suited determines the value. Viewed in this way, public decisions which set the kind of use and provide infrastructure and accessibility to a site greatly effect the value of land. The term, land value, refers to the use to which the land might be put.



Ideally, the land price reflects the value on highest and best use to which the land may be put. In the case of urban land, land prices do not always reflect land value because of the unique characteristic of the commodity and the market which allocates land. Thus, the price of urban land not only reflects its present value (present use), but often reflects the potential use likely to occur in the future. The result of this distinction between land value and land price is that it is possible to speculate on the potential use of a plot of land, purchase it at one price and resell it when its potential use is realizable.

### 3.4.1 Factors Influencing Land Prices

Land prices are the reflection of numbers of the interaction of a number of forces. Although the exact degree of influence is not known, five major forces seem to be influential in shaping land prices. These are: urban population growth, speculation, land use differences, public improvements and public planning and development programmes.

#### 1-Urban Population Growth

As a result of urbanization and the movement of people from the centre of urban areas to the suburbs, urban land prices have risen much faster than prices for agricultural land.

A study of population changes in relation to urban land prices, by Darin-Drabkin, shows the relationship between land prices and

population growth. However, the rate of population growth by itself, is not an explanatory variable, rates of land, price increase. Similarly, a higher rate of population growth in one community must not necessarily lead to a higher rate of land-price increase in comparison with another community with a lower growth rate.<sup>8</sup>

## 2-Speculation

The rapid influx of people into urban regions and the spread of those regions have promoted holders and purchasers of vacant land within the outskirts of metropolitan areas to hold on to land in hopes of receiving higher prices at some future time. This phenomenon is usually termed speculation and has serious impacts on the supply of land available for urban development and on the patterns of urban expansion.

Speculation on price increase in urban land occurs extensively in developing countries where there are fewer alternative and safe investment opportunities. People with capital to invest often choose land because it is a safe investment, yielding, on the average, a fairly high rate of return.<sup>9</sup>

## 3-Land Use Differences

All land adjacent and within urban areas do not increase or decrease in price at the same rate. In fact, it appears as if commercial sites behave quite differently than land suitable for residential purposes. To the degree that the size of the lot, location and availability of improvements determine the use to

which a parcel might be put, they affect the behaviour of the land's price. Generally speaking, on land that has been provided with improvement the increase is slower than that of vacant land. Thus, several patterns of land price increases can be established within a single urban area on the basis of suitability for different types of uses.

### Public Planning And Development Programmes

Planning and development work undertaken with public funds help to influence the increase in land values. In many countries, the provision of public services and development of public land uses directly shape the pattern of surrounding land uses and thereby affect the value of adjacent property.

The availability of the needed public services which make raw land suitable for urban use greatly enhances the value of the raw land. In Saudi Arabia, the construction of the New Jeddah Makkah Highway, increased land values on both sides of the highway from \$0.75 per square meter to \$70 per square meter in 1975.

### 3.4.2 Implications Of The Cost Of Urban Land

The impact of the continual rise in the cost of urban land have directly affected the housing industry, the provision of infrastructure and public facilities and, in general, have had a negative influence on the over-all pattern of development.

Where the private development sector is the major force active in developing urban land, there is always a tendency to move the edge of the city further outward to avoid paying the higher land costs found closer in. This pattern of growth increases the cost of providing services by forcing the extensions of the services into sparsely populated areas, which cannot bear the full cost of the extensions.<sup>10</sup>

The high cost of urban land has a direct influence on the location of public institutions. Residential, commercial and industrial land uses usually precedes the development of public institutions. When the demand for these services is sufficiently high, the value of the land rises substantially and the more optimal location tend to be put to other uses. Therefore, when these facilities are constructed, they often become extremely expensive and sometimes get located in unsuitable locations. On the other hand, facilities, such as roads, exert a very direct influence on future land use patterns. Land costs are very large factors in determining the location of these types of facilities and of the effectiveness of cost saving efforts by governments. These locational decisions may, in turn, result in land use patterns which further aggravate pressure on other types of services, e.g. housing, schools, etc.

### 3.4.3 Social And Economic Land Values

Land has always had an economic value based on its productivity or its potential use in an urban setting. Recently, people have become increasingly aware of the value of land as a natural resource which needs to be preserved and which cannot be replaced at any

price. Often, the natural resource value of land and the economic use to which it can be put are in conflict. In most of the existing land use control measures and policies, often do not reflect the natural resource or social value of land. Land is a fixed resource which cannot be appreciably increased, it is an economic commodity for which there is no substitute. These facts require that land be put to its highest and best use in terms of social as well as economic values.<sup>11</sup>

### 3.5 LAND USE

Growth takes many forms - more people, more homes, more schools, new job opportunities and so on. There can be growth in many directions, on different scales and on a diverse frontive - spatial, institutional and cultural, for example. Land is the platform of all previous growth and changes and thus it provides them the necessary accommodations. Therefore, the operation of land use regulations at the national, regional and local levels become one of the most important means of guiding land development.

The immediate reason for intervention is usually the need for land for roads, utilities and other public services or because of spillover effects, the tendency for the use of land for one purpose to result in costs or benefits to users elsewhere. In an uncontrolled land market, individual owners and users have little incentive to take account of the costs (or benefits) they impose on others. So governments may provide financial incentives in the form of taxes or subsidies. Where the spillover effects are

locationally specific, governments may impose direct controls that require individuals to use land in ways which benefit the community as a whole or at least create no serious harm.

Regulating land use in the community interest involves more than the recognition of spillover effects on contiguous land. One objective is to provide public amenities, such as open space, which would be unlikely to be privately produced. Another is to increase efficiency, for example, by guiding development and redevelopment of land to more desirable purposes, limiting urban sprawl and unnecessary encroachment on agricultural land. Finally, there are distributional aims such as making land available for all groups in the community and ensuring that the benefits of development go to the community as a whole.

The five most common forms of land use regulation and control are: zoning, subdivisions, building regulations, approval by government agencies, and urban planning. The first three provide a hierarchy of regulatory techniques covering different sizes of land area and level of detail. These three instruments are normally used in conjunction and, indeed, often include elements of one another. They are, however, by no means always determined by the same group of decision makers.

Agency (authority) approval is the usual method of implementing the regulations specified under the first three controls. However, the approval procedure merits separate consideration since in many cases it is operated by one or more organizations completely unrelated to the planning bodies determining the regulations. The

urban plan also requires individual treatment. Although, it usually employs the techniques already discussed, it is a far more comprehensive tool, involving the more positive government powers of investment, acquisition, taxation, and subsidy, and other direct involvement in urban development.

### 3.5.1 Zoning

Zoning is the demarcation of a city by ordinances and the establishment of regulations to govern the use of the zoned land. It also includes general rules about location, bulk, height, and thus plot ratios, shape, use and coverage of structures within each zone. It is an attempt to organize and systematize the growth of urban areas by setting up categories, classes, or districts of land in the community, prescribing the use to which buildings and land may be put, and applying uniform restrictions on the shape and placement of buildings. The main objective of such regulations are to improve efficiency (which includes restricting uses to particular areas to limit adverse spillover effects), to promote agglomeration benefits, to specify minimum health and safety requirements, and to provide land for public goods and services. Zoning is also used to affect the distribution of benefits, especially the protection of the rights of existing owners, although it can be used more positively to released land for redistributinal purposes such as low-income housing.

First introduced in the U.S.A., American cities developed an alternative to the traditional common law nuisance doctrine. This alternative was initially based on the idea that the nuisance law

could logically be extended to allow municipalities to use their policy power to regulate all aspects of land use. Policy power is the inherent right of a municipality to govern the community in order to provide for the "health, safety, morals, or general welfare" of the community. Out of this extension of policy power grew what sometimes has been described as the "tool" of land use regulation - zoning.

The first American zoning laws were developed in Washington, Los Angeles and Boston and involved regulation of land use and/or size of building. The concerns of the Fifth Avenue Association ultimately led to creation of a commission which drafted the New York zoning ordinance of 1916, the first comprehensive zoning ordinance to be adopted by an American city. New York's ordinance set specific requirements for land use districts, areas, lot coverage and height of buildings, all of which were subsequently held valid by the courts.<sup>12</sup>

### Exclusionary Zoning

As zoning became more and more popular, the legality and the constitutionality of it came under increasing criticism. The first judicial articulation of this concern was in 1926, *Village of Euclid vs. Ambler Realty*. In 1962, *Vickers vs. Township of Gloucester* resulted in the court rule that "Certainly general welfare does not automatically mean whatever the municipality says, it does, regardless of who is hurt and how much...general welfare transcends the artificial limits of political subdivisions and cannot embrace merely narrow local desires".<sup>19</sup> Since then,



various court cases took place to question amount the validity of traditional zoning as a method to control land use and protect justice in the community welfare. These criticisms can be summarized as follows:

- Social Injustice
- Rigidity
- Prevent Design Innovation

As a result of the above criticisms, traditional zoning has been undergoing replacement and/or modification to overcome the weaknesses which result from its ridgity and discriminatory nature. Such attempts are summarized in Table 3.1.<sup>13</sup>

### 3.5.2 Subdivision Regulations

Subdivision regulations govern the development of raw land for residential or other purposes. They prescribe standards for lot sizes and layout, street improvements, procedures for lot sizes and layout, procedures for dedicating private land to public purposes, and other requirements in far more detail than in the zoning plan. They also include procedure for filing maps and for receiving the approval of the public departments that grant permission. The main objective of such detailed controls is to ensure that developments take account of the community's need for public goods and services, of minimum standard requirements, and of immediate spillovers of costs and benefits.

The subdivision of land prior to development is one of the most important determinants of neighborhood patterns. Once the size

**Table 3.1: Techniques of Controlling Growth (Type of Regulation)**

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Public acquisition	Conventional subdivision regulations
Fee simple acquisition	Zoning/subdivision regulation/
Less than fee simple acquisition	building codes used for permanent
Land Banking	population regulation
Compensable regulation	Exclusive nonresidential zones
Public improvements	Exclusion of specified types of
Location of facilities	housing (mobile home, multiple
Access to existing facilities	family, etc.)
Environmental controls	Minimum floor area or lot size
Floodplains, wetlands, slopes, etc.	Height restrictions
Critical areas	Zoning or other off-site regulations/
Developments of regional impact	exactions and other requirements
Pollution controls	Mandatory dedication of land or
Development rights transfer	capital
Restrictive covenants	Low-income housing requirements
Zoning techniques	Tax and fee systems
Conventional zoning	Urban and rural service areas
Conditional zoning	User and benefits fees
Contract zoning	Special assessment
Planned unit development	Preferential taxation
Flexible zoning	Development districts
Performance standards	Annexation
Bonus and incentive zoning	Timing of infrastructure development
Floating zones	(capital programming)
Special permit	Numerical limits and quotas
Variance	Total population goals
Miscellaneous management and planning	Annual limit on building permits
activities	Fair share allocations
Moratoriums and interim controls	
Administrative delays	
Analysis of benefits vs. costs, environ-	
mental impact, carrying capacity, etc.	

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Source: After Michael E. Gleeson et. al., *Urban Growth Management Systems* (Chicago: American Society of Planning Officials, 1975), pp. 8-9, and David P. Godchalk, *Constitutional Issues of Growth and Management* (Chicago: American Society of Planning Officials, 1977), pp. 12-13.

and shape of lots have been defined, the essential character of land uses, street patterns and public utilities is determined. Lot size and shape also strongly affect the type, size and quality of structures and the density of population.

The regulation and planning of subdivision on the outskirts of cities are widely accepted as essential to development. Proper and timely planning of expansion can preserve the sound structure of cities in the long term. An important element is the dedication of land for public purposes. In Canada, for instance, planning authorities may take as much as 40 to 50 percent of a private developer's land for open spaces and other public uses. In some cities of Latin America, property owners contribute considerable land for street widening and parks.<sup>14</sup>

Many developing countries use this approach to the regulation of private development and to the specification of public involvement. In the Middle East (Iran, Iraq, Saudi Arabia) subdivision controls, usually administered by the municipalities, determine the essential character of neighborhood for a long time in the future. The original subdivision of rural land, the arrangement of the streets, the dimensions and shapes of the block lots, and the provision of urban spaces and public buildings must conform to national regulations.

Subdivision regulations have proven a powerful tool in assisting and controlling suburbanization in the United States, for instance, and in France where public control over detailed plans has existed for fifty years. But needs and conditions of developing countries

require a significantly different set of standards, more flexible, more able to take account of rapid changes, more clearly related to local conditions and standards of living, and more easily implemented. Current standards are often too high, too detailed and inflexible, unrelated to local conditions and often even to the planning objectives of the community. Moreover, the control of subdivisions is usually in local political hands and may be manipulated to protect the vested interests of the few rather than to foster the interest of the many.<sup>15</sup>

### 3.5.3 Building Regulations

Building regulations limit or define the way new structures are to be built and the materials to be used. They may prohibit the erection of any structure whatever or restrict the style of architecture, the cost of the structure, the materials, the position of the building on the lot or its distance from the street, its height or depth. Also, building regulations have included requirements for parks, parking and other amenities as a condition for approval of a subdivision or street pattern. They may also include controls over the use to which the building may be put for example, for residential purposes only or for specified types of enterprises - as well as minimum conditions which a dwelling must meet to be regarded as fit for human habitatism. They may be in the form of building and housing codes legislated at the national or, more usually, the local level, or they may be written into deeds or other instruments or part of the contractual agreement.

Their main objective is that of securing socially acceptable minimum standards. Originally there were three main reasons for such regulations, fire protection, structural safety, and sanitation. Today, codes include not only a far wider range of protection but often aesthetic considerations as well. In addition, they are seen as important devices for preventing the deterioration of the housing stock and a tool to implement zoning density regulations, for the purpose of, e.g. utilities, community services, etc.

In many circumstances the capacity to implement regulations may be increased by reducing general standards while maintaining minimum standards for health and safety, perhaps with the assistance of a subsidy. Site-and-service schemes have been designed in this way in the Philippines, Korea, Kenya and Jamaica, to mention a few examples. They point the way to a more positive definition of building regulations as a series of performance standards rather than as inflexible input requirements and constraints. Clear statements of what will satisfy each regulation allow producers to take local physical conditions into account. In determining output standards of this type, what consumers can afford to pay, including what government or international agencies are prepared to subsidize, must be kept in mind. Initially, they should be designed to deal only with the most immediate social needs, but over time, as standards of living rise, they can be adjusted upward to take account of other factors.

#### 3.5.4 Approval By Government Agencies

Approval by government agencies is the main way in which controls over development rights, subdivisions, and building are enforced. Generally, building permits are required to ensure compliance with the local bylaws and in some cases with the general city plan. A building permit is usually granted tentatively on the basis of schematic designs of the proposed building or group of buildings prepared in line with zoning subdivisions, and building regulations. The designs are finally approved when the full set of contract documents are available. These documents are stamped, filed and recorded so that the development is designed as conforming to requirements.

Government agencies also have the power to deny permission to build, and this is perhaps their most important control, although a refusal to issue a permanent permit may sometimes be challenged if it is thought to be unreasonable. Most governments of developing countries empower building or zoning inspectors to deny permission for development which is incompatible with public regulations. In most cases this power is exercised only sporadically. Where it is used it may have other purposes that to bring about complications with regulations. For instance, some countries use the denial technique to force minorities or nationals of other countries into joint ventures with local businessmen, as well as to prevent urban sprawl. The power often extends to the right to demolish buildings which do not comply with the regulations or to fine owners of nonconforming units. The most usual use of this power is in relation to the destruction of squatter settlements, but it may also be applied to buildings

within the formal sector, whether residential, commercial or (less often) industrial.

A major difficulty is "the proliferation of agencies involved in any particular development and the lack of interaction between those that enforce the ordinance and those that operate them". Moreover, there is no necessary relationship between the capacity to obtain one set of permissions and another. This problem is, by no means confined to the developing countries. In cities in the U.S., for example, the process may include several reviews with local and federal fine arts commission, many separate meetings with the building department and with the zoning commission, and several meetings with the general council's office of the local government.

### 3.5.5 Land-Use Planning And Land-Use Plan (Urban Planning)

Land-use planning functions within the scope of comprehensive planning to distribute spatial resources to fulfil social needs. There are two main reasons why it is necessary for governments to regulate and control land-use and the returns from land. First, private decision-making does not take into account the full range of spill-over effects, such as the social costs and benefits from land use. This prevents a rational pattern of land uses from developing. Secondly, and of major concern to both comprehensive planning and land-use planning, social priorities and goals exist which the private market does not and cannot accommodate. Land use planning commonly occurs at the local level, in keeping with regional planning, and it is conducted to direct spatial

development so that it will conform to and serve the goals set by the process of comprehensive planning.

The process of land use planning functions so as to prevent the land market from operating at cross purposes with those of comprehensive planning. Land-use planning can determine the location, timing and coordination of investments made by government, and the regulation of the use of private land.

Land use planning functions at lower level, of authority due to the specifically local nature of the factors that determine the components of a pattern of land uses. In practice, it specifies types of land uses, the amount of land needed for each use, and the spatial relationships among the various uses. The ultimate product is a model or plan for land uses that designates their pattern for urban development.

The means to implement land use plans include both direct public action and the direction of private decision-making through administrative, legal, fiscal and other means of land-use regulation. Such activities require the coordination of public efforts within a proper institutional context. Means such as building, zoning and subdivision regulations, permits for development, licences, plans for the construction of public works and capital budgeting should be available for this purpose, along with the continuing review within the planning function itself. Effective implementation is not limited to carrying out any specific plan, but entails a continuing activity within the land-use planning process.



Land-use planning may be influenced at the regional level by both regulations and public expenditure and investment programmes. In the United States, for instance, the states enact planning, enabling legislation, which in turn permits local authorities to engage in land use planning and the implementation of plans. The retention by the status of the power to plan, allows state governments to delegate this authority not only to municipalities but to other governmental agencies as well. The state legislature of New York created an Urban Development Corporation which has such powers or the right to condemn land and to waive local land use regulations. Although such legislation includes an increased interest at the state level in land-use planning, local authorities still then to retain the most control over land-use.

In developing countries, many of whose cities do not possess the ability or the power to undertake effective land-use planning, neither planning nor the committant tools for regulation of land use exist. Where present, they may be readily ignored or radically outdated. Planning that is carried out deals specifically with the use made of land within municipal boundaries and thus ignores the problems encountered in the development of metropolitan areas. Moreover, necessary regulations and the scheduling of capital improvements are often lacking as well. Although plans may be developed by central governments, they usually focus on a specific problem, such as resettlements, new town construction on holy cities. Regional plans may not elicit conformity at the local level, and many countries are faced with a major problem of organizing for planning and the enforcement and implementation of plans. A

lack of trained personnel and data, and rigid planning procedures inhibit the efforts necessary to regulate development.

Such problems are not unique to developing countries. Many cities in the developed nations do not undertake comprehensive land-use planning, but govern development solely through the enforcement of zoning and subdivision regulations. As in the developing nations, such control activities are often limited by jurisdictional boundaries. Metropolitan planning and plans have been difficult to implement due to the lack of either political or legal powers to overcome intercommunity competition and conflicts.

A major dichotomy may appear between land-use plans and land-use planning as a process. The former has tended to be a static concept in which specific land uses are identified on a map of the community, which in turn becomes the model for guiding land-use decisions over some specified period of time. Elsewhere, planning is conceived as a continuing process, wherein recommendations for land use, densities and locations of uses are made and are re-evaluated in view of changing needs and circumstances. The first may be applicable to an area no longer growing, but even in this case its applicability may be questioned. Thus, concern has increased to modify the form of traditional land-use plans, especially in orders to accommodate the dynamic processes that influence land uses. A further distinction is made regarding whether or not a plan itself should be binding. If the land-use plan were binding and require conformance to its recommendations, then it would be "imperative". However, if the plan serves as a guide, then it would be "indicative", planning for land use may be

indicative when the planning authority has little power, is not directly concerned with growth, or has few tools by which to control development or to implement its recommendations.

When tools exist in the absence of plans, they may well freeze patterns of land use according to legislative intent, rather than in the context of a plan. Static plans, plans without power, and tools without plans are themselves major barriers to effective land-use planning.

In view of such a situation and given organizational, technical and financial constraints, there is need to make planning concepts more dynamic and use procedures that are more substantively inclusive and scientific, to simplify planning methodologies and procedure in order to make the process more economical and workable, and to make the planning function action-oriented. In the face of rapid urbanization and development, expedient actions must be taken with whatever abilities are at hand. Elaborate and detailed land-use schemes and long range projections for situations 20 to 30 years hence may be irrelevant in view of the speed of present urban change.

An alternative approach may be the form adopted in the British Town and Country Planning Act of 1968, where the former Development Plans and were replaced by Structure Plans, Local Plans and Action Area Plans. Structure plans state policy towards development and land use, emphasizing environmental improvement and the relationship between transportation and neighborhood areas. Comprehensive treatments are reserved for

selected action areas of local plans, which require specific development of a part of all the action area. Local planning authorities are required to consider the relationship between their plans and regional economic development, the resources available for the implementation of the structure plan and other areas of concern that the minister in charge of the Act might specify.

Land-use plans, given a sufficient understanding of the temporal, spatial and socio-economic situation, can result in the optimal use of the land available to a given society. The land-use planning function goes beyond the mere preparation of plans and includes the use and review of planning as a continuing endeavour. Land-use planning needs to function in a context of institutionalized authority as this has been one of the most significant elements in determining the effectiveness of land-use planning.

Thus, land-use plans should not be seen in a static context, but rather as part of the revolving process of urban planning. Then the implementation tools (zoning, subdivision, public ownership, etc.) should be seen in the same context. In other words land policies should be seen as an integral part of the dynamic process of urban planning.<sup>17</sup>

### 3.6 FISCAL CONTROL

This section reviews a form of public intervention in the urban land market, for the purpose of plan implementation via, property taxation. The assessment of any given policy depends on what objectives are to be met, and unobtainable objectives can create

their own problems. Indeed, the political and economical conditions within which they are formulated, determine various taxing policies. The North American countries generally rely upon local control of local taxes, based on assessed valuations with the national governments taxing capital gains and income resulting from land investments. Thus, taxation is mainly a compulsory contribution to public authority for its expenses and is applied as a tax related to the value of a property. Such a tax may be varied in application to influence urban development according to some preferred strategy. For example, taxation can be used to discourage development in undesirable areas (i.e. a special area tax); or conversely, by reducing its application, it can be used to encourage construction in areas where development is recommended. Property taxation has also been considered as a means of retaining the appreciation of private property values resulting from community investment - e.g. as a land profit tax, levied on the increase of property value over a period of time. However, the principle of a land profit tax has usually been found for political and technical reasons too difficult to put into practice in most mixed economies.

### 3.7 Policies Criteria

The difficulty of formulating policies to control land development results from the nature of urban land. Land is both one of the natural resources and one of the essential goods necessary for existence of the individual. Land is a basis for urban settlements where people live, work and use services. Therefore, a land policy

has to be based on a cultural, environmental and a socio-economic approach.

One of the goals of urban land policies may be defined as supplying land needed for urban development in the appropriate location at the right time. Because land policies are a part of general development policies, they are influenced by the socio-economic and political structure of a country and its level of development.

Policies defined as a set of measures to achieve the objectives formulated by the public authorities. The objectives and the measures are influenced by the social and economical structure of the country and by the level of development; as well as by its environmental conditions.

Also, urban land policies are formulated according to the level of general national planning. In countries with planned economics the general comprehensive planning system has an impact both on urban development and on the way in which these developments are controlled. Urban development is planned according to national objectives of the general plan which are to use all the resources of the nation in order to achieve a better standard of living for its citizens.

In the Second Chapter, I mentioned that since the late 1960's Saudi Arabia had adopted a comprehensive planning approach to develop the country based on two levels of planning: national and local, with minor roles for the regional level. Within this framework of planning, land policies are formulated to implement the objectives

of land development, within political, cultural and environmental parameters.

Therefore, the criteria by which land policies in Saudi Arabia may be measured are:

- 1- The extent of success or failure to implement land development objectives;
- 2- Its consistency with the country's cultural and social habits;
- 3- Its compatibility with the country's physical conditions.

### Notes To Chapter III

- 1- H. Darin-Drabkin, 1977, pg. 409-411.
- 2- For more detail about Land Tenure in Africa and Europe, see U.N. Department of Economic and Social Affairs, 1975, Concept of Land-Ownership And Regional Variations.
- 3- Report of Habitat: United Nations Conference on Human Settlements, Vancouver, Canada, 1976, Declaration of Principles, section II.
- 4- For more detail see I. Orori, 1971, "Pattern Of Urban Land Ownership", International Seminar on Urban Land Policies, United Nations, Madrid.
- 5- Habitat, 1976, section II.
- 6- N. Lichfield & H. Darin-Drabkin, 1980, Land Policy in Planning, London: George Allen & Unwin Ltd., pg.198-210.
- 7- As a matter of interest, James Brown, R. Phillips and N. Roberts, 1982, "Land Ownership And Market Dynamics At The Urban Periphery: Implications For Land Policy Design And Implementation", in World Congress on Land Policy, 1980, Ed. by Matthew Cullen & Sharon Woolery, pg. 119-149.
- 8-H. Darin-Drabkin, pg. 47-68.
- 9-Saba Shiber, 1964, The Kuwait Urbanization, pg. 65.
- 10-H. Darin-Drabkin, 1977, pg. 18-23, Also, P. Balchin & J. Kieve, 1982, Urban Land Economics, pg. 38-68.
- 11-H. Darin-Drabkin, 1977, pg.1-6.
- 12-John Delafons, 1969, pg. 19-20; S. Warner, 1972, pg. 28, M. Scott, 1971, pg. 152.
- 13-For how this measure has been used in the United States, see Mary Brooks, Exclusionary Zoning (ASPO 1970).



14-W. Rayner, "Subdivision Control In Ontario", Canada Law-Book, 1976.

15-See Freilich and Levi, 1970, pg. 77-129; and "A Model Land Development Code", Washington, D.C. American Law Institute, 1970, pg. 27-108.

16-U.N. Department of Economic and Social Affairs . 1971 Land Use Control Measures Vol .1.

## **CHAPTER IV : CULTURAL AND ENVIROMENTAL CRITERIA**

### **4.1 INTRODUCTION**

This Chapter looks at two of the criteria for evaluation of the performances and/or guides to the formulation of land policies in Saudi Arabia; in the previous Chapter I mentioned that land policies are influenced by three factors: culture, the level of development, and environmental conditions. In the case of Saudi Arabia culture is defined and based on Islam where as enviromental conditions are characterized by the hot arid zone.

The first part of this Chapter looks at the cultural factor. It is composed of four sections. The first one discusses Islam as a way of life; where the second looks at the impact of the Islamic teachings and values on the physical pattern. The third section looks at the Sharia, its methodology and implications on land issues. The final section reviews the Sharia as it pertains to land-use control.

The second part looks at environmental factors. It consists of two sections, the first reviews the impact of physical conditions on site allocation, where the second section looks at the climatic factors.

### **4.2 ISLAM "A Way Of Life"**

The word Islam is commonly understood, literally, by Moslims and others to mean, surrender; that is, of the believer to God. The active

participle of the same verb *Muslim*, means one who performs the act of surrender. Hence, Islam constitutes two basic complementary concepts, *Imam* (faith) and *a'mal* (actions). The former govern the relation and the behaviour between the Muslim and God where the latter governs the relation, the behaviour and all non-spiritual acts between individuals; these are the parts of the Islamic Sharia which concerns us.<sup>1</sup>

Anyone acquainted with the teachings of Islam knows that Islam not only elucidated man's relation to God, but also laid down a definite scheme of social behaviour as guiding principles as a result of these social relations. Consequently, the Islamic state according to the teachings of the Quran and the Prophet tradition, contains a precise body of law called the Sharia which encompasses all aspects of life: spiritual, physical, individual, social, economic and political. The Muslims believe that Islam fulfills their needs by the Divine law - contained in the ordinances of the Quran and detailed and exemplified by the Prophet in the body of teachings that is described in his *Sunnah* or "way of life".<sup>2</sup>

Consequently, Islam established, for its believers, the values, principles and guidelines for their functioning and provides them with a state model for their government. The following are a summary of those principles, relative to our subject:<sup>3</sup>

1) The sovereignty of the people and the state belong to God, and the Islamic temporary state on earth is in reality a vice regency, its rights, and the rights of its deliberative bodies, whether the calipha's

or the consultative assembly's are subordinate to the law revealed by God through his Prophet.

2) In Islamic states, Muslims have equal rights regardless of their origin, race, colour or language. No group, clan, class or individual is entitled to special privileges. Nor can any such individual or group determine that any other group's or individual, position is inferior.

3) The Sharia is the supreme law under which every one from the most humble person up to the head of the state must submit to the Quran and to the authentic practice and sayings of the Prophet.

4) The government, its authority, and possessions, are a trust of God and Muslims, and hence must be entrusted to Him who is the most God-fearing, the most honest, and the most trustworthy.

5) Ali, the fourth calipha in Islam, reported that he asked the Prophet, "What shall we do if we are faced with a problem after you die about which there is no notion in the Quran nor have heard anything concerning it from your lips?" the Prophet answered, "Collect, those of my people (umma) that serve God truthfully and place the matter before them for mutual consultation. Let not be decided by an individual opinion".

6) The most important duty of the calipha and the government of the Islamic state is to institute the Islamic order of life; to promote all that is good and to eliminate all things which are evil.

7) The state places a legal and moral obligation on its citizens to subordinate personal interests to the interests of the community as a whole, as it is represented by the state.

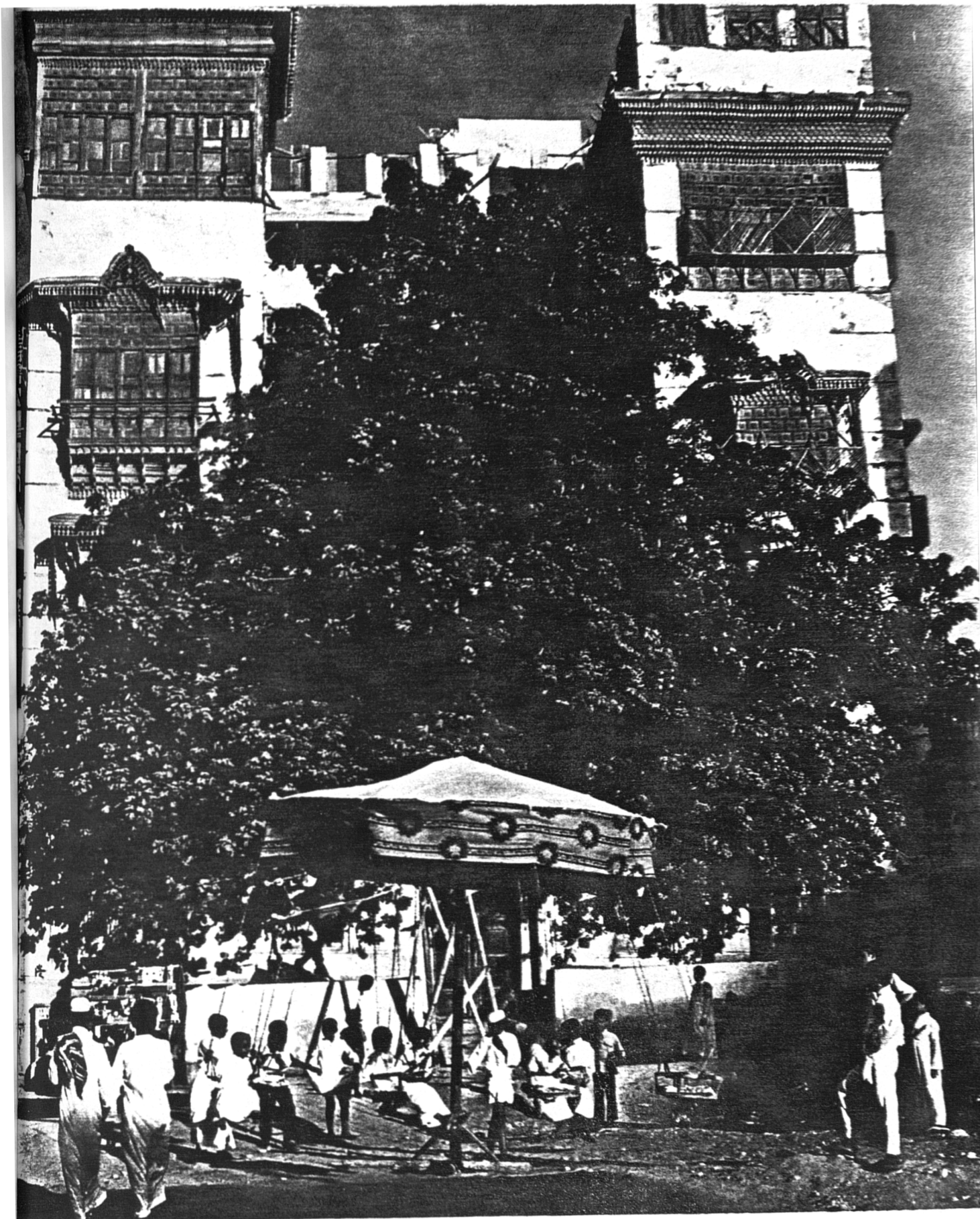
#### 4.2.1 Islam As A Parameter For Physical Behaviour

Religious Equality: Islam is an egalitarian religion and theocracy. For Moslems it is God, without conferring commands, who rules by way of His revealed book, the Qur'an. God governs, unassisted, infinitely alone in His inaccessible transcendence.<sup>4</sup> The ruler is merely a temporal executive of God, and therefore, only His shadow and sword. Since earthly authority, not only comes from, but is also administered by God, in His eyes all the faithful, all Moslems, are fundamentally equal by the mere fact of being believers.<sup>5</sup>

The strong sense of equality inherent in the Moslem, servant of God, motivates him to be remarkably cautious and prudent when he is to express publicly, and by physical means, his social and economic status. That is why throughout Moslem cities, these splendid residences, devoted to the exclusive intimacy of the dwellers, were hidden behind unattractive walls. The interiors were never allowed to be seen by the public, not only to preserve privacy, but because such action would represent a challenge to the fundamental equality of Moslems. The elaborate facade of a house would be erected in its interior, facing the omnipresent courtyard, not only so that it could be admired in strict privacy by the dwellers, but also by reason of respect for the city residents who could not afford such architectural features. This strong sense of egalitarianism has been a major



**Figure 4.1 : Equality**  
The absence of class segregation in traditional  
Moslim community



**Figure 4.2 :** Privacy  
Architectural techniques to provide privacy  
in traditional community

contributing factor in making traditional urban structures and patterns( Figure 4.1) .<sup>6</sup>

Seclusion and Sense of Privacy: It has already been mentioned that between the 'public' urban center of Classic Antiquity and the 'domestic' one of the northern European world, there is another which is quite different from them.<sup>7</sup> This is the 'private' city of Islam. A key to the understanding of its morphological characteristics and personality is furnished by the revelations of the Qur'an specifically in verses 4 and 5 of Sura XLIX.<sup>8</sup>

The strong desire for privacy, indissoluble in the Muslim, formed the basic format for the residence to be a confined area, hermetically closed to the exterior, which in turn forced the concentration of domestic life in and around the dwelling's courtyard. In the process of providing privacy, houses have been clustering in the form of cells to create semi-private space which later lead to the private space; this was undoubtedly the pattern of sex segregation, for which privacy has been highly regarded as one of the most identifiable characteristic of a Moslem-Arab community(Figure 4.2).<sup>9</sup>

Unity: The residential superblock enclosing semi-public space, which developed out of the tendency to assign property rights over a large space to a group which was impowered to subdivide it. This results from the aspiration of Moslem families to obey Islamic law and has encouraged consolidation among family members and neighbors. Such a relationship forms extended families, which are headed by the father and consist of his wife, his sons and his daughters. A Moslem's favorable attitudes towards his neighbors promote proximity and



lectivity in their relationships. From such intimate relationships among neighboring houses, a solidarity among the members of the community is established which is reflected in their buildings( figure 4.3).<sup>10</sup>

Mosque: The centre of religious and temporal life throughout the Moslem world is the mosque. The second pillar of Islam, Prayer, is compulsory for every adult man and women and the fact is that the Friday Mosque is the only known public gathering place in Moslem urban areas . The existence and location of the mosque in the Moslem urban physical pattern is regarded as the focal point around which all activities should be located(Figure 4.4).<sup>11</sup>

In summary, I can say there are four basic criteria to guide land policies in terms of physical pattern and physical formualtion of urban areas in Saudi Arabia:

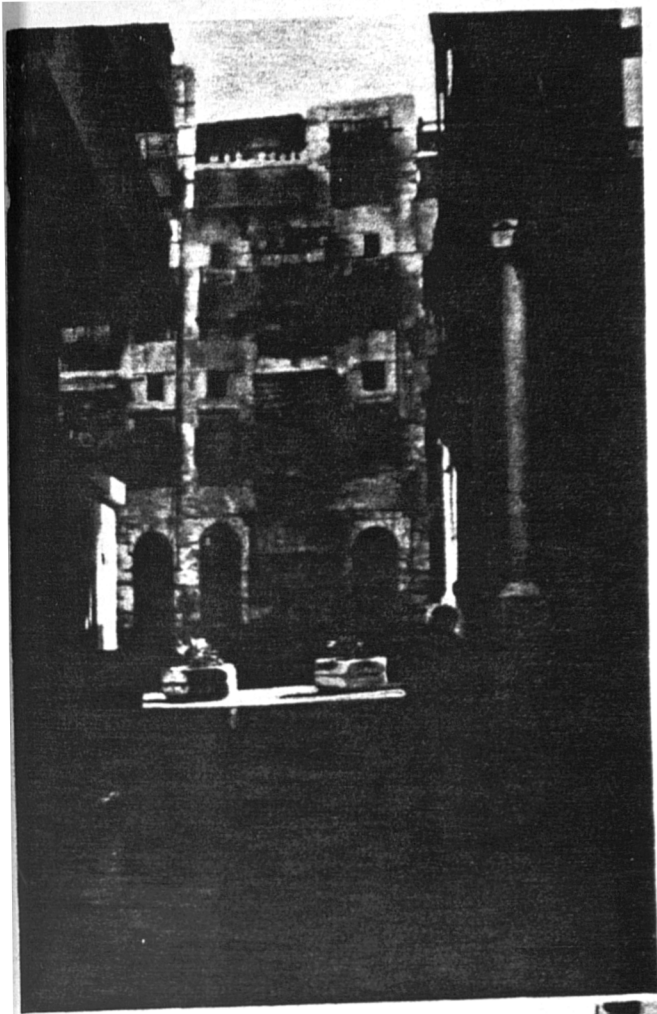
- Equality
- Unity
- Privacy
- Mosque

#### 4.2.2 Methodology of Islamic Sharia

##### Source Of Sharia

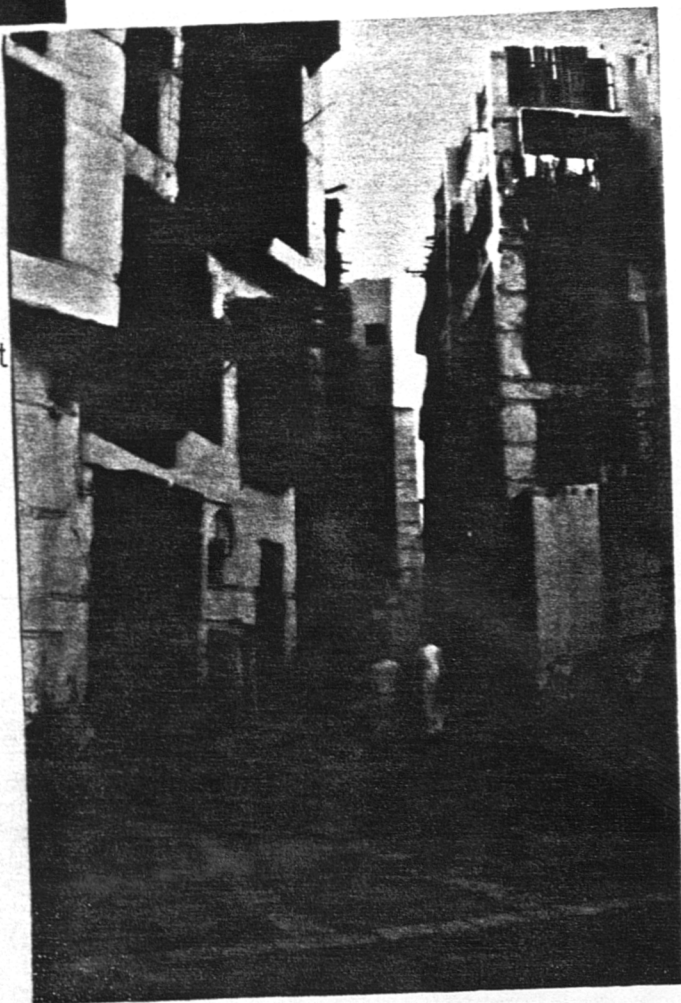
The Islamic Sharia has four sourcesd for legislation e.g. values, teachings; these are :

The Quran: primary source. This is the scriptural revelation of the will or laws of God and primary source of Islamic jurisdance."And we



**Figure 4.3: Unity**

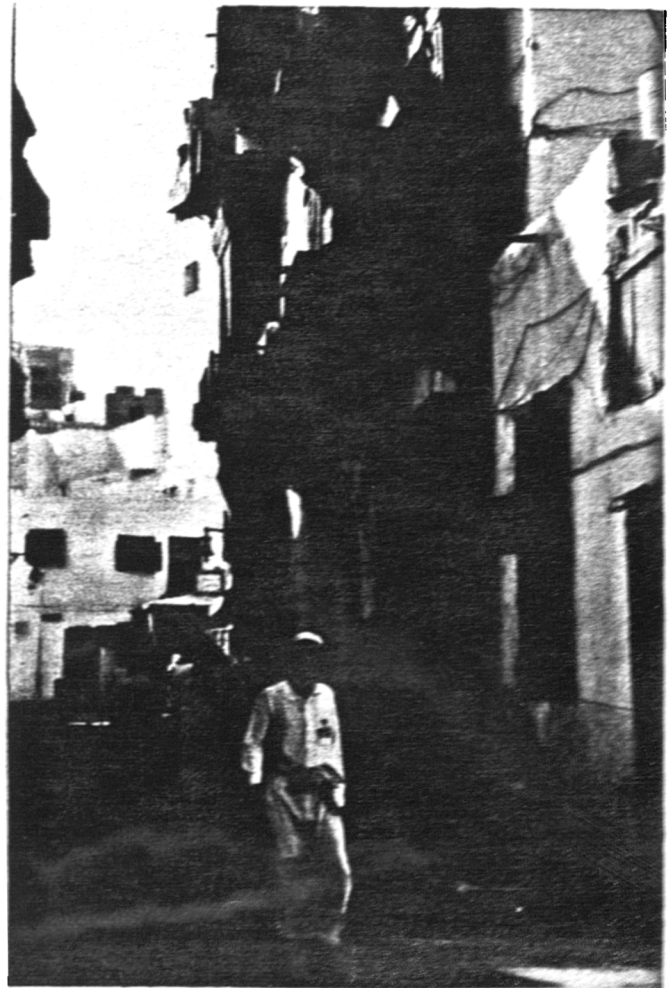
The semi public space of the residential quarters represent the Moslim community unity





**Figure 4.4:** The Mosque

The land mark of Moslim community  
and the centre of religious and  
temporal life



have sent down to you the Book explaining all things as a Guide, a Mercy and Glad Tidings to Muslims."<sup>12</sup> The authority of the Quran is unconditionally binding and irrevocable for a Muslim. However, the Qurans' nature, in general, provides broad principles and concentrates on the value judgements. Nevertheless, its command is applicable to innumerable human and social conditions with both precision and flexibility. Besides, the general principle, its command becomes obligatory only to the extent of our ability. "God imposes not on any soul a duty beyond its scope."<sup>13</sup>

The Sunnah (Tradition or Saying of the Prophet Mohammed): means the words, actions and assertion of the holy Prophet. Most of all it is the model pattern of behaviour. It demonstrates how the Prophets' thoughts and deeds were grounded in the eternal verities of the Quran or will an in the realities of the social and natural environments in which he lived. The authority of the Sunnah springs from explicit declarations in the Quran.<sup>14</sup>

Aiyas (analogy): is an intelligent deduction for analogous situations based on study, thoughtful interpretation and individual insight. The reasoning that God, the Prime Legislator, in revealing judgements, had specified aims and purposes. Thus, if we were confronted with two similar situations, and their illa (reason), which is the efficient cause or the attribute of the matter under consideration that gives rise to a judgement, was the same yet one situation was governed by a provision and the other was not, we can use that same provision to govern both situations.<sup>15</sup>

Ijma (consensus): Ijma means agreement or general consent. Ijma is collective, organized *qiyas* or *ijtihad* (it is the opposite of *taglid*, imitation, for example, imitation of the positive solutions of the classical Islamic jurists). Recourse to *ijma* is based on the authority of Sharia ordinances. However, the Sharia does not provide an unequivocal rule on whether *ijma* refers to the decision of the competent or of the community at large; the relation between the two; and whether it has to be unanimous decision, the decision of a simple plurality or or a predominant majority. These questions must be decided by *ijtihad* and *ijma*.<sup>16</sup>

In compliance with the Quran, the Prophet used to consult with his companions and refer to their expert opinions in legal, technical, political and even religious issues. The Rightly Guided Caliphas also used to ascertain and employ *ijma* for legislative and political decision-making. However, *ijma* is probably the most important Islamic legal principle. Without the sanction of *ijma*, interpretation of Sharia through *ijtihad* in its various forms would remain *zann*, personal conjecture.<sup>17</sup>

#### 4.2.3 Sharia As Source Of Legislation

Any formulation of land policies to regulate allocation or distribution and to control uses of land must recognize that fundamental legal questions are involved. That is why any attempt to regulate the development of land should go through and satisfy the Sharia principals pertaining to land development before any attempt to test certain criteria for formulation. There are fundamental facts that

have to be stated before any attempt to develop any Sharia parameters for policy formulation.

The Islamic Sharia, as a phrase, has two scopes of meaning. Generally and widely constructed it denotes everything that has been written by Moslem jurists through the centuries, whether it dealt with contemporaneous issues of the time or in anticipation of future ones. Narrowly, the Sharia is confined to the undoubted principles of the Qu'ran, to what is true and valid of Sunna. In this context, one can say that the Sharia as an organic creature, growing, developing and evolving, attached with a strong link of interdependence to its society, adapting its needs and changing with different circumstances. This fact derived from the Sharia Methodology . The second two sources of the Sharia responding to the needs of a society at any particular interval in history.

Our subject of land development policies derives most of its regulations and parameters, in terms of Sharia from the two sources and belongs to the "wide" scope of the Sharia. Which has been generated based and from "Analogy" and "consensus" (see section 4.2.1 ). In other words we can refer to Zaki Yamani, "The religious essence and value of the Sharia must never be underestimated...we must distinguish between what is purely religious and the principles of secular transactions. Though both are derived from the same source, the latter principles have to be viewed as a system of civil law, based on public interest and utility, and therefore, always evolving to an ideal best. The religious element serves as a model code of ethics, the purpose of which is to strengthen secular principles, by giving them a sense of dependence on divine guidance and creating a

subconscious respect for compliance, even in those beyond the reach of enforcement.<sup>18</sup>

#### 4.2.4 Islamic Sharia And Contemporary Issues Of Land Policies

Maqasid Al-Sharia (the Sharia intention) that must be realized in any examination of rules, regulations and policies.<sup>19</sup> The Islamic legal and administrative system is 'value-centered'; laws exist to realize certain value goals. Therefore, for any Islamic land development, the ultimate purpose of all regulation, controls and other legislations, is to implement the ultimate objectives of Islamic law. Thus, within the above understanding, this chapter examines and presents the general points of views and the legal understanding of the relevant issues of urban land development policies - land ownership, land value and land prices, land-use controls. In other words, the Sharia does not prescribe any specific form of government or any administrative or regulatory systems or even one pattern that the Islamic state must follow. Being a divine law, the regime of Sharia left a vast area of the constitution-making activity open to the citizen and to the government of the time, to be their sole responsibility and to be guided by the principles of ij-tihad (independent legal judgement arrived at by knowledge and reasoning, according to the circumstances of the time, within the values and ethics of the Sharia and in no way contradicting with any of them). Thus, this chapter looks at the different issues of land development and presents either the specific opinions of the Sharia or if there is no one, the relevant values of the Sharia point of view will be presented.

#### 4.2.5 Public And Private Ownership Rights

Perhaps the fundamental issue of our time which in turn gives rise to many complex issues is the legal economic conflict between the individual, his rights and authority on one hand, and the community (public), its rights and authority, on the other hand.

"Between the three ideologies (communist, capitalism and socialism), Islam has its distinguished understanding for the issue of individual right vs. public".<sup>20</sup> The concept of communal framework came about at the time of the Prophet, and was concretely and practically employed. Thereafter, the cases and writings of the jurists filled in the gaps, and gave substance and wholeness to the concept. This concept represents the fact that the Islamic preaching is for social solidarity.<sup>21</sup>

What is meant by social solidarity in Islam, is the existence of that state of affairs where the individual is charged with the responsibility of the community welfare and protection. Individuals partake in the service of the community, each according to his native ability and knowledge, in such a way that the needs of the community are satisfied by a division of labour or production or development.

From this concept in Islam, the following basic principles can be concluded:<sup>22</sup>

- the individual is the central unit of activity in the community, and must be given all the opportunities that prepare him to carry on his functions and activities.



- the community is the end and aim of the individual's activity, and is the limit at which the individual's activity ends. Within this communal framework individual's have complete freedom of action and the right to the fruits and rewards generated thereby; and

- the community is responsible for the preparation of the individual to fulfil his individual collective obligation, and the community, represented by he who is in authority, must enforce the fulfillment of such obligation.

Islam, as usual, starts with the concept of the community, by declaring that all property is owned by God. The Sharia realizes that when a certain right is described as belonging to God, what is meant is that it belongs to the community, on what is referred to legally as a public right. The Quran emphasized this concept in more than one place. Al-Zamakhshari in explaining this concept said, "The property you have in your hands is God's by virtue of Him making and creating it. He supplied you with it and permitted you to reap its benefits, and made you His heirs and successors in disposing with it, but it is not really yours and you are only God's agents and representatives".<sup>23</sup>

This general idea of God's ownership of everything is not a philosophical concept per se, but an important basic legal principle, the purpose of which is to define and determine the right of the individual vs. the property he is entrusted with, in case the act of ownership was to result in harmful and injurious effects to others and the community. It further imposes an obligation upon the individual to own it for his benefit and that of the community. And

last it sets the limits at which point ownership ceases if the welfare of the community demands that, or the need of another individual, in the same society, to that particular property reaches the stage of extreme necessity.

As long as these Islamic connotations are clear and inherent in the concept of ownership, one can refer to this private right as ownership rights, and once this right is vested, we shall recognize it and protect it, legally. This concept of ownership can be reduced to its two elements; the ownership of the legal title and the ownership of the equitable or beneficial title. Islam in principle vests legal title in God and vest the equitable beneficial title in the holder of the property. Thus the concept of Trust is created where the beneficiary can exploit and reap the fruits of the property provided he does not violate the condition laid out by the holder of the legal title who is God, the owner of everything. Which are the community welfare and others that fall under the concept of takaful (social solidaritiy).<sup>24</sup>

From the Sunna and the following Right-Caliphs, we can formulate two principles for the exercises of the right of ownership.

- 1) Prevention of injury to others.
  
- 2) Benefit to others if no impairment or injury is caused to the owner.

From the two legal principles, we can formulate three restrictions imposed on the exercise of individual rights in general and the right of private ownership in particular, being one of the major issues of our thesis.

1) The exercise of the right is only permitted for the achievement of the purpose for which the right was created.

2) The exercise of a right is considered illegal if such exercise resulted in excessive harm and injury. This limitation has been implemented generally by Imam Malik in matters relating to neighbour relationship, dispensing with special cases of windows opening (a problem similar to the prescriptive easement for light, air and privacy in development controls), the division of tenancy in common property, and the ownership of uncultivated virgin land. Malik decided in the above cases, the exercise of right results in excessive hardship and injury to others, the possessor of the right must be restrained in his exercise thereof.

3) The exercise of a right is not permitted if used not for benefit, but to bring injury to others. Again, Malik employed this limitation to restrain a neighbour from the use of his property which results in injury to others without any corresponding benefit to the owner. He maintained that one cannot take refuge in his ownership right to cause injury to others.

However, within the above principles, there are three groups of property excluded from private ownership:

1) Property that is by nature designed for public use such as places of worship, roads, rivers, public open space, etc.

2) Minerals, oil, etc.

3) Property the title of which reverts to the state from individuals. This kind of property remains owned collectively, and the Iman - according to the weight of authority - cannot grant it to anyone; if he does, title does not vest in the grant and he has only a grant for use.

#### Land Tenure

The right to enjoy private property and protection of private property from insurpation are secured in the Sharia, as in public ownership of scarce and indispensable resources. Currently, the Islamic systems governing land tenure in Muslim countries are unique. In the countries which were once under the influence of the Ottoman Empire, land is categorized differently from the other Muslim countries. Indeed, the countries that did not experience any Ottoman influence, still, land tenure varies between them. However, this section reviews the most common ones and those which are relevant to our area.

According to the Sharia, Allah is the ultimate owner of all things. Thus, land is declared to belong to Him, then to His messenger (after this death to the state), and then to the Muslim community. This amounts to human trusteeship or stewardship rather than absolute ownership. Out of this concept, the Prophet declared the distinction that land has two states: one when it is in a state of nature or abandoned, and the second is land made fruitful by its cultivation or other appropriate use. This principle is the basis of all human rights or ownership in Islam (the concept of ownership here as explained before: is not the ownerships of the legal title but the ownership of the equitable or beneficial title). The Prophet asserted on more that

one occasion: "Who revives non-owned land has priority to use or own it." "Who revives a dead land, it becomes his own; if another person attacks him by planting in his land he should remove the plants."<sup>25</sup>

Sharia further defines the condition of full possession as the actual use and development of land for the purpose intended. For example, if the land was intended for building a house, the actual building of the house fulfils the condition of possession. Or if the land was intended for cultivation, basic preparation which should include providing water for irrigation is sufficient.

#### Iqt'a - Donation<sup>26</sup>

The previous is the first of two methods of acquiring a title to ownership in early Islam and the two methods that shaped and formed the existing land ownership pattern. The other one is called Iqt'a "donation". The ownerless land can acquire a title through its bestowal upon an individual by the Imam. This is referred to as Iqt'a (donation) and many are cited.

The Prophet donated ownerless lands to many people. He donated to his followers and predecessors, some of them sold his or their share of the donation. The Prophet donated lands in Hadramont and Khaiber. The Prophet donated land in Medinah to the two Caliphas (Abu Bakr and Omar).

From the days of the caliphs have come the following Hadiths: Abu Bakr (the first Caliph) donated land to one follower and gave him a deed, and brought witnesses among whom was Omar (the second

Calipha). "Omar wrote to one Governor asking him to donate land on Dijla riverside to one person if the land was not jizyah land or had water passing through it (Jezyah land is property taken from non-Muslims by legal means).

From this body of caselaw and precedents finally emerges a system in which the following elements in land donation can be identified. Firstly, whoever leaves a donated land without utilization for three years loses his donation. The basis of this was that the Prophet donated land to some people but they did not utilize it; then others came and utilized the land. When the two parties disputed the matter before Omar ibn Al-Khatlab, he said: "if it was donated from me or from Aba Baker, I would have taken it back, but it is from the Prophet himself". Then he said "Whoever has land leaves it without utilization and then other people come and utilizes it, then the latter will have priority in its ownership". He then made the appropriate period three years and this created a firm precedent which is still recognized.

Secondly, if the donee does not utilize the land properly, his donation will be reconsidered. The basis for this was that the Prophet donated to one of his followers the whole Aqiq area in Medinah but when Omar became Calipha he said to the follower: "The Prophet gave you the land not to deprive people of it, but to work on it, so take the area you are capable of utilizing and return the rest of the land to us".

Thirdly, the government can donate only ownerless land; it has no right to withdraw land from someone and give it to another. As for that "dead" land which is used for a common interest even though

ownership is not established, this may not be donated. The Hadith says: "The Prophet gave one of his followers "white" land (white land is undeveloped land) to utilize; afterwards it appeared that there was flowing water (a spring) in this land; the Prophet then withdrew it because his principle was that all people are partners in food, fire and water".

Fourthly, the government donates land only to people who have contributed good service to the common interest, or who are related to such service or to people where the donation fits the common interest (needy people).

Fifthly, evidence of utilization must be firm and in one important respect it is based on environmental social needs. Omar said: "Water is the basis of revival, such as digging a spring or well; if a person did this, then built or farmed the land, his work creates the complete revival. If he did nothing on the land except extract water, he will, however, have the right of ownership only for the area of the spring or well".

The above are the early process of obtaining land ownership as well as the pattern at that time of land ownership. However, as stated, countries and government systems developed, Islamic Sharia and Islamic institutions developed simultaneously. This resulted, in relevance to our subject, into three forms of land ownership which are appropriate under the Sharia:

- Community Ownerships;
- State Domain; and

- Private Ownership.

In Islam, the community ownership and state domain appear superficially the same from the social point of view, but differ in legislation and control. The owner of the former is the whole community and a ruler has no apparent status to let or give it away. In the second, the owner is still the community, but the ruler has legislative status to control its use or dispose of it under Islamic law.

Currently, serviced land and other urban developed land that is not under the private appropriation, such as roads, riversides and open spaces...share state domain extending over all dead land. In this case the ruler has the right to donate land under the principle of Iqt'a. Finally, the private ownership which forms, almost all urban land and other agricultural land. This category also called Mulk, which denotes private property including land over which full right of disposal and alienation are exercised.

However, the basis of most of land law ordinances in Middle Eastern Countries excluding Saudi Arabia is the Ottoman land law of 1858 which synthesized land practices which had developed over the course of the Ottoman Empire. It is of an importance to the state that this law passed on the Islamic Sharia. This law divided all land into four main categories which are still used. These are mulk, miri (Hokomi or uamm), waqf and musha. Mulk land is private ownership which is owned by individual and over which he/she had full ownership rights. Miri land is that which is owned by the state. This right of enjoying the property may be sold by the state, or it may be let, mortgaged, or



even given away. The state retained ultimate ownership and, if there were no heirs, the property reverted to the state. Waqf land is land which cannot be divided or alienated, but continues in perpetuity to the descendants of the original owner. The waqf is a form of endowment unique to Islamic countries. The word itself means "stop", and the legal document drawn up for the waqf contains the full expression Mawquf lilah meaning "stopped for God". Originally meant as a charitable endowment for the establishment of schools, mosques, libraries, hospitals and other institutions, or for the care of indigent families, whereby the interest was given to particular designees while the capital was given to God, the waqf soon was turned into an institution for the preservation of property from extravagant heirs or from an acquisitive state. Many families in the region have in fact succeeded in protecting their properties by converting them into waqf and in all countries there is either a separate ministry (Jordan, Iraq) or a special department (Lebanon and the Syrian Arab Republic) which administers waqf properties. Only property which was under the full ownership of the endower could be converted into waqf, and once thus converted, could not be repossessed. Musha land is land which is owned collectively. It originated from the tribal practice of dividing the arable land on which the tribe settled between its members. Since both extent and quality were taken into consideration, members were given pieces of land in different zones of the village. Also, to maintain equality, the land was re-allocated at intervals. The practice still exists although it is falling into disuse because of settlement on title which requires registration of title to a definite area. Cultivators thus became owners of permanent buildings. Two of these land institutions,

namely waqf and miri are of particular importance in understanding urban land problems and policies in the countries of the region.

#### 4.2.6 Land Value And Land Price

From the outset, an important issue needs to be stated. The fact that land cannot be treated as a commodity or ordinary assets (introduction). The United Nations Conference on Human Settlements, 1976, declared that "land, because of its unique nature and the crucial role it plays in human settlements, cannot be treated as an ordinary asset, controlled by individuals and subject to the pressures and inefficiencies of the market. Private land ownership is also a principle instrument of accumulation and concentration of wealth and therefore contributes to social injustice...land is a scarce resource whose management should be subject to public surveillance or control in the interest of the nation". This fact had to be stated, because the Islamic Sharia, in general, does not advocate price control.

#### Unearned Income<sup>28</sup>

Of the terms earning (Kasab), recompensation (jaza), and wages or reward (ajr) can be derived the principle that individual work, manual and intellectual, is the primary means of acquiring income and wealth. "And man can have nothing but what he strives for." This leads to the fact that the benefits of the economic process in Islam should be in terms of effort rather than output as is done by the uncontrolled market system. More or less equal rewards should be given to all those who work in some capacity in the socially requisite occupations. This leads that income should be acquired in exchanging

goods and services through mutual consent, without fraud or coercion. Individuals have only the right of beneficial use of natural resources; "these cannot be made the source of unearned income and wealth such as through the sale of public water, and absentee landlordism on sharecropping".

One of the common types of the unearned income is the process of holding and purchasing of vacant land in hopes of receiving higher prices at some future time. Such a process conflicts with the Islamic ethics and values, but it is not prohibited.

#### Land Price Control

Price controls or *tas'ir* are not permissible in the Sharia in normal circumstances. The Prophet was once requested to fix prices in the Medina market as they had gone up, the Prophet refused to do so on the plea that the prices should have a natural course. Some of the purist have concluded from this tradition that *tas'ir* is not permissible in any circumstances. But Imam Ibn Tymiya has discussed this question at length. His conclusion is that *tas'ir* may be resorted to if there are artificial obstructions - speculation - in the determination of the price level or if it is being manipulated by the economically powerful class to their benefit, the government has a duty to apply corrective measures. So, the general principle can be concluded that if the level of price has been disturbed by artificial obstacles, public authority has the right to intervene to bring the process back to the natural course.

However, in the 19th century, Jurists carried out a lot of analysis and analogy in the concept of abusement of right. They concluded that there are two bases:

- 1) A right has to be exercised in accordance with the purpose for which it was formulated.
  
- 2) The possessor of right is considered to have abused his right in the following situations:
  - a) If he intended to cause injury to others.
  - b) If the exercise of the right did not result in benefit to the possessor but resulted in injury to others.
  - c) If the exercise of the right resulted in general injury to the community (such as in the case of monopoly or speculation).
  - d) If as a result of the exercise of the right, an excessive injury was caused to others.

From 'b' and the Introduction, we can conclude that if the price level of a piece of land exceeded its real value by a margin that was considered to bring injury to the community, then this situation is considered an abusement of right, which entitled the authority to intervene. Also, from the fact that urban land in some cases is greatly needed by the community, if the owner did not permit that community to satisfy their need by raising its price to an excessive level or by withholding it from the market. In such situation the authority has the right to take measures to control them.

Thus, we can conclude the following:

- It is unethical to use the method of unearned income to obtain wealth and income;
- If land had been withheld from beneficial public and individual use, where there was need for it, the authority has the right to intervene, and
- If land prices exceed the level of its value the authority has the right to bring it to a just level or to establish a ceiling level.

#### 4.2.7 Urban Planning

Nearly seven hundred years ago Ibn Khaldun laid the foundation of the science of "ilm al-'umran". This arabic word is derived from a word meaning "to build up", "to develop", the word was also used by Ibn Khaldun in the further sense of "population". When a social organization grows more popular, a larger and better 'umran' results.

Although Ibn Khaldun completed "The Mugaddimah" in 1377, his writing could be thought of as contemporary. He stated for example, that "...building and city planning are features of sedentary culture brought about by luxury and tranquility...".<sup>29</sup> Such features (of sedentary culture) come after Bedouin life and the features that go with it. Furthermore, towns and cities with their monuments, vast constructions and large buildings, are set up for the masses and not for the few. Therefore, united effort and much cooperation are needed for them.

The contemporary concept of which was introduced by the state of New York in 1916 was mentioned by Ibn Khaldun as: "The purpose of building towns is to have places for dwelling and shelter. Therefore, it is necessary in this connection to see to it that harmful things are kept away from the towns by protecting them against inroads by them, and that useful features are introduced and all the conveniences are made available in them".<sup>30</sup>

Most cases which involved zoning legislation, were, in fact, concerned with nuisance control. The first zoning, involving power to zoning, was concerned with excluding slaughterhouses, livery stables, and other alleged disagreeable businesses from residential districts. "Considerable uncertainty existed about the constitutionality of regulating the use of land." Scholar Mel Scott writes, "and there were times when city planners almost despaired of finding solid ground on which to build for the future".<sup>31</sup> Where, Ibn Khaldun was able to elaborate the basic concept of urban planning and justified by Islamic Sharia values.

Urban planning, here, is a concept which is specifically related to physical land-use planning at the city or town scale. This concept of planning is usually concerned with the production of city "master plan" with emphasis being placed on zonation of land in order to achieve a more rational pattern of future development including policies for redevelopment or conservation of existing structure. The following subsection looks at the existence of such activities in the Islamic physical environment from the viewpoint of Sharia.

Urban planning tries to shape the urban pattern by two complementary procedures. The procedure of land-use control and the procedure of urban form regulation. The first subsection looks at all land-use control; how its been achieved and what is permissible and not permissible from the point of Sharia. The second subsection looks at the urban form regulation, how they evolve and how the Sharia influence and control them.

#### 4.2.8 Land Use Control

The idea of designating a certain site for a certain use within the city was started by the Prophet himself in Medina. He choose, what is known in present day Medina as Al-Manakhah to be the market site. When the Prophet declared the site of the market, it was reported that he said "This is your suq, it is not to be built or acquired, and no tax to be levied on it".<sup>32</sup> The same pattern was followed in the amsar towns. In each of the three towns of Al-Kufah, Al-Basrah, and Al-Fustat, the market was located from the beginning in the areas surrounding the mosque or near it.

The order in which the several trades followed one another in the layout of the market evolved, it seems, from the concept of similarity as well as from the notion of avoiding harm or damage to anyone. There is another side for grouping together of retailers of similar goods made it easier for the muhtasid to control the quality of goods and to collect taxes. The manual of Al-Shayzari informs us that restrictions include any products and crafts which are not suitable for the main market, they must be located either outside the walls or in places within the town accessible to those who need them, while

at the same time causing no harm to the passerby. For instance, firewood and comparable materials.

Thus, from the Al-Shayzari manual and other scripts, three themes can be identified as underlying the regulation pertaining to the location of goods and services in the market. The first, the concept of similarity, has been applied to the market arrangement. The second, the relative frequency of the need on inhabitants to avail themselves was instrumental in choosing their locations. The third, avoiding causing harm and damage, was the determining factor in locating all businesses that were considered to be the source of either smoke or repulsive odours. This concept coupled with that of similarity, helped to keep sources of damage within the market near each other.<sup>33</sup>

Thus we can see that Muslim jurists differentiates among the types of uses in the city. Since they were concerned with the fulfillment of the inhabitants' needs as well as with preventing harm and damage that might be caused to them, they looked at the uses in two ways. One was according to the needs of the inhabitants where two types are identified: the frequently needed and the rarely needed business or industry. This can be seen in almost any Muslim city of the 19th century, where large industries which were rarely needed such as those of building materials and other factories were located outside the city walls. Such was the case in Medina of 1885, where factories of building materials and pottery were located on the south-eastern side outside the quba gate, while other factories were reported outside the shami gate in the north.



The other, in which the jurists looked at the uses, was from the point of view the causing of harm or damage and that which is harmless. By locating the rarely needed industries outside the city, or granting those which caused harm or damage the right to continue since they originated before the surrounding properties were developed while preventing new ones from taking place in areas where neighbours would object to them, Muslim jurists accommodated the idea of declaring zones for specific types of uses within the city. Based on the concept of avoiding the causing of harm or damage, they give priority to the use which originated first, whether it was residential or industrial. Once this specific use had been established, then other types might move in provided that they would not cause harm or damage to existing users. However, it should be pointed out here that the jurists always tended to support the right of residents more than those of industry. Even when they granted a certain industry the right to continue since it originated before the surrounding properties were developed, they still would not allow this industry to expand nor would they allow new ones to move in when neighbours would object to them since this would mean an increase in the amount of harm or damage caused to the residents of that area. This attitude explains the continuous tendency of industries and places of production to move to the peripheries within the Muslim cities whenever expansion and physical growth takes place. This was the case in Aleppo, where places of production moved from areas within the central bazaar to an eastern suburb, and later to the northern Christian quarter.

#### 4.2.9 Urban Form

Urban pattern can be described by two elements, the use and the form. In the previous section we discussed the Sharia legislation towards controls and the uses. This section looks at the attitude and behaviour of the Sharia towards controls the form.

To show how this worked we will look at notions concerning the right of way; conceptions of space, privacy, light control and the guarantee of fresh air; and precedents established to deal with walls and buildings threatening collapse. We will be concerned to show how these issues were conceived from a legal point of view and how they were treated within the actual context of the city.

### The Right Of Way

In the city, Muslim law distinguishes the through street in which all people have the right of way, from the land or cul-de-sac (*tariq ghayr nafidh, sikkah, zuqaq*), which most jurists consider a private road appertaining to its surrounding properties. A notion complementary to this is that of the *fina*, an open space around or along a building, which in the conception of most Muslim jurists is considered part of the property.

The encroachment on public or private property is forbidden by the Tradition of the Prophet which states: "He who may appropriate without right one palm of ground will be yoked by God, of seven grounds at the Day of Resurrection".<sup>34</sup> However, this prohibition did not characterize all the jurisdictions or opinions of the Muslim jurists. Even jurists belonging to the same school had different

opinions on issues of trespassing or the appropriation of portions of the streets.

However, from reviewing various cases in this subject, it shows clearly that the concern of Muslim Jurists about the right of way and their underlying agreement on not narrowing the way, hindering circulation or causing damage to the public. Despite this common theme, when they were faced with specific cases, jurists' opinions differed.

#### The Conception Of Space

The *fina'*, an open space around or along a building, and the *zuqaq* seem to have been treated by the jurists as well as by the inhabitants of Arab-Muslim cities as semi-private, collectively-owned spaces. They are conceptualized as part of the surrounding properties or at least considered to belong to and to be susceptible to collective use by the residents of these properties. Malik was asked whether these spaces (*afniyah*, p., of *fina*) situated in front of houses along a publicly used road could be leased by the owners. His response was:

"...For spaces of small width, where the least thing posed would hinder the circulation, I think that no one has the right to reserve their use for himself, and that the authorities must intervene; but for those where the width is such that the circulation would not be hindered at all if the neighbouring owners utilize them for their own needs, I see no harm if the authorities do no intervene..."<sup>35</sup>

Sharing the same opinion, Asbagh is reported to have said that the afniyah, whether at the front or at the back, are part of the houses. "The owners (he said) should not be prevented from using them as long as the way is not narrowed, the circulation is not hindered, and no damage is caused to the public..."<sup>36</sup>

### The Concern For Privacy

With the intensely close family life and the strictly followed code of conduct of Muslims, it is not unusual to have the privacy issue comes under the preview of the jurists. To be able to see into a house more than what a passerby on the street would see is looked upon as an intrusion into the private life of the household, one which could not be tolerated either by residents or by the jurists. Such an act is considered to cause great harm and damage, and Muslim law has always insisted on the removal of the damage.

The concern for privacy was reflected in the physical form of the city in several ways. Among these are the limits on building heights throughout the city, avoidance (or architectural treatment) of windows on the street, and the placement of doors within the streets.

### Building Heights And The Opening Of Windows

Restriction on building heights per se did not prevail in Muslim cities. When the famous General Khalid B. Al-Walid complained to the Prophet that his house on the eastern side of the Prophet's mosque, was too small to accommodate his family, the Prophet replied "build higher in the sky and ask God for spaciousness".<sup>37</sup> However, damage

caused by raising up a building was not tolerated. When asked whether an individual could raise his building higher than that of his neighbour and thus be able to look into the neighbour's house, Ibn Al-Qasim stated that "one has the right to rise his building, but I heard Malik say that he should be prevented from inflicting damage..."<sup>38</sup> Since intrusion into the private life of residents is considered to be a great damage not to be tolerated, it is obvious that the residents would not tolerate being under the constant view of others.

### Window Openings

The opening of windows which overlook other houses seem to have always been condemned. The earliest opinion we have is that of Umar B. Al-Kattab in regard to a case that took place in Al-Fustat during his reign. It is reported that he wrote to Ammr B. Alas to demolish a room that Umar thought was built for the purpose of overlooking neighbouring houses.

At a later time, Ibn Al-Rami, when speaking of doors and windows that looked upon neighboring houses, introduced two types of openings: new, which according to general belief were to be sealed, and pre-existing ones which were left as they were. However, he emphasized the fact that "as it is generally understood, the viewer is to be prevented". This implies that even if the opening was not sealed, one should not be allowed to use it in order to look upon his neighbours. Ibn Al Rami also relates that, in Tunis, the customary judgment as well as the actual practice was to prevent intruding and uncovering. This, he says, was the opinion of the judge Ibn Abd Al-

Rafi, who in many cases occurring during this time ordered the windows sealed.<sup>39</sup>

The Malik scholars did not allow the opening of a door in front of another door near it. The reason given by Ibn Al-Qasim was that the neighbour who owns the existing door has the right to say:

"I benefit from the place in front of my door in which you want to open yours. I open my door with no one intervening on my privacy, and I bring my loads near my door without causing inconvenience to anyone. Thus, I wouldn't let you open a door in front of mine or near to it since you may use it as a reception and entertainment area or for comparable matters."<sup>40</sup>

The concern for privacy seems to have substantially affected but not limited the variety of urban form throughout the city. By observing the traditional neighbourhoods of Medina, one finds that building heights are always similar. They all fall within the category of either two, three or four stories buildings, and it is very rare to find these different heights within one district. On the rare occasions when this does occur, care is usually taken to avoid openings that will cause harm or damage to the neighbours.

The mashrabiya house, (Al-Medina) in its simplest form is an typical row house with openings on the street, each covered with a mashrabiya and high openings on the opposite side that allow ventilation and sun but do not provide a view onto other houses. This type usually averages four to five stories in height, while the courtyard house rarely exceeds two stories. The qaah house ranges between two and three stories.

It is believed that the sequence in which the three types emerged in Medina followed the previously explained classification. However, the emphasis here is primarily on the fact that even with the changes in shape and building elements used in each type, all of the three house types continued to subscribe to the previously discussed legal conventions on privacy. In the placement of the door on the street; in the opening of windows; in the raising of the building; and in the treatment of the roof, solutions in each type differ but they have all subscribed to the same rules and conventions.

#### 4.2.10 Provision Of Light And Fresh Air

Regarding the provision for sun light and fresh air, early jurists had very little to say. Discussion of such matters comes usually under the opening of windows and their relationship to the issue of privacy. This, however, should not be taken to express a lack of concern on the part of Muslim jurists. Keeping in mind the very harsh climate with its very hot sun and the huge amount of light available, and the tendency within the Arab-Muslim city to have more or less similar heights within each neighbourhood, it is very probable that this issue rarely came into question.

On this matter Ibn Al-Qasim was asked about someone who would erect a high building that would block his neighbour's windows, darken his rooms, and prevent the sun from reaching his courtyard and the fresh air blowing from there. Could such a building be allowed? Ibn Al-Qasim stated that he heard nothing from Malik in regard to sun and air, and that he would not prevent a person from raising his

buildings. However, he invoked Malik as saying "one should be prevented from inflicting harm or damage onto his neighbours". In response to a similar case Malik, on the authority of Ibn Nafi, is reported to have said: "The owner has the right to his property; after all, if he blocks the sun from the east, the neighbour will be able to get enough sunlight when it moves westward". In another case Malik was asked about the individual who opens his windows onto another house, or lane, to get sunlight and air. His neighbour builds a high wall that prevents these windows from getting any sunlight. Is the neighbour allowed to do so? Though Malik responded in the positive, Ibn Nafi and Ibn Kinanah had a different opinion. Ibn Nafi could not allow the building of the wall if this inflicted harm and damage, but only if the owner of the wall had nothing to gain by building it.<sup>41</sup>

In regard to opening windows for light and air, the jurists seem to have been very sympathetic as long as they did not facilitate intrusion onto neighbouring houses. Ibn Nafi went as far as to allow an individual to open his window right onto his neighbour's property in order to get sunlight and fresh air, even if the neighbour disliked such an act, so long as no harm or damage was being inflicted. Ibn Wahb and Ashhab did not go as far; however, they did give an individual the right to open windows within his own house in order to avail himself of sunlight and fresh air, even if neighbours objected on the grounds that these windows might facilitate intrusion onto their private homes. They both expressed the opinion that as long as the window was high enough so that the passerby would not be able to see behind it, then it should be allowed.



In summary Islamic Sharia has accepted the principles of today urban planning ,however the Sharia has established its own parameters , teachings and methodology to achive the common objectives of urban planning . Also , the Sharia methodology permitts and provides a process for upgrading , changing and modifying the inherited regulations and measures within the the principals and values of Islam.

#### 4.3 ENVIROMENTAL CRITERIA

This part presents the environmental criteria in land policies formulation and evaluation. The importance of physical environment in the process of formulating urban land policies is driven from the fact that environmental conditions are not manmade conditions and any attempt to develop a site should be considered at the onset, the physical feature of the site, e.g. climate, soil, topography, etc.

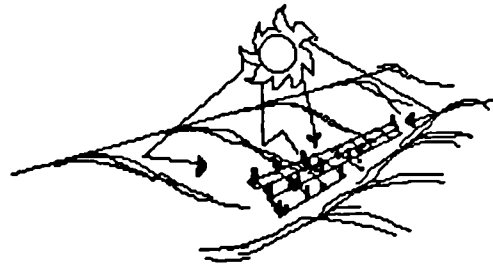
In hot arid zones - desert - the climate factor permeates all considerations of environment. To make a town as responsive as possible to climate conditions, several basic techniques for minimizing the effects of the sun, wind, dust, lack of water and temperature may be achieved by development control processes, land policies. Nevertheless, the soil condition as well as the location of the development are all important factors in the process of providing satisfaction and comfort for inhabitants of urban areas. The following sections looks at these elements in the context of our subject.

##### 4.3.1 Site Selection<sup>42</sup>

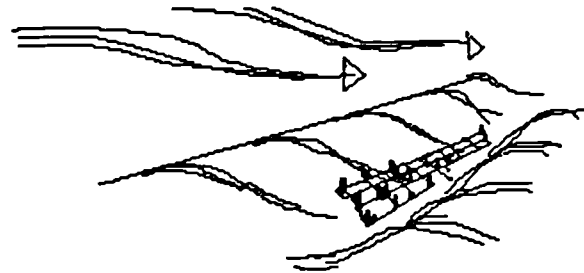
Figure 4.5 : Problems associated with a site in a valley

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A. Low Ventilation

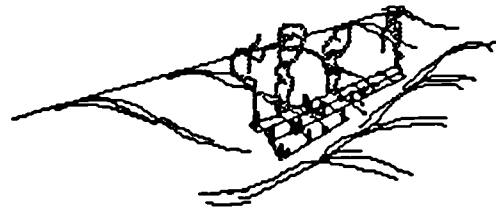


B. Reflection

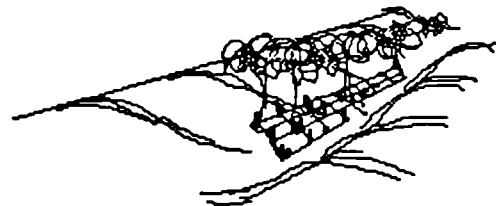


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C. Pollution

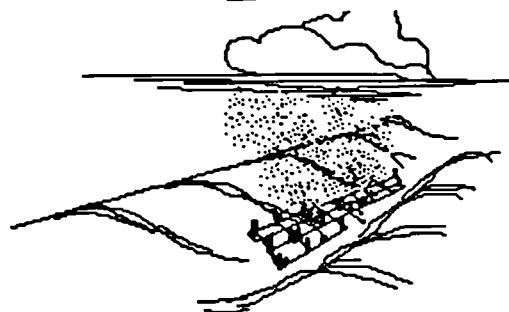


D. Inversion



E. Flood

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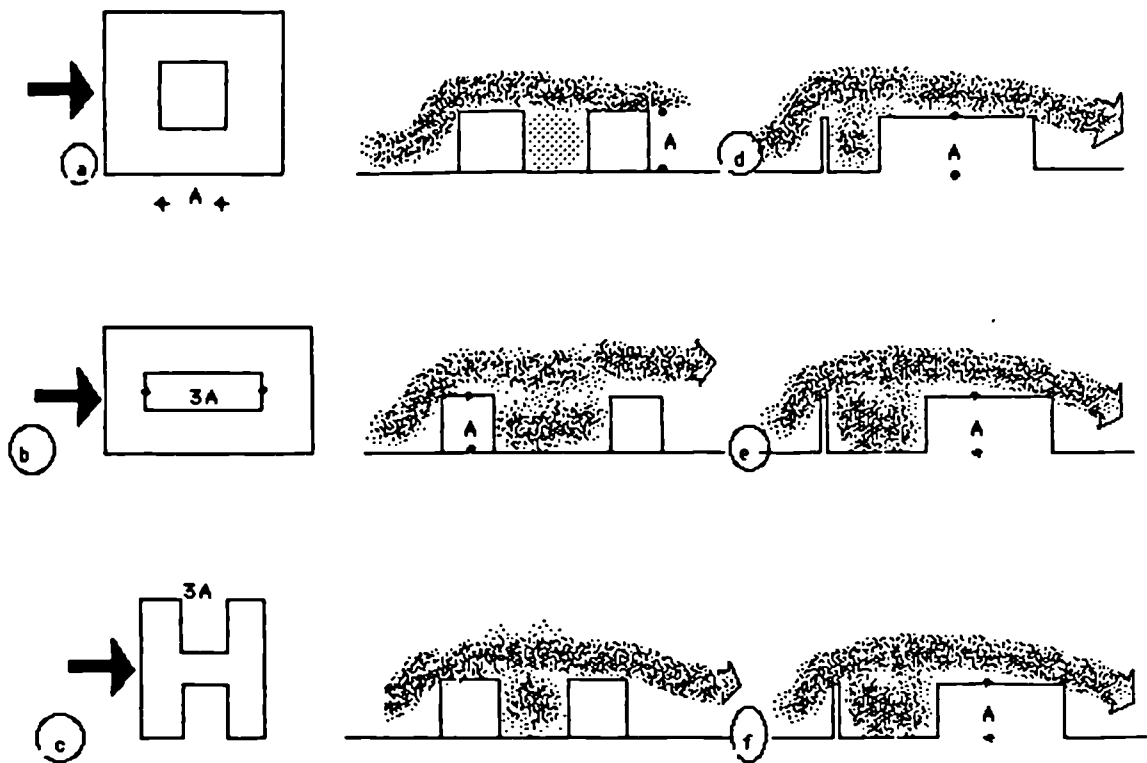


Arid zones are characterized by various conditions that can be affected by different combinations of physical determinants. Policies of land development must adapt criteria designated to minimize its negative features. Primarily, the physical criteria for an urban site in an arid zone will include the following:

- Air temperature: Some site characteristics can help to increase or decrease air temperature. For example, careful location of a site, relative to water surface, along with proper orientation, vis-a-vis, the prevailing hot wind will, however, affect its temperature. When the hot dry air is blown over water, the humidity of the air increases and its temperature decreases, thus the temperature of the prevailing winds will be reduced if the wind crosses the water surface before reaching the site. An example of a bad site would be one at the base of a foothill, characterized by temperatures higher than those at the top of the same slope. Such a site will be affected by the adiabatic heating of air that occurs as air flows down the slope. Another bad location would be in a valley, where air overheats and inversion occurs (figure 4.5).

- Soil Structure: The combination of low humidity, high temperature, and drastic differences between day and night time temperature strongly affects the geomorphology and landscape of arid zones. This combination produces the sand common in these zones. The absence of vegetation contributes much to the instability of the sand, which is easily moved by wind. The resulting dust storms may increase urban maintenance and accelerate the deterioration of buildings. Above all, such storms cause much human and animal discomfort as well as harm to vegetation. In contrast, a site at a higher elevation than the

**Figure 4.6 : Dust**



A square central courtyard offers good protection from windblown dust and sand (a). The depth of a rectangular courtyard should not exceed  $3A$  unless the long axis is perpendicular to the wind (b). The same holds true for perimeter courtyards (c). Barried screens must be of a suitable height and not more than  $6m$  from the building to provide protection (d-f).

Source : Design Primer For Hot Climates, by A. Konya . 1980. The Aachitectural Press Ltd. London

surrounding area may be less affected by dust storms. However, simple techniques, such as zoning regulations and other building design controls, can reduce the impact of sand and dust (figure 4.6).

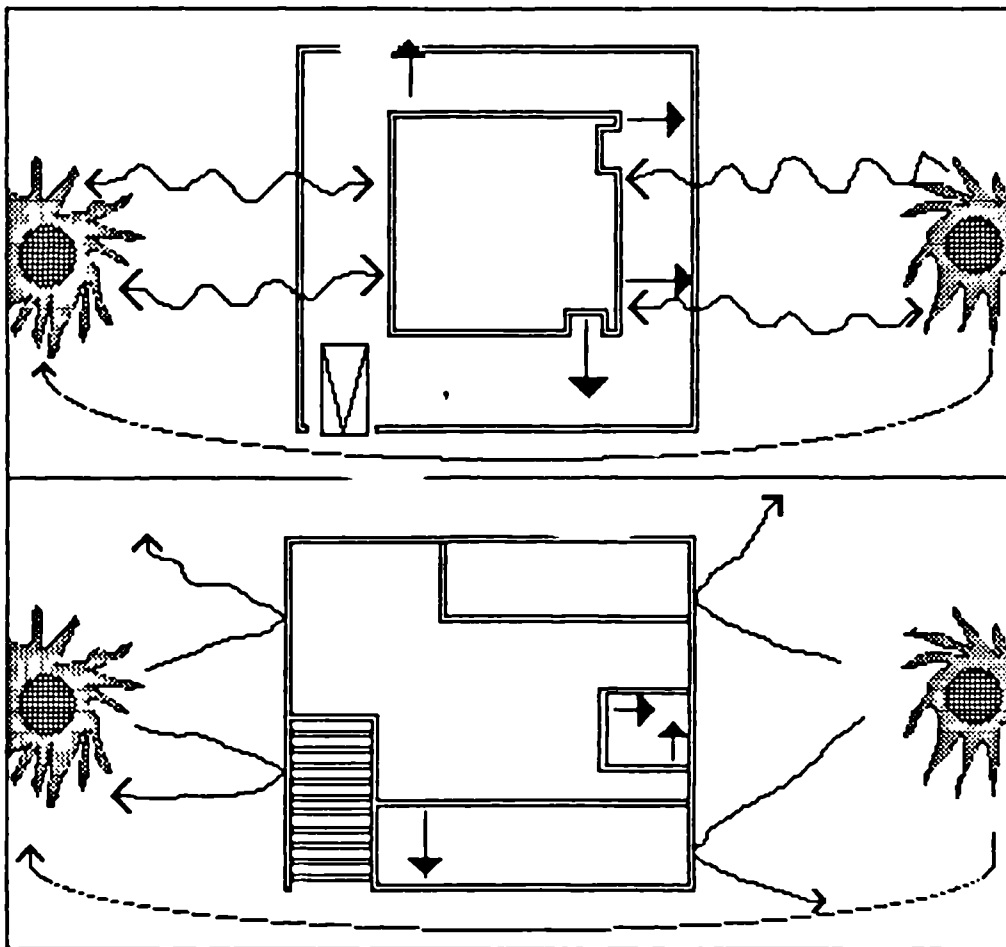
#### 4.3.2 Climatic Considerations<sup>43</sup>

Climatic factors should govern settlement design, building design, building materials and energy sources uses. All of these variables are important, however, what concerns us are the first two.

Settlement Design: Topography is an important variable because it governs what meteorologists call microclimate, climate on a very small scale. Topography also governs the air pollution potential, that is the possibility of pollutant accumulation, if there are pollutant sources. Such sources need not be industrial, other agents such as agricultural machinery, automobiles, and buses are also potent sources. Street layout is another very important variable in designing a settlement. Generally speaking, we have to owe due consideration to the winds. If shade is desired, the buildings may have to be placed close together.

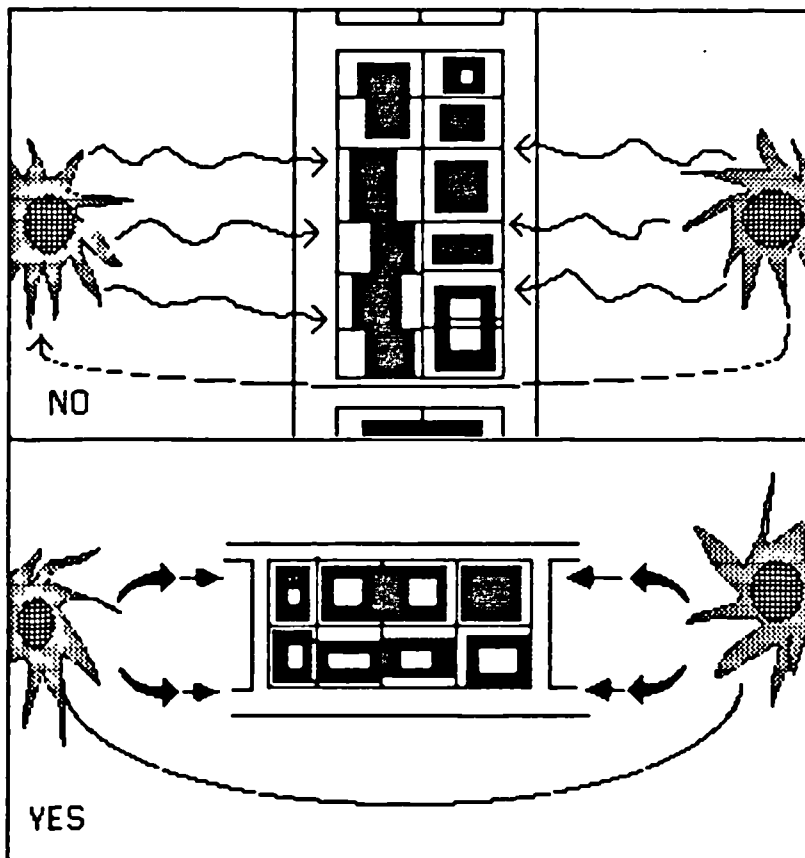
Building Design: The building design likewise should be governed by the climatic realities. The architecture itself is important, as are the shading devices, the landscaping, the shielding that a designer provides against adverse conditions, and the ventilation. For example, in a hot area that has very low wind speeds, if the housing is misplaced with respect to the winds, there will be insufficient ventilation. The heating and air-conditioning plants of a structure must be designed with the climate in mind. Another factor in the

**FIGURE: 4.7**  
**Reducing Solar Gain**



The shaded courtyard provides a source of cool air, by reducing the solar gain.

**FIGURE: 4.8**  
**Reducing Solar Gain**



The proper orientation of roads and buildings helps to reduce the total area exposed to the sun.

design is the roof, if it is not properly designed to absorb heat, the heat will cause considerable trouble.

There are three general techniques for promoting the comfort of individuals. They are the use of shadow and breeze, the use of water elements, and reduction of the impact of solar radiation. In traditional desert settlements all three techniques are used.

### Shadow

Traditionally, the typical dwelling unit is composed of an outer wall surrounding the building which has an interior atrium and an external garden. The internal and external spaces have different kinds of shadow and provide comfort at different times of the day. The interior atrium, a source of light for the rooms that surround it, provides indirect exposure during the hottest hours of the day when the family rest inside. The atrium also acts as a vertical passage and carries a constant flow of warm air upward, while cool air enters to make the adjoining living areas comfortable. During the summer months, the external garden is a comfortable place only in the morning and evening. Then the temperature is low enough to allow activity outside where the trees provide shadow and where the lower shrubs can channel cool breezes (see figure 4.7&8).

### Compactness

Compactness is the technique of minimizing the amount of building surface exposed to the direct radiation of the sun. Compactness can be specified in many ways, but it is most clearly evidenced by the





**Figure 4.9 : Compactness**

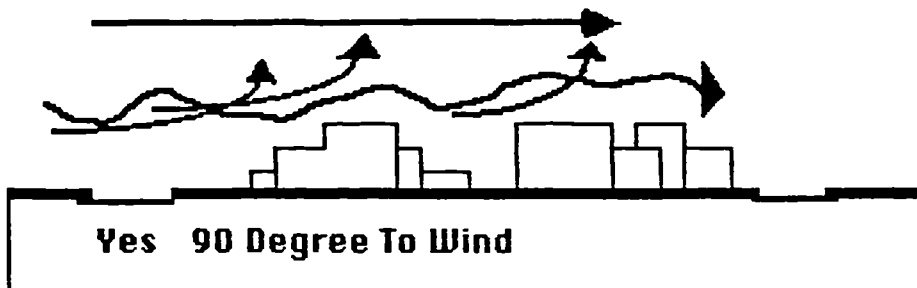
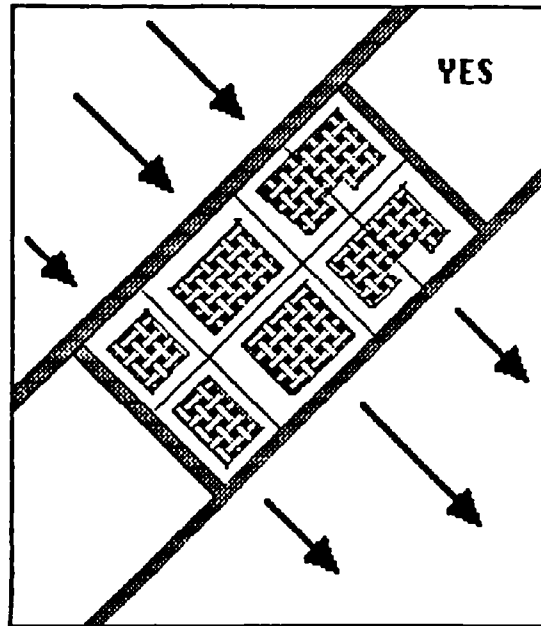
In Hot dry climates building are normally grouped close together to give some shade to each other and to provide shady narrow streets and small spaces between them.

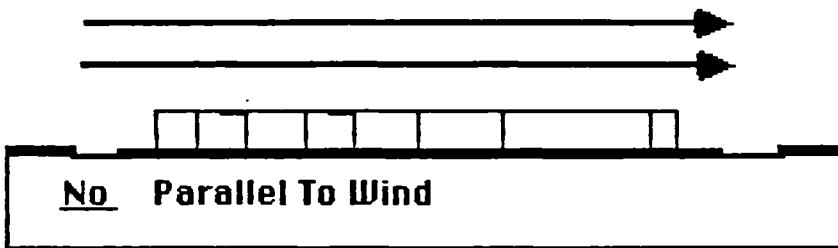
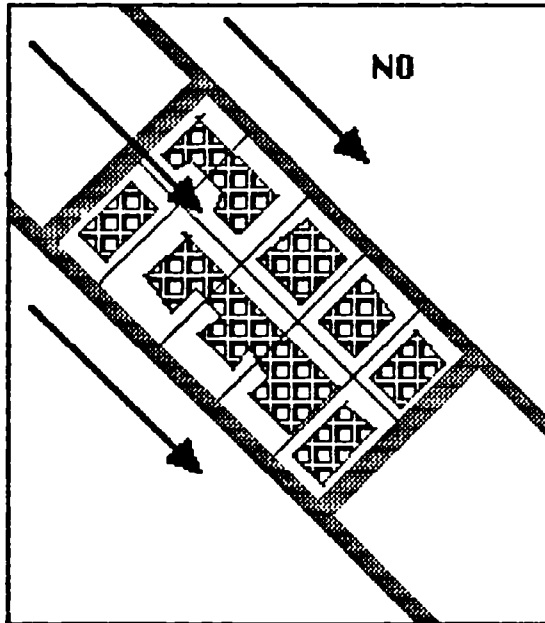
ratio of exposed building surface to the enclosed living volume. A one-story, single-family dwelling totally detached from its surroundings exhibits the greatest amount of exposed wall and roof area to usable floor area. A two-story dwelling can double the usable floor area while less than doubling the amount of exposed building surface. If a number of two-story dwelling units are attached in a row, sheltered areas can be multiplied while adding smaller proportions of additional surface area. As one combines dwelling units into multi-family residential building blocks, the ratio of exposed surface to usable area continues to drop (see figure 4.9). At the scale of the city, the amount of land area not specifically designated as enclosed private space can be significantly reduced through the principle of compactness. The density of residential areas can reach the level where most external pedestrian spaces are sheltered from direct sunlight.

### Orientation

Because of the severity of the climate, orientation of all structures must be carefully determined. To minimize the effect of the hot sun, planners should design all buildings so that their major window exposure faces north and south. The north face of a building has no direct sun exposure; while the south face, though exposed to sunlight, can be controlled. In the summer months, the angle of the south sun is quite high at midday so that a porch, overhang, or similar device will provide an effective protecting screen for the occupied spaces inside. In the winter, the lower angle of the southern sun allows the sun to pass through the protective screen to warm the face of the building. The effect of the sun on a building's east and west facades

**Figure :4'10**  
**Orientation**





is more difficult to control since the angle of the sun is lower in the morning and afternoon. Exposure to this orientation should be minimized or carefully considered in terms of potential heat gain. Although this concept cannot be applied to all buildings (since various portions of the town will have nonparallel orientation), it is possible to orient a vast majority of the dwelling units to north-south (figure 4.10). Where the desired orientation is not feasible, a technique of creating building screens to diffuse the light and heat of the sun can be employed.

In desert regions, buildings are constructed with a minimum of openings so that the amount of direct sunlight entering the structure can be controlled. Windows are small and infrequent, and indirect lighting is preferable to direct exposure. In the design of buildings in a new town, a technique of providing all structures with a second outer shell of screening elements may be used to reduce the amount of direct light entering buildings and to minimize the direct exposure of living and working areas to the heat and glare of the sun. Screens or porches are placed on facades of those buildings facing toward the sun. Screens may also be used to cover pedestrian spaces.

### Climatical Criteria

In the context of the above discussion of impact of climate on physical pattern and the possibility to reduce such impact by development regulations. The following are guidelines for achieving natural climatization by land development policies.

- Capturing Cooling Breezes: Cooling breezes prevail from the northwest and west. Effective design for wind can be influenced by

subdivision layout. Generally, layouts where roads run at 90 degrees to prevailing breezes will encourage them to circulate through buildings. The higher the built density the more important the principle becomes. Response to wind is also required at the detailed design level.

- \* compact urban layouts
- \* wind towers and water cooling
- \* natural shading and on-plot planting
- \* courtyards and arcading
- \* through ventilation system
- \* preferred building orientation
- \* window dimensions and design

- Reducing Solar Gain: The adverse effects of high solar gain can be ameliorated by building orientation and form and this in turn can be influenced by land subdivision policies. Detached buildings which rely on large windows should be avoided. Rather, measures should be taken which ensure the protection of east and west facing walls, large windows should, where possible, face north and south, facing openings should be screened with overhead awnings. Relatively small north-south oriented rectangular plots are likely to result in buildings which are climatically more responsive than conventional large square plots.

- \* building forms
- \* orientation
- \* compactness

In the following chapters we will examine land policies in terms of their compatibility with the above climatic criteria as well as with the Islamic Sharia.

### Notes To Chapter IV

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- 3- S. Husaini, 1980, *Islamic Environmental System, Engineering*, pg. 92-116.
- 4- O. Liewellyn, 1980, *The Objective Of Islamic Law And Administrative Planning*, *Ekistics* 280, pg. 12.
- 5- F. de Montequin, 1981, *The Essence Of Urban Existance In The World Of Islam*, pg. 48.
- 6- Ibid, pg. 52.
- 7- Ibid, pg. 49-51.
- 8- F. Montequin, 1979, "The Personality And Morphology Of Islamic City", *Action*, Vol. X No. 21, New York, pg. 6, 8.
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- 12-Quran, 4:60-61; 5:44-45; 47; also 5:48-49; 6:115; 7:2-3; 16;64.



- 13-Ibid, .
- 14-Rahman, Fazlur, 1960, Islam, New York: Holt Rinehart and Winston, pg. 3, 43-67.
- 15-M. I. Al-Shafi, 1961, Islamic Jurisprudence: Shafi's Risala, trans. by M. Khadduri, Baltimore: Johns Hopkins Press, pg. 288-289.
- 16-Quran, 3:158; 42:38, Ibn Hisham, Life of Muhammed, pg. 235, 296, 454, J. Schacht.
- 17-For more detail see, An Introduction to Islamic Law, by J. Schacht and O. Liewellyn, "The Objective Of Islamic Law And Administrative Planning", 1980.
- 18-Zaki Yamani, 1968, pg. 18.
- 19-O. Liewellyn, 1978, pg. 281.
- 20-Zaki Yamani, 1968, pg. 19.
- 21-Ibid, pg. 20.
- 22-Ibid, pg. 25-27.
- 23-Ibid, pg. 27.
- 24-O. Liewellyn, 1978, pg. 282.
- 25-Prophet Hadith, quoted from H. Hajarrah, 1982, Public Land Distribution in Saudi Arabia.
- 26-Most of the information in this section is from H. Hajarrah, Public Land Distribution in Saudi Arabia.
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- 29-Ibn Khaladun, The Mugaddimah, An Introduction to History, trans. by F. Rosenthal, 1974, Princeton University Press, pg. 263.
- 30-Ibid, pg. 267.

- 31-Mel Scott, 1969, pg. 237.
- 32-Prophet Hadith, quoted from Al-Hazluol, 1980, pg. 67.
- 33-Ibid, pg. 68-71.
- 34-Ibid, pg. 83.
- 35-Ibid, pg. 83-92.
- 36-Ibid, pg 92-103.
- 37-Ibid, pg. 105.
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- 40-For more detail about this section see: A. Golany, 1979, *Arid Zone Settlement, The Israeli Experience*; and G. Golany, 1978, *Urban Planning for Arid Zones: American Experience and Directions*; M. Petrov, 1976, *Deserts of the World*.
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## **CHAPTER V : LAND DEVELOPMENT RESPONSIBILITY**

### **5.1 INTRODUCTION**

The subject of land development policies can be viewed in two perspectives: (a) minimal scope where government intervenes minimally in regulating land resources under the heading of land tenure, public land management, land title registration, land laws and courts, property taxation and government property management; and/or (b) the scope goes beyond the minimal when government is more actively involved in owning, using and developing urban land resources; there could be seven additional components - central government relations, central government fiscal and monetary policies, housing policies, regional development policies and urban planning control. These wide-ranging scopes clearly cover policies which go beyond the focus of land in the context of this study.<sup>1</sup>

Since land policies are the instrument for implementing development plans and they should be seen in the comprehensive framework of planning (the wider scope of land development policies). Therefore, to undertake an analysis for urban land policies we should understand the mechanism by which plans proceed to the stage of plan implementation, which this study is concerned with; as well as to understand the nature of these plans for which land policies have been established.

Therefore, this Chapter will examine the structure and functions of the planning machinery at the local and central level, the relationship among

national and local plans, the linkage between physical and social-economic planning, and the relationships between local planning offices and municipalities.

## 5.2 BACKGROUND

Saudi Arabia is an Islamic monarchy which has developed from a monarchical to a ministerial rule. The duties of the King-Imam are defined in the Sharia law (religious Islamic law as recorded in the Quran and interpreted in the Hadith, the Prophet's sayings) which recognize the Imam not as an absolute hereditary monarch, but as one who reigns in order to rule for the public good. The following quote from Islamic law illustrates this concept: "Of all the agencies and organized bodies of the government of Saudi Arabia, the Council of Ministers is the most potent. It is derived directly from the King. It can examine almost any matter in the Kingdom."<sup>2</sup>

The Royal Decrees, proclaimed in 1953 and 1955, which provided for a Council of Ministries and laid down its functions, may be regarded as the beginning of the "constitutional regime", the first formal step towards the system of popular consultation recognized by the Sharia law.<sup>3</sup>

Until recently, the Saudi Cabinet consisted of fourteen ministries represented in the Council of Ministers. But the cabinet formed on October 13, 1975, increased the ministries from fourteen to twenty. These twenty ministries are:

- 1) Defence
- 2) Foreign Affairs
- 3) Labour and Social Affairs

- 4) Interior
- 5) Education
- 6) Communications
- 7) Agriculture
- 8) Finance and National Economy
- 9) Petroleum and Mineral Resources
- 10) Health
- 11) Commerce and Industry
- 12) Pilgrimage and Endowments
- 13) Justice
- 14) Information
- 15) Housing and Public Works
- 16) Municipal and Rural Affairs
- 17) Higher Education
- 18) Industry and Power
- 19) Telegraphs, Post and Telephone
- 20) Planning

An element of decentralization was introduced in 1963 when the country was divided into thirteen provinces each with an appointed governor, who is in charged with local administration, maintenance of order and implementation of Sharia judgements. Various ministries have field offices, and the Ministry of the Interior is responsible for appointing Governors of each province but Saudi Arabia has no effective local government as the term is understood in Western democracies. The municipalities are completely dependent on central government for funds (no kind of local form of national taxation exist in Saudi Arabia). The people expect the government to provide whatever utilities and services are necessary, and the government accepts an obligation to do so. The

only form of local election is for council members, called Al-Majlis, Al-Baladi, who have only an advisory function. Their advice is directed to a chief municipal executive - Mayor - who serves as a administrator of local municipal functions.<sup>4</sup>

Of the twenty ministries noted, the Ministry of Planning (MOP) and the Ministry of Municipal and Rural Affairs (MRA) are the two included in planning and development as it relates to our subject. The Ministry of Planning acts as an instrument for planning and coordinating economic and social development, for concentrating resources on priority programmes and projects, and for evaluating success in achieving national objectives and targets. Whereas, the Ministry of Municipal and Rural Affairs is concerned with regional and local physical planning and municipal work, e.g. development controls, utilities, etc.

### 5.3 THE PLANNING MACHINERY<sup>5</sup>

#### 5.3.1 The National Level

Steps toward formal planning in Saudi Arabia began in early 1959 when the government established the Economic Development Committee consisting of six financial, economic and industrial advisors of the government. Later, because the Committee had not functioned successfully, it was replaced in 1961 by the Supreme Planning Board.

Dissatisfaction with the performance of the Supreme Planning Board led to the establishment of the Central Planning Organization (CPO) which essentially superseded it. And later became an independent Ministry.

The CPO was established by Royal Decree No. 19, dated the 17th Ramadan, 1304 A.H. (1965 A.D.) and its functions were defined in Council of Ministers Resolution 430:

- 1) To prepare a periodic economic report;
- 2) To formulate economic development plans;
- 3) To estimate the overall resources needed to implement the plan;
- 4) To assist the various ministries and government agencies in their economic planning;
- 5) To assist in the establishment of planning units in each ministry and public agency; and
- 6) To supply the King with needed technical advice.

The organization consists of four departments; the planning department, the research department, the follow-up department, and the administrative department. The planning department prepares the economic reports and formulates development plans. Due to the ministerial reforms of 1975, the current Ministry of Planning superseded the Central Planning Organization, ensuring that national planning functions were supported and encouraged by the highest level policy makers.

The Ministry of Planning is certainly an integral part of the overall government structure, guiding the design of economic policy and coordinating the needs of various government agencies and commissions. At the same time its actions must be influenced by the realities of day-to-day operations of the ministries which frequently reveal many additional needs of the country in its various economic sectors. Its plans are nonetheless constrained to some degree by other governmental

agencies such as the Ministry of Finance, the Saudi Arabian Monetary Agency, and the Ministry of Petroleum. Close cooperation and coordination with these agencies is essential to ensure that the plan does not exceed the available resources and that monetary and banking policies are carried out in a manner that will accelerate development without endangering the fiscal and monetary stability of the country. Thus, to achieve its goals, the Ministry had developed a set of four stages to a planning procedure. First, the ministry is to analyze the state of the economy and publish its findings in a report. Second, on the basis of the economic report and in cooperation with the other ministries, the ministry designs the development goals.

These development goals are then submitted to the Council of Ministers for final sanction, upon which they become the foundation for the development strategy. Third, upon approval of the general strategy, the Ministry of Planning assists and coordinates the transformation of that strategy into action by the various ministries and agencies. Following the development of targets, projects, and actions to be carried out in the implementation of the overall strategy, the Ministry combines the various elements into a single plan to be submitted to the King for approval. Finally, acting in concert with the Ministry of Finance, the Ministry of Planning assists in reviewing past events, the current situation, and the possible course of future events as expected from the successful implementation of the planned projects and policies.

However, it should not be understood that the end product of the Ministry of Planning is an economic development plan; the National Plans, which covers all aspects of development-economic, social and physical, also in general goals, objectives and strategies.



### 5.3.2 The Local Level

The age of regional and urban planning in Saudi Arabia is younger than national planning. The physical planning in Saudi Arabia started only twenty years ago, with the planning of two important cities: the holy city of Makkah and the port city of Jeddah on the Red Sea. As towns became the center of economic, social, political and cultural activities, the government established a Deputy Ministry of the Interior for Municipal Affairs in 1965. One of the deputy minister's functions was to establish a comprehensive planning programme for the future growth of the urban areas. To achieve this goal the Deputy Minister of Municipal Affairs divided the nation into five planning regions in order to facilitate the preparation of regional physical plans.

In the ministerial reform of October 1975 was created, the Ministry for Municipal and Rural Affairs (replaced the Deputy Ministry of the Interior for Municipal Affairs). Its aims were: 1) to provide the best means for expansion and development of the Kingdom's towns and villages, 2) to promote local services and utilities, and 3) to plan future growth. The new ministry was divided into : 1) Deputy Ministry for Town Planning, responsible for regional and town planning; 2) Deputy Ministry for Municipal Affairs, responsible for the management of the 102 municipalities of the Kingdom; 3) Engineering Affairs and Rural Affairs.

#### Local Planning Machinery

The Deputy Ministry for Town Planning (DMTP) is primarily responsible for physical planning activities in the Kingdom. The DMTP exercises

planning functions at local levels through the regional town planning offices. There are seven regional planning offices in the Kingdom empowered to exercise, guide, supervise, and control the planning functions of municipalities and rural areas within their respective jurisdiction.

### Function Of Town Planning

The broad functions of the town planning offices can be summarized as follows:

1. To assist in the preparation process of master plans, action plans, and detailed area plans within its region;
2. To collect data, undertake land-use and other surveys in relation to the above mentioned activities;
3. To provide town planning advice and technical assistance for planning to local municipalities under its control;
4. To prepare subdivision maps and detailed land-use plans for existing and future development;
5. To ensure coordination of functions between municipalities and other executive agencies of the government;
6. To assist in land acquisitions for public uses including the checking of areas, land prices, etc.;

7. To approve and revise, if needed, the detailed plan for each municipality within the framework of the respective master plans;
8. To follow-up consultants work in the preparation of master plans for municipalities and rural areas within its region, and;
9. To maintain technical archives containing maps, drawings, etc., relevant to its region.

#### 5.4 Municipalities<sup>6</sup>

Since the early 1960's, Saudi Arabia experienced a great deal of development in all sectors. In 1970 the government's efforts started a more controlled approach for development which resulted in the series of Five Year Development Plans. Accordingly, municipalities were given greater responsibilities and offered expanded services, resulting in an expansion of the entire municipal system at the central, regional and local levels. Thus the government realized that it was necessary to reorganize the system and establish the Ministry of Municipalities and Rural Affairs to replace the Deputy Ministry of the Interior for Municipal Affairs at the end of 1975.

The ministry took the first step toward modernization by contracting with a foreign consultant, McKinsey International, to study and focus on decentralization in a new organizational structure. The result was a decentralized organization which extended more responsibilities to the municipalities and the regional offices, leaving the central

administration in charge of general municipal policy, planning, supervision and follow-up .

#### 5.4.1 Organization of Municipalities

According to the new decentralized system of the Ministry of Municipal and Rural Affairs, greater authority and responsibility have been delegated to the municipalities. Social and economic development outlined in the Five-year development plan led to increased need for services, both in quantity and quality; and many municipal functions were undertaken such as water systems, and private building construction inspections. There was also a belief that local planning and problems were best handled at the local level. All these increased duties necessitated the reorganization of the municipalities.

In 1977, there were about 100 municipalities in Saudi Arabia serving a range of population from over 700,000 to less than 10,000 inhabitants. The first step was to evaluate and classify these municipalities to determine the extent to which functions and responsibilities could be delegated and the consequent need for increased staff .

The result was a four-tier ranking of municipalities: "A" for cities over 300,000 population, "B" for towns over 100,000 people, "C" for towns with + 30,000 people and "D" for small town (+5000 people). New organizational structures were devised for each of these ranks.

##### Class "A" Municipality.

The Class A municipality has no direct authority connection with regional or ministry officials except the Minister. But it does cooperate and coordinate many matters with the central ministry system, regional offices, and other municipalities. Thus, the Class A municipality is a highly independent system; its Municipal Mayor and Municipal council have complete authority to manage and control its own affairs and services according to the 1977 ordinance, except for those matters which must be approved by the Minister, either administratively or financially. Its budget is also independent so, after it obtains the Ministers approval representatives negotiate directly with the Ministry of Finance.

There are four Class A municipalities - Makka, Al-Madinah, Al-Riyadh, and Jeddah - so designated because of their spiritual, political and commercial importance.

While the Class A operate within the general policy guidelines and standards of the government and the Ministry, they have a number of specific responsibilities.

1. Setting local policies and priorities for its services and development its own approach to the provision of services;
2. preparation and approval of its master plan;
3. selection and supervision of consultants;
4. preparation of the annual budget;

5. preparation, control and supervision of all the municipal projects in the city;
6. selection of contractors and establishment of required payment procedure;
7. preparation of projects' detail design and specification and preparation of tenders;
8. all administrative affairs;
9. provision of all kinds of municipal services;
10. all land administrative tasks.

### Class B Municipality

The Class B municipality refers to a town with an average population of 100,000 people. It reports to the regional office which assumes a part of the technical, physical, and planning responsibilities, depending on the abilities of the municipality. It has complete autonomy with regards to municipal services and internal administration. The regional office acts as a supervisor, assistant, and coordinator.

The Function of the Class B municipality are similar to those of Class A municipalities but with certain limitations. Therefore, the Class B is responsible for:

1. All land services with the help and cooperation of the land department in the regional office's;
2. design and construction of small and medium sized projects;
3. coordination of consultants and the implementation of infrastructure project;
4. all required administrative works;
5. all the rest of municipal services, and
6. preparation of city, technical, and development plans with the cooperation of the regional office.  
Financially, it is responsible for the preparation of the annual budget which it provides to the regional office.

#### Class C Municipality.

The Class C municipality refers to towns with an average population of 30,000. It reports to the regional office which guides and supervises it. The Class C municipality depends on the regional office more because of its lack of technical and skilled manpower to perform jobs which require experts. Accordingly, Class C municipalities are responsible for:

1. all required municipal services;

2. distribution, operation, and fee collection for the water system;
3. participation in the preparation of plans and determination of the city's priorities;
4. carrying out small projects according to their capabilities;
5. preparation of the budget, and
6. overseeing administrative affairs.

#### Class D Municipality

Class D municipalities are those cities with average populations of 5,000. Most of the municipalities in this class have been established within the last decade; because of this smaller populations, they have proportionally smaller responsibilities. The responsibilities of this class of municipality include:

1. issuing permits and inspecting buildings;
2. designing and implementing projects under this immediate control;
3. providing needed municipal service, and
4. performing internal administrative affairs.



## 5.5 WATER AND SEWAGE DEPARTMENT

Water affairs in Saudi Arabia are administered by two different ministries - the Ministry of Agriculture and Water and Ministry of Municipal and Rural Affairs. The Ministry of Agriculture and Water is responsible for water resources and their development for the delivery of water to cities and villages, and for things related to these services (e.g. dams, wells, desalination of sea water).

The Ministry of Municipal and Rural Affairs is responsible for the construction and operating the water systems, the collection of fees, management, and maintenance of water inside city limits. The sewage system is, only the responsibility of the Ministry of Municipal and Rural Affairs alone. The Ministry has divided these duties into two categories: (1) a municipality takes care of water and sewage affairs in its area as municipal services; and (2) a city has its own water and sewage department.

Therefore, the Departments of Water and Sewage are responsible for developing projects for the cities they serve so that water and sewage networks reach every household. They strive to reduce maintenance problems of old systems, increase water resources, and set standards for contractors to apply. In addition, they are responsible for operating and maintaining the existing water and sewage plants. They provide their customer with such needed services as water distribution and sewage disposal, system connection, and meter reading and fee collection. Each department has its own administrative and financial

staff and has control and responsibility over administrative and financial affairs according to regulations .

## 5.6 NATIONAL AND REGIONAL CONTEXT FOR PHYSICAL PLANNING<sup>7</sup>

The planning function of Saudi Arabian municipalities has traditionally been subservant to higher administrative levels: the Ministry of Municipal and Rural Affairs (MRA) and its *Branch of town planning* department in each regional capital. It is the responsibility of the Ministry's Undersecretariate for town planning to initiate the preparation of local plans, supervise their development in accordance with national standards, and approve their implementation following a review by the municipal council and, more importantly, the provincial governor. Once adopted, master plans are binding and the development regulations they contain are to be strictly adhered to by the municipalities.

Municipalities of grades B, C, D have little local autonomy, their major planning function being the implementation of the MRA approved structure plan. Where municipalities of Grade A have more local autonomy in the form of master plan preparation and other municipal functions (previously discussed). Land development policies follows national standards and national regulations, first codified in the "Regulations on Roads and Buildings". Numerous subsequent amending and supplementary decrees have been issued, dealing with both procedural and substantive matters. National policy has stressed the formulation and implementation of common land development regulations pertaining to all municipalities. Although individual municipalities may adopt their own regulations, they must be compatible with national

codes and deviate, except in extraordinary circumstances, from the minimum standards adopted for the Kingdom. In all instances, whether they are regulatorial or policies for implementations, they are subject to a hierarchial review and approval process, at the provincial level and by MRA.

The reorganisation of MRA (discussed previously) that implemented in early 1973 proposed to differentiate between larger municipalities capable of supporting their own technical staff and smaller towns. The expanded regional offices of MRA proposed by the McKinsey Report are to assume management and supervisory responsibility for all MRA programmes as well as provide technical support to smaller municipalities and rural areas. Regional planning offices are specifically responsible for:

1. Developing regional statistical series for planning purposes;
2. Conducting special studies of a regional nature;
3. Preparing master plans and detailed action plans for local areas lacking planning capabilities (C,D);
4. Providing a range of technical services to local governments ; and
5. Supervising the disposal of public lands and the expropriation of private property for a public purpose.

Although many of these technical responsibilities are clearly designed to overcome the shortage of qualified professionals in local administration, even the large municipalities with adequate staffs will be subject to a close scrutiny of their planning and land development activity to ensure compatibility with national objectives and standards. Only the three principal cities (Jeddah, Riyadh and Makka) are to be exempted from regional review and will continue to report directly to a special office in MRA. Similar status may be granted to the Damman-Khobar-Dahran metropolitan area.

The policy-making function is the responsibility of Regional High Planning Committee composed of the provincial Governor, the provincial Director General of Municipal and Rural Affairs, local notables, and representatives of relevant line ministries. The High Committee will approve all master plans as well as action and project plans that may be referred to it by the Regional Planning Subcommittee as a result of their intrinsic importance of their controversial nature. It should be noted that the Minister of Municipal and Rural Affairs retains the power to review and approve or disapprove all regional High Planning Committee actions.

The Regional Planning Subcommittee is composed of representatives of the provincial Governor, the regional Deputy Director General of MRA, local notables, and representative of line ministries. Its responsibilities include reviewing draft master plans and recommending action by the High Planning committee; approving all local action area plans, public projects, and large subdivisions proposed by or submitted to the municipalities; and identifying significant and/or controversial planning issues to be referred to the High Planning Committee.

The linkage between the local planning offices and the municipalities is a crucial factor in formulating and implementing local programmes. Hypothetically, besides the management of the public utilities, road construction, development control and hygiene control, the technical division in the municipalities should prepare the working drawings for the detailed planning projects proposed by the local planning offices as well as the full control of building codes and planning regulations approved by the planning authorities.

On the other hand, the municipalities, through their survey section, need to provide the local planning offices with all information and data related to land ownerships, building permits, road construction, underground water, and public utilities. In the meantime, the municipalities should not undertake public utility studies without full consultation with local planning offices. Long term projects of public utilities are usually approved by the central planning authorities. Finally, the more close and cooperative a relationship between local planning offices and the municipalities can become, the more adequate local planning will be and the more successful the implementation of local projects and programmes.

#### 5.6.1 Relationships Among National, Regional And Local Plans

The linkage between the plans of various levels of government is a crucial factor in the ability of planners to generally stimulate agreement and coordination within the intergovernmental system. In addition, these linkages are crucial to correlation between physical and socio-economic plans (the socio-economic plans are frequently national,

whereas the physical plans tend to be local) and to the functional comprehensiveness of planning activities.

The Deputy Ministry for Urban Planning holds a central Planning status and deals with the physical aspects at the national, regional, and local planning levels. On the other hand, the Ministry of Planning is the national organization dealing with the socio-economic aspects at the national level. This means that the planning process will not operate according to planning levels, but according to planning aspects.

The intergration of these aspects, which should be achieved at all planning levels, require a capable national planning organization. "An efficient urban management system should be based on the fact that the national authorities should play a prominent role in the formulation and execution of urban development programmes in various parts of the country." Since municipalities have very limited financial resources, as well as they are also last able to obtain the advice of technical experts to deal with the problems of development with the areas under their administrative jurisdiction.

Theoretically, this suggests that the integration of socio-economic and physical aspects could be achieved at all planning levels. On one side, the Ministry of Planning is dealing mainly with the socio-economic aspects of planning at the national level. These aspects should then be reflected in the spatial context of regional planning. On the other side, the Deputy Ministry for urban planning will be dealing mainly with the physical aspects of planning at the local level within the socio-economic context of regional planning. This means that the inter-relationship between the two bodies could be activated at the regional level, as this

is where effective coordination between the two bodies seems best capable of achievement.

## 5.7 PHYSICAL PLANNING

Saudi land development policy consists of three categories. First, the land grant programmes, second Real Estate Funds, and finally planning policies. The last one consists of land-use planning guided, through, e.g. conventional delination of permissable use of districts, maximum building rights, location of public programmes, etc. All together they form the physical planning of Saudi Arabia at the local level. So, simply it refers to land-use planning.

Theoretically, the term usually refers to two things: land-use plans and land-use planning. The former has tended to be a static concept in which specific land-use, identified on the map of a community, which in return becomes the model for guiding land-use decisions over some specific period of time; where as the later in more of a dynamic process generate variables and evaluating them through a revolving process which at a certain stage produce the "former". The first may be applicable to an area no longer growing, but even in this case its appliability may be questioned. Thus, concern has increased to modify the form of traditional land-use plans, especially in order to accommodate the dynamic process that influence land-uses. A further distinciton has been made regarding whether or not a plan itself should be binding.

However, planning for land-use may become indicative when the planning authority has little power, is not directly concerned with growth, or has few tools by which to control development or to implement its

recommendation. When tools exist in the absence of plans, they may well freeze patterns of land-use according to legislative intents rather than in the context of a plan. Static plans, plans without power, and tools without plans are themselves major barriers to effective land development.

In the case of Saudi Arabia the situation is more critical in terms of the country's development and growth process which is accelerating faster than the traditional approach of the rigid long period Master Plan. Almost all Master Plans which were put for implementation before 1974 have failed for the reason of rigidity, such as the case of Jeddah, Yanbu. By 1975 the country recognized the need to adopt more flexible approach to plan. Making the efforts by the local and national authorities resulted in a more flexible approach by 1978 - for some parts of the country. The new approach resulted in replacing the comprehensive long period rigid plans by structural plans, state policy towards development and general land-use, emphasizing environmental improvement and the relationship between transportation and neighbourhood areas. Comprehensive treatments are reserved for selected action areas of local plans, which require specific development of a part of all the action areas.

This approach by nature required more skilled manpower to manage it; for this reason its been limited to higher grade municipalities "A" and "B", of which have more administrative capabilities. As a result lower grade municipalities such as "C" and "D" suffer from the same reason that forced the competent authorities to adopt different approaches than the traditional rigid approach - the case of Yanbu for example.



Nevertheless, the higher grade municipalities which are assumed to have more skilled manpower have shown a lack of competence to deal with issues of complexity, e.g. cost effectiveness for priority development programmes, estimation of future needs for land, development; control enforcement, etc. This situation leaves us with a question about the validity of the approach as an alternative to the rigid, but more simple system. But that does not mean that the previous system is more valid, instead, what we need is more understanding of the existing capabilities, level of development and the rate of change and growth.

However, where the traditional approaches are still in operation, problems of out-of-date information, rate of growth that have not been anticipated and changes in development techniques have made the task of development control difficult and insufficient.

## 5.8 CONCLUSION

The government in the process of implementing sectoral plans, did not neglect the need for a broad strategy for physical development in the country. The government is trying to integrate socio-economic development within the physical development of the Kingdom. The idea is that in the long run, a convenient, efficient, and safe physical environment can be provided within the entire nation that will be able to sustain steady economic growth and social development.

Such integration is not an easy job. Professor Mark Fortune has argued that "while comprehensive planning may seem a logical thing to do, in practice it is hard to carry out. The problem is how to integrate the various plans (socio-economic and physical) into a comprehensive,

integrated whole . To my knowledge no one, yet, has devised a method for weighing needs in the fields of municipalities so that all parties concerned are convinced. This still is a matter of judgement and of political bargaining”B.

In the Kingdom the major obstacle in any integration process between socio-economic and physical planning is the lack of coordination and cooperation between the various planners. The Ministry of Planning, as has been pointed out before, is responsible for the formulation of national socio-economic development plans. However, a number of ministries are responsible for urban development. Ministry of Electricity and Industry is responsible for the generation and distribution of electric power; Ministry of Post, Telegraph and Telephone Services and the same situation applies to numerous other ministries and public agencies.

The Deputy Ministry for Town Planning is responsible for all physical planning on the national, regional, and local level. Each Ministry is planning and executing its development programme quite independently of the other ministries. Due to a lack of mutual cooperation and coordination between the various ministries the planning and execution of urban development programmes is seriously affected.

National development in the Kingdom has brought in its wake a broad array of programmes and projects of a socio-economic and/or physical characters which are substantially affecting the quality of life in the cities and villages of the Kingdom. These programmes and projects have so far been initiating and implemented on a sectoral basis with little concern for their locational aspects from the standpoint of

physical planning, their impact on other sectors, or their consequences and impact on the overall objective of national development.

The existing system of sectoral planning in the Kingdom demands a great deal of horizontal co-ordination. Theoretically , the horizontal co-ordination , the local level must be reflected in local plans -physical plan.; the case is different at the local level, in Saudi Arabia, where co-ordination almost dissappear in terms of planning as well implementation . These points of concern have been reflected at United Nations report on physical planning, 1980.

The United Nations physical report differentiated between two planning processes, undertaken by two planning organizations. The first organization would deal with the major projects due for implementation by the different government ministries; the second is to deal with the short-term planning actions derived from the five-year development plans. Most programmes may be initiated by any ministry through the council of Ministers or Ministry of Planning as has been illustrated through a series of socio-economic development programmes.<sup>12</sup>

Regarding the first channel of the planning which deals with the major development projects due for implementation, the report suggested that planning studies initiated by the ministry concerned should be carried out with the full participation of the concerned regional and urban planning departments in order to achieve full coordination between and within each major project. The report listed two main reasons for foregoing suggestions: the first is that planning units in the different ministries do not possess enough personal, diversified disciplines in the field of planning especially in their own planning departments. The

second reason is that in practice, the ministries concerned generally contact specialized consultants for their major projects and these same consultants are frequently not available to the sectoral planning units of town planning departments.

The report further indicated that supervision of this process should be under the control of Physical Planning Coordination Committee (PPCC) which should include deputy-level representatives from all ministries. In this case, the proposed local planning section in a town planning department would be concerned not only with the coordination of major development projects but with supervision of the consultants during planning preparation and feasibility studies. This section would then act as a technical sector of the PPCC.

After the PPCC approves the planning studies prepared by the consultants, the work will be transferred to the ministries concerned in order to take the necessary measures for execution, including the preparation of a detailed step by step of each project and the designs of construction supervision.

The second channel of planning for action deals with short and intermediate term planning activities. Most of the planning studies at this level, according to the UN report, should be carried out and supervised by the Ministry of Planning. At this stage, the role of the regional planning sector of the Town Planning Department would be to cooperate with the concerned sections in the Ministry of Planning in putting the output of their socio-economic planning studies in the spatial context of regional planning prior to its approval by the national planning committee. Projects which are committed for implementation

without going through all the above steps will be sent through the previous channel of coordination for planning and feasibility studies by the department concerned or by special consultant.

The scale of lack of coordination, especially, between the local authority and the regional reflected clearly at the scale of "C" and "D" municipalities. An example for the situation is the case of Yanbu; which can be summarized as :

- Lack of initiation, formulation and awarding of planning studies;
- Out-dated scheduling of the execution of development projects under various sectors.
- Lack of providing critical inputs to the regional level for the purpose of plan modifications and;
- Lack of reviewing of development projects between ministries.

In order to integrate the socio-economic and physical plans, to relate development to the needs of the people, to streamline the formulation of programmes and projects on the basis of the existing and emerging problems of towns and cities, and to bring about a meaningful relationship among the programmes and projects of various sectors, the deputy minister of town planning was recently entrusted with the task of coordinating the programme and projects implemented in the local plans . This, however is not sufficient . Local participation in formulating as well as implementing local programmes is required. Nevertheless, physical plans whether they result from a static or dynamic approach have to be based on the socio-economic plans variables and they should have a system of which any modifications should consider these variables and aspects of socio-economic plans e.g household size , income , level of education , house ownership.....

To summarize, in our analysis of the existing system and approach to physical planning, two issues of concern have emerged. The first is the question of applicability between the traditional rigid approach to physical planning (comprehensive plan) and the more dynamic flexible approach to physical planning (structural plan). The second issue is related to "sectoral" system for planning, which results from the centralized system vs. the horizontal system; the co-ordination and integration of planning and implementation of physical regulations and programmes.

**Notes To Chapter 5**

- 1- N. Lichfield, 1980, pg. 12.
- 2- F. Al-Farsy, 1980, pg. 5.
- 3- F. Al-Farsy, 1980, pg. 6.
- 4- M. Yamani, 1981, Administrative Framework For The Physical Development Of Yanbu Sub-Region, unpublished thesis, University of Pittsburgh.
- 5- S. Adam, A Report on the Development Of Planning Organization In Saudi Arabia, (Saudi Arabia: Central Planning Organization, 1965), pg. 6, and a report prepared by The Standford Research Institute for Reorganizing the Administrative Structure of Ministry of Planning, 1975.
- 6- This information in this section is derived from McHinsey International, Inc., Mastering Urban Growth: A Blueprint For Management, a report prepared for the Ministry of Municipal and Rural Affairs (New York, 1978).
- 7- United Nations Technical Report of the United Nations Physical Planning Project. Prepared for Deputy Minister for Town Planning, Ministry of Municipal and Rural Affairs. Riyadh: Kingdom of Saudi Arabia, May 1976.
- 8- Mark Fortune, "Some Requiriements for Effective Planning at Local Levels of Government, Planning and Administration, (The Hague, Netherlands: IULA and LFHP Publishing Co., 1977), pg. 82.

## **CHAPTER VI : LAND DEVELOPMENT POLICIES IN SAUDI ARABIA**

### **6.1 INTRODUCTION**

In the previous chapter we examined urban land development and its problems in Saudi Arabia. The purpose of this chapter is to analyze those problems in the context of existing land development policies. The chapter is composed of two parts: the first part will review existing land policies in Saudi Arabia; Whereas the second will analyze and evaluate the performance of the land market with reference to land policies .

This chapter consists of three sections. The first one looks at land tenure in Saudi Arabia and the ways by which land becomes available in the market. The second section reviews the legal instruments for controlling land development. The instruments cover regulation of land ownership, trading, use of land and public assistance for development. The third section looks at the land market in Saudi Arabia.

### **6.2 LAND TENURE<sup>1</sup>**

After World War I and the decline of the Ottoman Empire, the movement towards the creation of a new state in the Arabian peninsula culminated in the proclamation of King Abdul Aziz (Ibn Saud) as the King of Saudi Arabia in 1932. The new state is an



Islamic State and has adopted the Divine Book as its constitution. Within the new state some forces and elements relevant to fundamental aspects of land holding had to be accepted and incorporated into the workings of the new State with its own specific statehood needs.

It is clear that in the Arabian Peninsula Islam always reflects the hardships of tribal life in arid and semi-arid environments, and stresses equality and brotherhood. The Arabs accepted and followed the Sharia concept that everything on the earth belongs to Allah and his people are his representatives who share the utilization of what had been found. The King, according to Islamic Sharia, is the qualified representative of the community, who had the authority of controlling community proprietorship.

Individuality and separation are the main characteristics of any one tribal group. The area occupied by a tribe is regarded as being in its absolute possession. The situation was different in those areas which fell under the Ottoman Empire. In those areas, the Ottoman Empire legal codes applied and remained even after the formation of the state of Saudi Arabia.

However, in general, where claims already exist, the State's responsibility has to be faced through insisting on its right to control, otherwise, all land becomes known as public land.

First there can be the acceptance or rejection of pre-existing land claims. King Abdul Aziz temporarily accepted many of the

administrative customs in the new State to avoid friction, but he changed the administrative gradually to put all powers in his hands as Head of State.

Tribal claims were affected, because according to the belief of some tribal groups, any devolution of authority gave them total power in their territory, the King gave some of those tribal leaders, the Sheikhs, limited rights of disposition for the purpose of settlement or distribution among their people. This concept was thought of as an inducement for tribes to substitute calm and peace for aggression.

During the Ottoman rule, of west and east Saudi Arabia, granted titles to land were of particular importance. The new state accepted the situation, and former titles were not rejected by the state as long as they were not clearly against religion. These titles related to ownership of areas including mountains, valleys and water channels; many cases were taken to and warrented by the Islamic Court and its judgement was accepted.

The land and property of superceded governments was located in Hijaz, Al-Hassa, Qatif and other areas. Regarded as community property, this land became utilized under a contract lease system applied to agricultural areas, and also to unutilized land. Responsibility for it is held by the Ministry of Finance and National Economy for the national community.

Secondly, there was an insistence on the illegality of any land claim made without state permission; this was based on a strict

interpretation of Sharia. An ordinance of Sharia Courts was issued in 1952, to unify an organized system of courts in the whole community and to council others. Articles 85 and 86 are the most important relating to the control of land appropriation.

Article 86 provided that in cases where the Court is requested to issue an appropriation deed for undeveloped land, it should refer the matter to the financial authorities for guidance, in addition to the procedures contained in Article 85. In 1957, the Chief Justice made a final ruling and confirmed that the deed (unutilized and unowned) can be owned by utilization. "He who utilized the land claimed it as his own, whether or not he had permission from the Imam. He who surrounded a land by stones, it became his own free of charge. When an interested person received it he had to utilize it or leave it. Any dispute or interpretation by municipality or another will refer to Sharia. Anybody trying something else is not going in the direction." This was the decision of the Chief Justice of Saudi Arabia and remains authoritative, but other jurists still prefer a requirement of permission for the benefit of land control.

The appropriation of utilized and unutilized land by individuals and groups who claimed that their titles had legal basis gave rise to other problems. In some cases it seemed that jurists had confirmed proprietorships of the division of utilized land by written documents or deeds. Similarly the disposition of unutilized land sometimes appeared to be confirmed by deed or written document. It therefore became necessary first to insist on complete ownership registration documents. However, private appropriation of these lands and

ownership claims were rejected. A Royal Decree of 1967 ruled that anybody who henceforth alleged land appropriation would have his allegation disregarded. Another Decree of 1968 also ruled that undeveloped lands are owned by the Government, that the appropriation of such land by anybody is not recognized, that any deed supporting such appropriation is cancelled and that the claimant shall be made to understand that this is a trespass for which he may be penalized.

Thus, this system of land tenure took its final form by the early 1970's. Three kinds of ownership resulted from the various Sharia ordinance. The first one is public ownership (government ownership). The second is private ownership and the third is collective ownership.

As was explained in Chapter Four, according to the Sharia, Allah is the ultimate owner of all things. The land is declared to belong to Him, then to his Messenger, and then to the Muslim community which is represented by Imam (King). Therefore, all land in Saudi Arabia that is not owned by an individual is considered to be publicly owned (miri), which means that it is controlled by the King. Under this category there are two kinds of publicly owned land. The first is land whose utilization has been shifted to different ministries, according to their needs, by Royal Decree. The second kind is the remaining part of the publicly owned land. In this case the King controls the land. From this kind of land, the King provides, by grant, plots to either individuals or public agencies for development purposes .

The second kind is the private ownership (milk). Chapter Four explains that besides the fact that land belongs to God, individuals can still have the privilege of ownership. This kind of ownership covers the largest part of existing urban areas. The ownership can either be passed to children by means of inheritance or sold. At present land in Saudi Arabia may only be owned by Saudi Nationals. The third kind of ownership in Saudi Arabia is mortmain property (waqf) managed most of the time by religious institutions. The final type of ownership is the collective ownership which is mainly used for non-permanent agricultural purposes. Most of these areas were located at the fringe of the urban areas.

### 6.2.1 Process Of Providing Land<sup>2</sup>

After the abolition of all traditional tribal rights to land and the process, by individuals, of bringing "dead" land to "life", the only process of providing land which remains is the King's grant process. At the moment there are two ways in which this process provides land for urban development in addition to the normal land market process through which someone can purchase his land needs. The first is the 'direct process' in which the King grants a plot to an individual for development. The second process is the 'indirect process' in which a number of steps occur between the King's grant and the final acquisition of the plot by an individual. This latter process is by far the most common one.

### 7.2.2 The Direct Process

The mounting pressure on urban land prompted the government to initiate, in 1966 a programme of land grants to assist limited income families to meet their housing needs. Eligibility requirements were defined as: residency in the locality; non-possession, in sole or joint ownership, of property (land or building) in the locality which could allow the applicant to have a separate dwelling unit(s); and a maximum monthly income of SR 250 plus SR 30 for each dependent.

Simultaneously, the public needs for urban development land were met by a similar Royal Grant, in cases where land was in government's (King) control, otherwise the demand was met by a procedure of land appropriation.

By the early 1970's 'the Direct Process' took three different areas; for private house construction; for commercial or industrial use; and to a public or semi-public institution for administrative purposes.

#### Grant For House Construction

The procedure is as follows: An individual submits to the Royal Cabinet an application for a plot . The applicant then goes to the Municipality (while the formality goes there through the Ministry of Municipal and Rural Affairs), which holds a number of plots and subdivision plots for that purpose in several parts of the city . He receives his plot, the corresponding property title being obtained from Kitabat Al-Adl (in the Ministry of Justice). Qualification for a grant can be subdivided into two, the case of limited income, and other grants. In the former case, there are no preconditions set for

the potential grantee, each case is examined on its merits . In the later case the beneficiary could be a military man a retired government officers or other candidstates as the Royal Cabinet recommend. In this case the granted plot could either be locally allocated by the municipality of the grantee, or a certain location requested by the grantee and approved by the Royal Cabinet.

The case of limited income grants as mentioned before, started in 1966. However the conditions for eligibility for a grant have become more strict sincethen. It began in the 60s for limited incomes and later for Saudi citizens. Now the applicant must have received no previous grant of a plot in any city in the Kingdom - a form has to be completed in this respect. If the grantee has already received a grant which he did not declare, the land awarded can be confiscated. The size of the land grant is determined by several factors, among them the applicant's needs, mainly the size of his family. The plot area, generally speaking, may range from 900 to 10,000 sq.m ( 30 x 30, 40 x 40, 50 x 50, 100 x 100).

The municipality plays a major role in this process, since it is responsible for managing the land provided for grants by the Royal Cabinet, subdividing and improving this land, and distributing the plots according to Royal orders - to be excluded is land controlled by the Ministry of Finance and National Economy from which in some cases for the earlier case the grantee gets his grant (The land control by the Ministry of Finance called amlk ad-dawlah)

At present, most of the granted plots are in subdivisions drawn up the Town Planning Department. For example, the major subdivision now being distributed in Riyadh is Al-Urayga, with 17,000 plots, west of Riyadh. This subdivision is reserved for applicants with limited incomes (who own no other dwelling in the city and depend on limited salaries).

#### Grant of Land for Commercial or Industrial Use

There are two processes: large scale Industrial Uses and individual Commercial and Industrial use. The procedure of the former process is similar to the one described above, but the land is granted for a specific type of plant or commercial complex. Usually the grant is made with the condition that the projected development must be undertaken within two years. However, there are many instances where the grantee held the land for over two years without developing it and in some cases succeeded in selling the land in the market.

There are two cases of large scale land grant for industrial development in which two new communities emerge. The site for the new towns of Yanbu and Jubail have been granted on the recommendation of the Ministry of Planning to the Royal Commission to develop two major industrial complex which later can be leased or sold to the individual, for building factories and other associated activities. The procedure in this case did not involve the Ministry of Municipalities and Rural Affairs.

#### Grant of Land to a Public or Semi-Public Institution



This procedure, although common in the past, is now infrequently used since land suitably located for administrative purposes is now nearly all privately owned. A good example of such grants is the land along Air Port Road in Riyadh on which most of the Ministries headquarters are located. In Jeddah the Police Headquarters and other institutional facilities in Al Mina Road have been provided through this procedure. This procedure is used not only for administrative buildings, but also for publicly sponsored residential developments such as the officer's quarters on Air Port Road in Riyadh and the Military Hospital in Jeddah. In this procedure the institution submit its request for the particular location that it needs (*it should be under the public ownership*). As a result the site will be allocated to the institution or the ministry by the Ministry of Finance and National Economy after the municipality surveyor defines the boundaries.

### 6.2.3 The Indirect Process

More than 40% of the total urbanized land in Saudi Arabia was developed through an indirect process which includes several phases: a Royal Grant, to one individual, of a large undeveloped or developed area; sale of this undeveloped land, or a portion of it to a real estate agent or joint stock company; and subdivision of the land, and sale to the public.

#### Grant by the King

Practically all the large estates not devoted to the public have been granted to a high official, dignatories and members of the Royal family. This practice is not a new process in the Islamic Society. In Chapter Four, I explain that land donation has been practiced since the Prophet, peace be upon him. Yusuf Ibn Ibrahim in his book "Kitab-Al-Kharaj" mentioned that granting of land (Iqta) became a practice largely after Uthman (the third Guided Caliph). At the moment, the large estate grants are much less significant than before, because of the fact that most of the land that surrounding cities or land that has development potential has been granted already.

#### Sale of the Undeveloped Land

When the grantee decides to sell the estate or a portion of it, he usually contacts a real estate agent, registered with the Chamber of Commerce. If the market price of the estate exceeds the agent's capabilities, he may initiate the creation of a joint-stock company (musahama). The organization of the joint-stock company will establish the necessary rules for the operation.

The creation of the company is then advertised in the newspapers, and people are invited to buy shares at a fixed price from the real estate agent who initiated the operation. The price of the share, which is supposed to reflect the price of the land, is based on various factors which will be discussed in the coming section. When the required capital is gathered, the land is purchased from the previous owner by the company, and a fee equivalent to 2.5 to 5 percent of the price of the share is collected by the agent. Each share sold corresponds to a

standard number of square metres of the estate, but their location is not determined. Illusive actions are frequently witnessed in this stage or others.

### Subdivision and Resale of Land Plots

Once the land is acquired, the agent is responsible for submitting the subdivision application to the Town Planning Office, and to the relevant public agencies for the necessary infrastructures : road, water, electricity, sewerage, and telephone.

The sale of the subdivided land is decided by the Agent (or the shareholder) and can occur as soon as the subdivision plan is approved and the plots are marked on the field. As a matter of fact, the sale often takes place before the infrastructure is in place; frequently the only improvement on the day of the sale is the asphaltting of the main street, to give to prospective clients an idea of how the subdivision will look.

Once decided, the sale is advertised in the newspaper, with an indication of the date of the sale and the location of the subdivision. The sale takes place, sometimes on the site itself, when sales are by auction and sometimes in the real estate office. The sale price does not reflect the value of the land, but it reflects the general market mode at that time. However, this subject will be discussed later. Once all the plots have been sold, the company is dissolved and each shareholder receives his share.. The agent receives another fee, amounting to 2.5 to 5 per cent of the profit on each sale. When the

purchaser pays the sales price to the company, he obtains a deed registered with the Kitabati Al Adal and becomes the owner of the plot.

### 6.3 LEGISLATION<sup>3</sup>

To achieve the objectives of land development policy, a legal instrument is necessary. The instruments cover regulation of land ownership, trading, use of land, and public assistance for development. The most important regulations affecting land ownership rights are those involving a forced transfer of ownership rights, when land is required for public purposes. Others, to improve the functioning of the land market by forcing vacant land into use and facilitating its transaction. Regulation of land transactions has generally been confined to the establishment of price controls.

Land use controls exist in most countries and include zoning and subdivision regulations, building regulations, development permits, and planning concepts, such as a controlled area and urbanized or urbanizable limits. Various schemes of public assistance for land assemblage and joint adjustment of land use planning have been adopted in recent years. It is noteworthy that zoning regulations are one of the the most popular instruments in achieving the objectives of land use policy . These regulations define the permissible uses of land and buildings and determines the various uses such as residential, industrial, commercial, etc. It also determines population density through the rates of occupancy. Land taxation and betterment taxation have been recognized as a potentially effective

means of achieving desired pattern of land development and a control measure for proper land use.

One of the most important and effective policy devices to control land development is through the use of administrative directives. The directives can take the forms of, e.g. Royal decree issued on major issues related to land development. They may be cabinet or ministerial decisions, *regulating specific aspects of land use*. They may be in the form of circulars explaining technical details and procedural steps. The circular may be an interpretation or an explanation of a decree or a decision. They may be further elaborated at regional and local level by the regional and local authorities, e.g. Amirs and Mayors.

In the Kingdom most of the laws derive their power from Royal Decrees and Administrative Directives issued by the Council of Ministers, various Ministries, and regional and local authorities. The pertinent laws/regulations are discussed in the following sections.

### 7.3.1 Municipality And Village Laws

The law of Municipality and Villages was promulgated in 1977 to govern the establishment of municipal and rural affairs (discussed under Section 5.5). The law determines the functions, powers and responsibilities of the municipalities. It also regulates the relationships between the municipal council and the Minister of Municipal and Rural Affairs, by specifying the decisions that should be approved by the Minister.

### 6.3.2 Physical Planning And Building Laws

Until recently, the land in and around Jeddah, and other cities in Saudi Arabia, was owned with the liberty that the owners choice of land use was not questionable. This freedom, has greatly influenced the growth pattern and development activities in the city. The absence of comprehensive planning legislation has also contributed to the present status of Jeddah's physical environment. *Prevailing by-laws* and legislation related to urban development are fragmented.

There are four Royal Decrees affecting land development; the establishment and authority of municipalities in 1937; the aquisition of land for public use in 1972; the Real Estate Development Fund of 1974; Public Nuisance and Safety in 1962; and Buildings and Roads Law of 1927.

The historical development of physical planning legislation dates to 1927, when the Royal Decree on Roads and Buildings was promulgated. This Decree comprises provisions relating to physical planning, buildings, protection of residential environment, safe guards from hazards and dangers, housing standards and organizing activities of the contractors, engineers and architects. It was followed by the Royal Decree on Establishment of Municipalities and Villages' promulgated in 1937. This Decree stipulated that Municipalities shall be the local authorities and composes provisions relating to their functions, power, and responsibilities. It also outlines the role of a Municipality in respect of prepration of development plans,

development control, provisions of utilities, refuse collection and deposit, and other public services. In addition there are provisions on environmental protection, parks and gardens, preservation and conservation, and development of markets and trade centers. This decree specifies the President of the Municipality as its chief executive; provides for constitution of a Municipality Council and gives conditions governing the relationship of the municipality with the Ministry for Municipalities and Rural Affairs. This Royal Decree was amended in 1977 when the functions of the Municipality were further enlarged.

The Royal Decree on Premises causing disturbances, nuisance and hazards, promulgated in 1962, lays down provisions for protection of persons and properties from any danger, inconvenience and environmental repercussions arising out of the activities of industrial and servicing establishments. Specifically it contains provisions for safeguarding public health against establishments like food processing units, and other such industrial activities.

The Royal Decree on Land Acquisition for Public Purposes promulgated in 1972, comprises provisions regarding compulsory acquisition of land for public purposes and prescribes procedures for estimating and payment of compensation. In addition a number of Royal Decrees on Estate Development, Land Grants, Land Value, and Rent Control have been promulgated from time to time.

The Ministry of Municipality and Rural Affairs issued in 1978 a circular to all Municipal and Town Planning Departments embodying

the principles and rules to be followed in preparing land subdivision and the duties of the component agencies in that respect. It explained, comprehensively, how to apply for a subdivision plan, the duties of the municipality towards the application and the duties of the Deputy Minister for Town Planning towards the approval of these plans. It also explains in detail the preparation of cadastral location.

### 6.3.3 Expropriation

Under regulations implemented in 1973 and amended in 1978, land and property can be compulsorily acquired for public purposes—broadly, any purposes which is beneficial to the welfare of the community (not, therefore, necessarily excluding commercial uses). Adequate, and usually generous, compensation must, however, be paid to the vendor. Having not satisfied the owner of its intention, the Municipality would be instructed by a committee of about 6 officials and private specialists of the amount of the compensation to be paid. This law follows the following procedure:

- Survey and appraise all public and private properties to be acquired for the purpose of a specific project.
- The inssuing of a ministerial decree approving the project and listing the properties to be acquired. The publication of this decree in the official newspaper constitutes notification to affected property owners.
- An official appraisal committee which estimates compensation in accordance with prices and conditions prevailing at the time the decree is published.
- Properties have to be turned over to government



officials within a month of notification.

- Compensation cannot be changed once a budget allocation has been made for a project.

Requested funds are allocated in the municipal budget for a specific project but sometimes only designated for compensation purposes.

While a new method of compensating individuals for loss of property through compulsory acquisition is being introduced, the present method applied by the Jeddah Town Planning Office can be summarized in the following terms:

- All property that is compulsorily acquired for government projects is compensated at assessed market value per square meter.
- Where acquisition affects only part of the property, compensation is calculated as the market value of the required part, minus the value of a 75 centimeter strip running along all residual frontage affected by expropriation. It is assumed that this deduction represents an improvement charge.

The amended regulations which are, later introduced, differ only in the manner of assessment of compensation for partial acquisition. As before, the required part is compensated at existing market value, but the residual part is assessed twice on the basis of its market value before and after implementation of the project. The difference is considered to be an unearned profit and is, therefore, charged to the owner by deducting it from the value of the required property.

However, in no case will the deduction exceed 50 percent of the total due amount of compensation.

#### 6.3.4 Land Donations

In Section 6.2.1 we discussed the various ways in which land becomes available on the market. However, we note it again from the point of view that it is a part of the existing land development legislation. A Land donation system operates in the Kingdom where by his Majesty the King donates plots of land to individuals. Big chunks of land are gifted to distinguished persons in the society who in turn prepare land subdivision plans and feed it into the land market.

#### 6.3.5 Administration And Disposition Of Municipal Land

In 1954, government-owned vacant land within the jurisdictional boundaries of municipalities was turned over to the municipal governments. A 'land committee' was formed in each municipality to map these lands, assess their valuation and administer their disposition. Directives were issued by the central authorities to provide municipalities with instructions for discharging these responsibilities.

In 1967 a rigid national land classification and valuation scheme was abandoned in favour of a more flexible approach permitting municipalities to appraise their lands within a framework of three broad categories:

- 1) lands within the limits of the urbanized area which

- were to be sold by public auction;
- 2) lands directly adjoining the built-up area and within a radius determined by the land committee to be sold at prices set by the committee;
  - 3) lands beyond the above-mentioned zone to be appraised by the committee.

Yet price schedules were still being established in 1974 by MRA for all municipalities in the Kingdom.

In accordance with existing regulations, municipalities dispose of their land by *outright sale transferring full ownership rights to the buyer*, although they are legally authorized to exercise other forms of tenure. The underlying rationale favouring sales seems to be popular preference, ease of administration and expedient source of local revenue.

Administrative practices distinguish between income producing projects for which land must be purchased at going market rates and residential use fee for which land can be obtained at government set prices which are often only nominal, the only restriction being that an individual cannot purchase more than one parcel in any given locality at this low government price. At first, no maximum size for land parcels was specified in the regulations which only stipulated 'to each in accordance with his needs'. However, in 1972, the discretion of the land committee in determining individual needs was limited to a maximum of 1,000m, presumably to curb some flagrant abuses.

Mounting pressure on urban land prompted the government to initiate, in 1966, a programme of land grants to assist limited income families to meet their housing needs. Eligibility requirements were defined as:

- Residency in the locality;
- Non-possession in sole or joint ownership of property (land or building) in the locality which could allow the application to have a separate dwelling unit(s);
- A maximum monthly income of SR 250 plus SR 30 for each dependent.

In 1975 the income ceiling was dropped in favour of a declaration of need issued by a committee of local officials, leaving the programme wide open to abuse.

The land grants consist of plots of about 400 sq. m. in subdivisions planned and approved by the municipality and the MRA. Title to the land cannot be registered in the beneficiaries name until the land is developed as stipulated in the grant agreement. Following the establishment of the Real Estate Development Fund in 1974, municipalities were ordered to issue land certificates to enable beneficiaries to obtain construction loans from the fund offering the land as collateral.

Starting in 1967, regulations were issued, in an attempt to control widespread land speculation, providing for the confiscation of land bought from municipalities if the owner fails to develop the land within one year of purchase. Seven years later, in 1974, MRA was still attempting to control speculation by doubling the price of public

lands it had established in 1972. However, local residents were exempt from this price increase.

Skyrocketing land prices, rising construction costs and a growing housing shortage prompted the promulgation of rent control regulations, restricting the raising of rents in occupied premises to an annual rate of 5% but allowing new, vacant or vacated premises to be freely let at market prices. This restriction was lifted in 1982.

Simultaneously, to encourage investment in the housing sector, two important measures were taken by the government:

- 1) The establishment of the Real Estate Development Fund (REDF) in 1974 with wide discretion in the financing of residential development.
- 2) The promulgation of an instruction in 1975 ordering municipalities to sell land at nominal prices to developers which undertook to build residential projects. Title to the land is conditional upon the completion of a specified proportion of the project in accordance with a construction schedule agreed upon by the municipality and the developer. Failure to comply with the agreement authorizes the municipality to reappropriate the land, reimbursing the developer for any improvements completed. However, the developer can, with the approval of the municipality, turn the project over to another person who undertakes to complete it in accordance with the plans and subject to the same conditions.

The fact that these measures failed to relieve the housing shortage or control the rising costs of housing is reflected in the stipulation embodied in the 1976 decree of the Council of Ministers on the control of inflation, which specifically:

- prohibits government agencies from leasing residential premises for their offices;
- prohibits municipalities from undertaking demolition except in absolute necessity;
- institutes a crash housing programme relying on prefabricated housing;
- enjoins municipalities to accelerate the completion of their housing projects;
- prohibits corporations awarding large government contracts, from leasing existing buildings for offices or residences, and orders these corporations to erect their own buildings for these purposes.

Paradoxically, in an apparent concern to ensure orderly urban growth and in light of the massive planning studies undertaken by the MRA to provide every region and municipality with an approved physical development plan, municipalities were ordered to refrain from selling or granting land plots until such plans are completed. This moratorium which was first imposed in the Eastern Region in 1974 was extended to the rest of the country in 1975. At the expiration of the initial period of one year, in 1976, it was decreed that moratorium would remain in effect until further notice. The only exception to the moratorium is the land grant for limited income

persons. Given the development pressures experienced in the Kingdom, the restrictions on redevelopment and the loopholes in the regulations governing the programme it has not surprisingly become a source of uncontrollable abuses.

### 6.3.6 Land Registration

The registration of land titles is still governed by regulations issued in 1944 and 1952. Following the establishment of the Ministry of Justice in 1971, these regulations have come under review and it is expected that an amended system will be enforced in the near future.

Under current regulations, land deeds are issued by two separate entities within the Ministry of Justice. Neither has the registration of titles as its sole responsibility:

- The local courts issue titles as part of their duties in enforcing the legislation rights of citizens under the Sharia.
- The Clerks of Justice issue deeds as part of their functions as registrars of transactions and contracts.

Because of a long tradition of transfers without written documents, the issuance of land titles often entails complicated and time-consuming procedures involving the Ministry of Finance, the authority in charge of state properties; the Ministry of Hajj and Awqaf, the authority in charge of municipal properties, including vacant lands and lands for public use and utilities within their jurisdiction.

The fact that the public sector is the sole agent of new urban development has ensured the issuance of a proper title in the new zones at least for the first transaction transferring land from government to private ownership. However, the registration of transactions between private parties does not seem to be mandatory.

In order to alleviate the chaotic state of affairs arising from the laxity of land registration regulations, the municipalities were ordered in 1975 to establish registers for land ownerships deeds and prepare atlases based on the recently completed photogrametric surveys showing the boundaries of all private and public properties within their jurisdiction. Property owners were enjoined to register their titles with the municipalities within six months. However, this unrealistic deadline was postponed to enable the municipalities to handle the workload entailed by such a major undertaking as well as to enable property owners to obtain official titles and deeds through the courts and the Justice Clerks.

### 6.3.7 Illegal Occupancy Of Land

In 1967, a Royal Decree reaffirmed municipal ownership of all government lands within their jurisdiction and prohibited the acquisition of ownership rights on these lands by prescription. Consequently, orders were issued to municipalities to:

- prevent all future encroachment on these lands;
- evict non-authorized settlers who were henceforth to be considered as squatters;
- keep a vigilant and unrelenting surveillance to prevent



- illegal occupancy of their land;
- speedily investigate all title claims referred to them by the courts in order to file their objections (if any) within the time limit prescribed by the procedures.

Simultaneously, the courts were requested to disregard ownership claims based on prescription rights only.

Judging from the number of ministerial orders to that effect, it is evident that municipalities have been unable to prevent unauthorized occupancy and use of their vacant land. In 1976 a general notification to the public, issued by the MRA, referred to widespread illegal occupancy, use and transfer of this land by individuals and real estate corporations, and reiterated that all such activities are illegal and all such transactions are invalid. The courts, however, adopted a more flexible and lenient approach, declaring that:

- 1) Settlers, before the promulgation of the 1967 decree, on land which is not designated for mosques, public utilities and community facilities, are to be issued title to the land provided that any part of the structure in violation of existing regulations be demolished without compensation.
- 2) Post-1967 settlers on land for which plans have been prepared and whose development conflicts in whole or in part with these plans, are to have the non-conforming portion confiscated and demolished without compensations.
- 3) Post-1967 settlers on land designated for mosques, public utilities and community facilities are to be

evicted, and their improvements demolished without compensation.

- 4) Post-1968 settlers on land which is not designated for a specific project or granted to another individual and whose development does not conflict with existing plans are to be allowed to purchase the land in accordance with the regulations governing the sales of municipal lands.

Despite the fact that the MRA stipulated that the above-mentioned sales should be concluded at the going market rate and not the government set prices for the particular class of land involved, it seems likely that illegal occupancy and use of land will continue to plague municipalities in the foreseeable future.

### 6.3.8 Real Estate Development Fund

The Royal Decree No. M/23, dated in 1973, approved the establishment of the Real Estate Development Fund. The functions of the Fund can be summed up as follows:

- Offering medium or long range loans to the Saudi nationals of low and medium income who wish to construct their own houses to cover the costs of building. The funds gives around 70% of the costs of construction. It gives loan to Saudis in person or in their normal entity to construct settlements of different units for commercial or hotel uses provided the loans do not exceed half of the cost of

building.

- Offering loans with the purpose of city development and improvement. This may be in coordination and agreement with the municipality. The Fund has the right to acquire the area to be developed (and pay compensations to its owners) and then undertakes its replanning prior to sale. The municipality with the powers it possesses has to assist the Fund in the process of expropriation.
- The Fund may make an agreement with the Saudi establishments to construct housing compounds for its employees by offering loans not more than 50% of the cost of a unit.
- The Fund may give loans to any residential project other than mentioned above provided the Fund's management makes sure of the feasibility of the project is acceptable and the conditions and specifications.
- The Royal Decree regulates the administration of the Fund and determines its capital. The Minister of Finance and National Economy issued a decree laying down the status of the Fund.

#### 6.4 LAND-USE CONTROL (zoning)

The emergence, development and evolution of land-use control in Saudi Arabia (zoning and subdivision regulations) is perhaps best treated in two different phases. First, we will look at the

development of regulation before 1973, the year when the first master plan for Jeddah was adopted. In this phase of development, we will deal with three general issues of interest: the early statutes and their provisions, and the establishment of precedents for later regulations; the effect of the development of the villa as the preferred dwelling type ; the introduction of high rise buildings in the 1960's, and how all of these previous developments culminated in a package of rules that were applied throughout the country before the introduction, of Master Plan. For the second phase, we will review the regulations introduced by RMJM with the Master Plan for Jeddah,

#### 6.4.1 The Emergence Of Zoning Regulations

The Road and Building Statute in 1941 concerns itself with main issues; planning procedures, building codes, zoning and rights of way. In line with the interest of this section, we will deal here only with the last issue, zoning and the right of way.

Article 6 of the statute emphasizes the need for 'official maps'. The statute required that these maps indicate sites for slaughter houses, stables and barns, work shops and factories, and storage areas for construction and fuel materials; in addition the relation of these to buildings designated for residential purposes should be clearly set forth. The maps were also to indicate the following: the placement and width of roads and lanes, the area designated for building, according to their use, the existing built-up area, and the areas designated for future growth.

Article 20 states uses that are excluded in each zone and the rules and regulations to be applied in such cases. It requires that the following to be taken into consideration the designation of zoning districts.

- It is not permitted to use any building in the residential area as a shop or a workshop for any purposes related to marketing or any malodorous craft.
- It is not permitted to use any building in the markets and bazaars as a workshop for any malodorous craft.
- It is not permitted to use any building in the area designated for factories, for purposes related to malodorous crafts.
- It is not permitted to use residential buildings as a substitute for public buildings. . . and vice versa. . .
- It is not permitted to construct any building, be it temporary or permanent, in these districts except with a clear written permission from the building authority.

Article 24 introduces limited setback requirements. It states:

It is permissible for the building authority to establish a building line to be a maximum of fifteen meters from the organization line (the street limit), on the condition that establishing such a line would in no way prevent the construction of buildings that are suitable for the status of the district.

When the building line is established in any residential district, then no building should be erected beyond this line, except for the fence.

When a building line is established in a street or in a part

of a street related to markets and bazaars, then no building could be erected beyond this line, except for arcades and balcony projections. . .

Article 28 introduces two important concepts: the minimum size of a lot and its minimum dimensions. It states:

It is not permitted to erect dwellings on any lot, from land designated for building inside any new district, unless it complies with the following conditions:

- a) that the area of the lot from land designated for building is not less than 98.45 sq. meters, according to the decision of the building authority,
- b) that the dimension of the lot's frontage width on any street is not less than one-third of the lot's length perpendicular to that street, and it should in no way be less than nine meters,
- c) the conditions stated in paragraph (b) of this article do not apply to any lot in market of bazaar districts if it is not used as a room or a building for human habitation. . .
- d) the building authority does not have to adhere to either, all, or part of the conditions stated in paragraph (a) of this article.

Regarding the right of way, the statute indicates the need for widening roads in existing communities and for taking into consideration the planning of roads in future communities.

The straightness of roads and their design are to be designated according to the map. . .

Roads are to be planned according to the approved design,

on the condition that this design be gradually implemented either when reconstructing dilapidated buildings or when constructing new ones. To be excepted from this are buildings whose removal is required in the public interest. Existing streets are to maintain their present condition unless public interest requires their widening according to the approved design in the town's map, on the condition that these newly opened streets do not exceed the following widths: main streets, not less than 15m.; secondary streets, not less than 8 to 12m.; and lanes, not less than 4 to 6m.

Most of the concepts advanced by the statute were elementary in nature and, in practice, they were seldom resorted to since the standards they established were the ones usually followed in traditional cities. The minimum lot size, for example, equals the average area of traditional dwellings, and the restrictions on use were already in practice. For our purposes, however, the statute is very important since, for the first time minimum standards were coded by regulation rather than being merely followed by virtue of the community's traditional adherence. In short, the statute established a precedent that was to be followed later on, sometimes in a very stringent and thoughtless way. In particular, the setback requirements and the minimum lot size, which were later to be enforced with standards at variance with traditional ones, were imposed irrespective of the physical character and socio-cultural values of the community. The opening of new streets and the demolition of old neighbourhoods which reached their peak in the early 1970's can be said to derive their legitimacy from this statute.

Since the statute required municipalities to produce maps of their cities, the Egyptian Survey Department was assigned to carry out this responsibility for the cities of Mecca and Medina. A fairly detailed map of a scale 1:5000, was prepared for Mecca in 1947. A less detailed map on the scale of 1:10,000 was prepared by the Department for Medina in 1946.

#### 7.4.2 The Villa, The Apartment Building, And The Grid Pattern

The urban pattern resulting from the above statute has been the grid as a street pattern and the villa as a dwelling type, however, since their introduction, in 1950's, its almost the only pattern to exist today in Saudi Arabia cities. The Al-Sharafiah district, in Jeddah, is a good example of the rigid system of the set-back regulation and the grid pattern.

The development of modern apartment buildings in Saudi Arabia began in the 1950's. This was the result of two factors: first, the influx at that time of people from the surrounding Arab cities, as well as from other countries who preferred apartment buildings to traditional houses; secondly, the government housing projects which were rented to government employees, enhancing the image of the apartment building as an appropriate residence for Saudi's. As a result, the pattern was established and the process of erecting apartment buildings prospered.



Though not obvious at first sight, the relationship between the development of regulations and the construction of high rise buildings form a crucial part of the history of contemporary development in Saudi Arabia. Privacy has always been a basic issue in Saudi Arabia; consequently, the development of high rise buildings, in area of one or two storey single-family dwellings, was of great concern to both individuals and the authorities. The development of high rise buildings started with caution, attempting not to violate this important cultural principle. This took, various architectural forms, which attempts to interrupt sight lines between high and low rise buildings. Where this was impossible, building facades were kept solid without openings; light wells provide providing natural light and ventilation for the kitchen and bathrooms were kept in the center of buildings.

In the late 1950's, pressure was put on municipalities to protect the privacy of people living in these areas of mixed high and low rise development. In some cases residents had to take their case to the court, which failed to establish any kind of controls and most cases ended up in a sulh (an agreement acceptable to both sides). However, the issue was somehow evaded, and the promoters of high rise buildings continue constructing.

The continuation of high rise building in single-family residential areas, had two results. Those who were well-off (and politically influential) moved out to new areas, where there was no market for such buildings (not withstanding, most of them are actual investors and promoters of this type of building). On the other hand, there were those who either could not accept the situation ; or those who

restorted to individual action on their own property to protect their privacy when it was invaded by neighboring houses. This introduced new value of individual self-interest that were unprecedented. . . namely, a person's right to get the greatest benefit from his property regardless of the harm and damage inflicted on his neighbour.

The experiance gaind from the application of zoning regulations introduced in the late 1930's and early 1940's, and the popularity of the villa and high rise building form in the 1950's and 1960's -- all culminated, at the end of the 1960's, into the drafting of certain rules that were applied applied uniformly throughout the entire country. These were later issued in the form of a circular from the Deputy Ministry of Interior for Municipalities to all municipal and town planning offices . The circular read as follows:

Regulations concerning building on plots of land:

1. Prior to the issuance of building permits, confirmation must be made of the existence of concrete posts.
2. Plots are to be sold according to their drawn and established boundaries, and should be strictly prohibited from further subdivision.
3. Heights should not exceed eight meters, except with the approval of the concerned authority.
4. A built-up area generally should not exceed sixty percent of the land area, including attachments.
5. Front setbacks should be equal to one-fifth of the width of the road and should not exceed six meters.
6. Side and rear setbacks should not be less than two meters and projections should not be permitted within

this area.

7. Building on plots of land specified for utilities and general services should only be permitted for the same purpose.
8. Approval of the plan does not mean confirmation of ownership limits (boundaries) and the municipality should check the legal deed on the actual site.
9. The owner should execute the whole approved plan on the land by putting concrete posts for each plot of land prior to its disposal either by selling or building.
10. Irregular plot cuts should be extracted according to Circular No. 4855 of H.E. the Deputy Minister of Interior dated 1970.
11. The municipality should extract the legal deeds of lots intended for public gardens and squares according to Decree No. 1270 of the Council of Ministers, dated 1972.
12. These regulations cancel all other stipulations which are in contradiction with them.

These rules indicate that on the eve of preparing Master Plans for the country's major cities, the pattern and model for most of the regulations introduced by the plans had already been established.

Master Plans have since, divided cities into various zones. Each zone has its one zoning regulation. Also, subdivision regulations have been introduced along with various standards e.g building codes.

## 6.5 LAND MARKET<sup>4</sup>

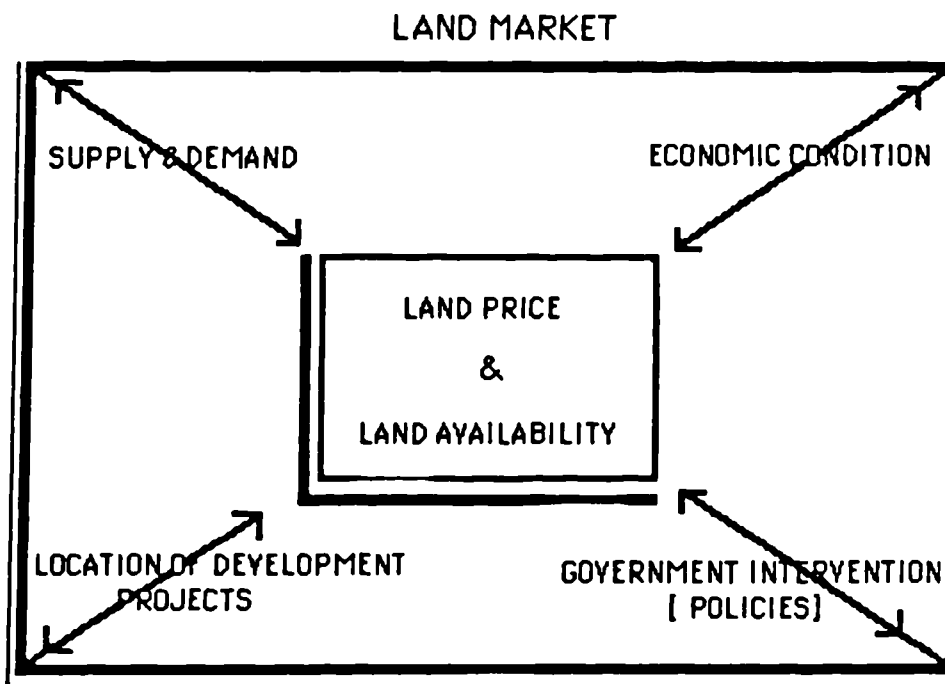
The Nature of the land market determines, with other factors, the kind of policies of which the urban land development process requires to develop in accordance with the local and national goals. Land derives its value from the functions and services it renders. It is a basic resource which generates economic activity. It is a source of all raw materials such as the minerals, or agricultural crops, etc. The rise of any economic activity is closely associated with the availability of land. The use of land depends on the nature of its suitability to a particular function. The location for the different uses is, being, dependant on the nature of the economic activities in the town, the types of predominant social life and the prevailing political attitudes.

The formulation of a policy for land values, therefore, requires a collection of data on these basic aspects of town life. In addition to its impact on the type and pattern of uses, the bulk of economic activities also determines the value of land. The value of land eventually leads to the amalgamation of homogenous districts as far as the income and the standards of living is concerned. The high-income population have their own districts while the low-income classes and the industrial areas are assigned land of less value. The law of supply and demand in the land and construction market also has its impact on determining the value of land.

A land market in the context of this thesis is: the total environment in which land develops its value and its availability. Figure 6.1 shows the four factors which compose and determine the input and the output.

**FIGURE : 6.1**

**Land Market:** is the total enviroment in which land develops its value and its availability



The selection of the location of development projects affects the social cost of the project. If, from the point of view of location, the development projects and resultant new human settlements are at places where they should not be, their functional efficiency is impaired, bottlenecks develop, and large investments may be partially or fully wasted. However, what concerns us here is the impact of Development Projects (programmes) on land values, availability, and consequently the cost of these on the society. In Chapter Two I discussed the general impact of urbanization on land values. The efforts by the government, to up-grade the condition of its urban areas by constructing utilities, community services, e.g. increase the desirability of land in that area which will, in turn increase its value and reduce the available amount of land.

The second factor: supply and demand; how land comes to the market and the land tenure systems controlling the supply has already been discussed in the previous sub-section. However, in this section we are concerned with the complementary factors affecting the market process, namely, the various actors who manipulate land in the market, land registration, real estate activities and government intervention.

The imbalance of economic structure may be reflected in the rise in land prices and the increase may be much more than that warranted by the rise in general price levels. The sky-rocketing of urban land values unrelated to any perceivable economic factors is largely explained by speculation in land. In the absence of adequate

investment opportunities in the productive sectors, the investor finds real estate a lucrative business. Here the cause mixes up with the result. In the sense that high prices attract the speculators to the real estate market and when speculation is severe, the sky-rocketing of prices takes place. This brings about inflationary pressures which encourage ownership of land as a hedge against inflation in the face of the rapidly declining purchasing power of money.

All these factors lead to the augmentation of investment costs and hence impede economic development projects. Increasing land values may be a result of monopoly in the land markets; when a few large land owners control supply and dominate prices. These individuals may even dominate the growth of the town itself and consequently place a severe constraint on urban development and the rate of growth. Nevertheless, the growth of percapita income and the improvement in the overall economic conditions, result in a general tendency to extensive use of land, due to better standards of living, such as large residential lot size which in turn increases the demand and therefore prices of land.

The extent of government intervention in the land market could be the most important element in the price and availability equation. There are many forms of intervention; both direct and indirect. "Land Banking" in one of several direct interventions, is the land market; such intervention will facilitate some of the needs for land, e.g. providing loans for private construction with easy conditions, help individuals to build, which in turn, increases the demand for land.

In this context we will evaluate the land market in Saudi Arabia, using Jeddah as a case study. First, we will look at the existing activities in the Saudi land market performances. Secondly, we will look at the various actors in the market and their motives. Land value and price evaluation, follows, using the above argument to assess the price structure and causes behind it. Thirdly, factors determining land prices in Saudi Arabia. Finally an analysis of government intervention and government control, over the land market. Various detailed areas are analyzed to assess the impact of the land market on urban land development in Saudi Arabia.

#### 6.5.1 Actors In The Land Market

##### The Land Owner

There are three groups of owners. Those who own large tracts of land either inherited or through purchase; those who own numerous plots and; those who acquired land through donations; they later, subdivide this land and feed it back to the market for sale through one of the real estate agencies. The activity in the land market and the rates of proces depends to a large extent on these owners.

##### The Businessmen

They invest their capital in the construction industry by acquiring land and participate in the construction of buildings.

##### The Real Estate Agencies



They are involved in subdividing land into suitable plots for construction either for themselves or on behalf of owners and also act as commission agents. There has been considerable fluctuation in the real estate business over the past few years. The number of permits issued annually to Real Estate Agencies declined from 30 in 1971 to 23 in 1973, then jumped to 36 in 1975 and up to 38 in 1977 and again up to 41 in 1978. Though the number of real estate agencies is an indicator of the level of activity in the land market. However, the scarcity of real estate agencies may be attributed to the restrictions imposed by the government not to mix real estate business with other trade, e.g. grocery, general merchants, or import-export etc.

### Government

The Government plays a main role in the land market. Most of the land currently under sub-division was originally donated by the King to the distinguished citizens in the society. The government also gives parcels of land to low income people. Real estate development loans, the sale of land at a token price to low income people, the participation of the public sector in land-subdivision and construction of buildings are all manifestations of government's involvement in the land market. Land acquisition by various government departments e.g. Ministry of Education, Ministry of Transportation, Ministry of Health, etc. is one of the most visible roles of government in the market.

In the previous section I talked about the process by which land becomes available in the market. The real estate agent and the grantees play the main role in land market activities.

When the grantee decides to sell the estate or a portion of it, he usually contacts a real estate agent, registered with the Chamber of Commerce and the Ministry of Trade. If the price of the estate exceeds the financial capacity of the agent, he may initiate the creation of a jointstock company (musahama).

The organization of the jointstock company follows well-established rules. The creation of the company is advertised in the newspapers, and people are invited to buy shares at a fixed price from the real estate agent who initiated the operation. When the required capital is gathered, the land is purchased from the previous owner by the company and a fee equivalent to 2.5 to 5 percent of the price of the shares is collected by the agent. Each share sold corresponds to a standard number of square meters of the estate, but their location is not determined. Illusive actions are frequently witnessed in this stage or another.

Once the land is acquired, the agent is responsible for submitting the subdivision application to the Town Planning Office, and requesting the relevant public agencies for the necessary infrastructure, streets, water, electricity, sewerage, and telephone.

The sale of the subdivided land is decided by the agent (or the shareholders) and can occur as soon as the subdivision plan is

approved and the plots are marked on the site. As a matter of fact, the sale often takes place before the infrastructure is in place; frequently the only improvement on the day of the sale is the asphaltting of the main street, to give prospective clients an idea of how the subdivision will look.

Once decided the sale is advertised in the newspaper, which indicates the date of the sale and the location of the subdivision. The sale usually indicated, since most sales are by auction. Once all the plots have been sold, the company is dissolved and each shareholder receives his share. The agent receives, again, another fee amounting to 2.5 to 5 percent of the profit on each sale when the buyer pays the sale price to the company, he obtains a deed registered with the Kitabat Al Adal and becomes the owner of the plot.

The original grantee plays a fundamental role, as the amount of land put on the market for development depends on him. His decision to sell an estate is not based on a comparison of the income derived from agricultural use and the income to be derived from urban development since almost none of this land has agricultural value. Many decisions to sell occur at times when land values are rising very rapidly, when it would be more profitable to keep the land for sale later. In many cases, land sold by the grantee for between SR 0.5 and SR 2 per square metre, brought up to SR 200 per square metre a few years later. Such a large difference between the price of unsubdivided and subdivided land is almost unequalled in the rest of the world.

The Real Estate Agents initiating the subdivision process have been its main beneficiaries. In addition to their fees, they had use of the proceeds of the sale for several months, frequently large amounts of money, (the shareholders only received their share of the profit when all the land was sold). They were, thus, able to purchase for their own accounts large areas on which they could make additional profits. The real estate business, thus, became very profitable, particularly for the most important agents, since the commercial services to be provided were largely dependent on personal credit.

The shareholders of the jointstock companies were of two types: those who did not plan to keep the land for their own use, but considered the purchase of shares as a safe and highly profitable investment; and those who needed a land plot to build a house. Almost eighty percent of land put in the market between 1970 and 1980 followed the process described. Most of the land now available for development, within a radius of 20 to 25 kilometers from the city centre, has already been subdivided. This process is common practice of land market in all Saudi urban areas. It should be known that there are government policies regarding this process (time for sale, price...) except that land has to have a subdivision plan approval before the actual plots can be sold.

#### **6.5.2 Land Price Evaluation And Its General Structure**

It is suggested that the best method of measuring the development of land price is by comparing changes in the price of the same site at

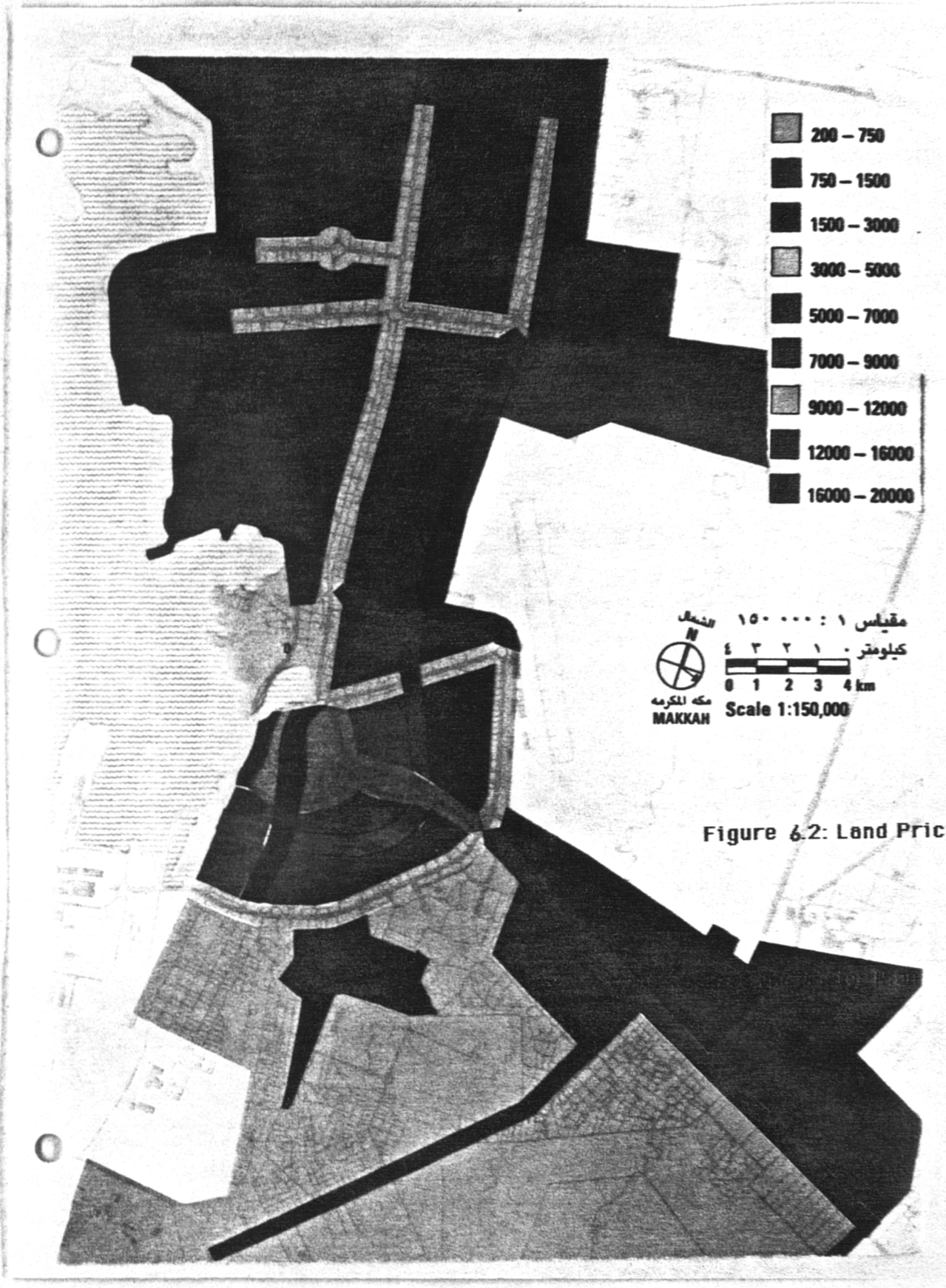


Figure 6.2: Land Price

different times.<sup>5</sup> Thus, in the following paragraphs we will be looking at land price evolution, in the city of Jeddah (in some cases we bring more examples from different cities in the country, depending on the data availability).

According to the Municipality records of June 1975, land prices were projected graphically as shown in Figure 6.2. Those figures, however, have become quite obsolete since late 1976, i.e. since the beginning of the oil price boom.

If we look back twenty-five years for land prices we will find that price changes were very low and within a very small margin. An example, in 1955 a square metre in a site in the middle of the city was SR 45, five years later the same site was SR 50 per square metre, a minor change in five years. Two things can be brought out of this example; because people at that time were viewing land not as a commodity for investment, but as a necessity to build a shelter on it. Not only that but also there was more respect to the Sharia point of view in this matter (undesirable behavior—see section 4.3). Thus, land remains unwanted until the need arises for building. Especially since land in most urban areas has no value except desert. Hence, land prices developed more in response to inflation rather than to other factors, e.g. such monopoly, governmental intervention, etc.

The second point is the influence on prices in general; the acceleration of economic growth was so low that it did not result in a significant difference in living standards. Generally, since the unification of the Kingdom until the late 1950's, land prices were

subjected to the personal needs rather than for any financial investment purposes.

Since the late 1950's a new motive for obtaining land entered the land market. This was obtaining land for developing residential developments to meet the increasing need for renting dwellers. The migration to Saudi Arabia from other Muslim countries, the rural urban migration and the increasing number of the young Saudis who preferred to live out of the family house created demand on tenement houses. The motive for obtaining land for investment accelerated the increase in land prices, however, this increase was only in central areas and serviced land. During this period of the late 1950's to the beginning of the 1970's land prices were increasing by 5% in the outer zone to 50% in the city centre.

The sudden substantial increase in the Gross National Income, caused by drastic increase in oil prices by the end of 1973, led to phenomenal government expenditures and investment in imports, modernization, and urbanization. Suddenly the liquidity rate surged in the public and private sections. The paucity of diversified re-investment opportunities, caused many individuals with enormous amounts of cash to turn to real estate and land speculation (especially since there has been no policies regarding land transactions, speculation...). Coupled with the scarcity of serviced land, this resulted in an unprecedented sky-rocketing of the real estate prices by not less than tenfold the prices.

Obviously such land values were artificially set and did not represent the real need or demand for new development and urbanization. Most of the land changed hands several times within the period (1974-1976) without being developed or used at all, yet creating tremendously large fortunes to its owners and land speculators. In the absence of land control measures, property taxation, and legalisation governing the turnover of undeveloped land.

Broadly speaking, the further one moves from the centre of Jeddah, the lower the land prices are, while land value is generally higher for property facing an asphalt, major street than for the interior properties facing small roads. It is not unusual to find properties in the heart of the city, with prices ranging between 30 and 40 thousand riyals per square meter (approximately 1000 pounds per square foot), while the average annual rent of an ordinary two bedroom apartment lies in the vicinity of 8 thousand pounds, and the annual rent of a medium size villa ranges from £8 to £40,000.

Between 1973 and 1977 the inflation of land and house prices was further aggravated by the increasing number of foreign companies and their employees arriving in Jeddah . Finally, real estate prices leveled off by the beginning of 1977, due in part to new regulations prohibiting foreign companies from competing for houses and developed properties. Nevertheless, the tremendous inflation in property prices left many middle and low income Saudi families unable to rent a house or a large apartment, let alone purchase a property.



While the rapid increase in rentals had stopped in 1980 and by 1982 was actually falling by 10% annually,, where prices of land remained increasing almost by the same rate until 1981; when the rate of increase dropped. However, until the end of 1983 land prices, in almost all parts of Jeddah, stayed increasing despite the fact that inflation had dropped since 1980 and by 1982, Saudi Arabia witnessed "deflation". This phenomenon can only be explained by the common practice of land speculation which kept about 40 percent of the serviced land in Jeddah vacant.

In summary, the recent history of land prices in Saudi Arabia full into three three identifiable periods:

- 1965 to 1973: During this period, land prices rose by a constant rate of 30 to 40 percent per annum , mainly, in response to real demand.
- 1974 to 1980: Land prices witnessed a sky-rocket increase, which was higher than the rate of increase in GNP and GNI, without responding to a same rate of inflation.
- 1980 to Present: Despite the "deflation" and the availability of properties, land prices are still increasing.

Land value information obtained from various sources is shown in Figure 6.3. Land values are highest in the city centre (despite the fact that since 1982 retail businesses experiencing are equivalent, if not better in district shopping centres than in the CBD) and along the major roads. Outside the city centre land values are higher in the



north than the south. Generally as distance increases from the centre, land values decline; but in the northern part of the city values do not fall as sharply as in the southward direction. A major reason for this difference is that northern areas are preferred by the community, and physical layout, architectural design, and public facilities in this part of the city are much better than in the southern area.

### 6.5.3 Factors Determining Land Prices

Figure 6.3 shows that the price structure for land is not homogenous and prices differ markedly from one area to another, as mentioned before. The levels of prices are high in the CBD, the sub-commercial centres along the streets of business activity, while rates vary considerably in the residential districts due to different considerations.

As the major land management authority in the city, the Jeddah Municipality can play an important role in influencing land values, zoning, permissible heights, provision of utilities, architectural style, width, and functions of street, etc., are factors that can affect land values.

- The width of the street affects land prices as a higher floor area ratio (F.A.R.), is permissible for wider streets and in town the value of land increases. It is an indicator of traffic flow and therefore, expected to increase commercial activity.
- Land prices are also affected by the authorized density of construction. Land is more expensive in areas

where more higher ratio of occupancy.

- There is no doubt that the availability of public utilities and services is one of the elements increasing the value of the land.

Besides the Municipality's actions in influencing the land market in Jeddah, three major agencies have had an effect on land value and land development activities in Jeddah.

- Private estate agents are usually an important link in property transactions. Prospective sellers depend very much on estate agents and are guided in terms of asking price. As fees are a percentage of the transaction costs the higher the land is valued, the more money they make. Thus they manipulate land values.
- The Real Estate Development Fund (REDF) has been very active in the past few years, granting interest free and long term loans for construction. During REDF's nine months closure in 1977, development activities were affected appreciably, and land value, specifically in residential areas were affected.
- Land prices are directly influenced by the rate of building activity which in turn is a function of affluence in a society. One of the indicators to the activity in the land market is the number of building permits. The number of building permits, however, is not necessarily associated with the market activity as many of those permits are given to building additional floors on

- existing buildings, repairs, fencing plots, or construction of public buildings, on publicly held land.
- Close proximity to the established commercial centres e.g. district and neighbourhood shopping centre...
- Distance from the city centre also affects the land prices markedly. The more distant the area is from the centre the less the price of land.

#### 6.5.4 Registration Of Land And Real Estate

The transfer of property ownership is done by the registration of title deeds at the competent court (Katab Al-Adl). The procedures of registration cover the following steps:

- a) The owner submits an application to the court for attestation and proclamation.
- b) The court sends the title deed to the original register for verification of the information contained in the title deeds regarding its authenticity and validity.
- c) If in order the process of documentation takes place (documentation through sale, gift, or mortgage).
- d) As for the registration of the building constructed after the registration of the land title deed, an engineer on behalf of the court makes a field investigation of the site. The court holds a session and in the presence of two witnesses the status of the property is registered.

#### 6.5.5 Land Market Activities

Land market activity in Jeddah differs from one area to another and from time to time, according to the spatial etemporal variation in the factors influencing land transactions.

The Central Area: This area has always been the main hub of commercial activity, as well as in its outer zones, a mixture of commercial and high rise residential developments with some exceptions of low density residential developments. The central area contains two zones: the old town and the outer central zone. The old town has been developed completely in that; no vacant land exists in this zone. Hence, any modern building, since the 1980's, has involved redevelopment. This process continued until the existing conservation policy was enforced. However, since this area was the first to be served by utilities and other services; most of the commercial activities have been located in this area, transforming it to a high density CBD. Today, there are still some residential buildings, the majority are traditional houses. To assess the land market activity in this area, we can identify three different periods. The first being 1964 to 1973, during this time, the old town was the only commercial and business centre (CBD) for the entire city, land uses were highly mixed and owned entirely by individuals on a freehold title basis. Dating largely from the Ottoman era, a large portion of the land within the inner central area belong to indigenous families.

The 1964-1973 period was considered the first turning point in Jeddah's urban growth commencing with the ascension of King Faisal to the throne in 1964. It was during this period that Jeddah fully

established its present pattern of growth. The previous chaotic urban growth accentuated the need for more controlled and guided city planning. Various foreign surveying and engineering companies were, hence, employed to lay the groundwork for such planned expansion.

The completion of the New King Faisal Street in the Old Town marked the beginning of the build-up of construction and development activity in this zone. As a result of demolition and clearance activity, to accommodate the new street, several sites in the Old Town adjacent to the new road became available for modern high rise buildings. Similarly a new departure in development, the construction of the Queen business complex encouraged many land owners and investors to develop their properties.

During this period there were two groups of land owners in this zone - first, those who owned properties and could afford to develop them, and second, those who had no financial ability to undertake development. The majority of the first group was not ready to invest in developing or redeveloping their properties at that time simply because the return from the capital investment in real estate was much less than returns from more familiar investments i.e. export, services, etc... However, those who invested at the beginning of this period and later invested in commercial and residential buildings. These activities encouraged the second group, who did not have the means for developing, to speculate on new properties, hoping that as a result of building activities, the prices would increase. The land ownership inheritance, tended to hold properties from development. Land can be be passed on to children and/or a relative by means of

inheritance. In some cases, the inherited property, is inherited by more than one relative, which means that any action towards the inherited property should be agreed upon between the inheriters, which consequently means a delay in development, in some cases it can take several years.

After the oil price increase, in 1974, two important influences affected land development in the central area: the conservation process; to protect the historical hub in the central area and the establishment of the REDF (Real Estate Development Fund). Conservation prevented the demolition of historic buildings, however, the action was limited to certain parts of the central area. The REDF and the introduction of interest free government loans for investors, made it possible for property owners who did not have the necessary financial means to develop their properties. These factors together with the great increase in inflation, the increase in income and the large sums in compensation paid by the government to those whose property had been appropriated, encouraged investors with large sums of money to look to the city centre for speculative investments in land.

However, the availability of utilities and other public services in the city centre and the great demand for housing and office space, made the land prices in the centre the highest.

By the end of the 1970's roads to and from the city centre became congested, parking spaces were insufficient and new office centres were built outside the city centre zone; all these factors resulted in



a stand still in land market activities until today with exception of the sea front.

In summary, three factors have influenced land market activities in the city centre: land ownership and the financial ability of the owner and the inheritance laws associated with land; the government intervention in the land market by means of subsidies (REDF) or by compensation processes and government expenditure (improvement programmes); the last and the most important, is the general economic condition of the country.

The Southern Area: Land market activities in this area contained two identified areas; one to the southwest of the centre and the other to the south and southeast of the centre. The first one, remains, until today, relatively slow in terms of construction activities, and land prices, in comparison to the rest of the city. Land in this area was associated in the beginning with wholesale activities as a result of its proximity to the sea port. It developed into a scattered pattern of warehouse structures in the early 1950's, when land prices in the area ranged from SR 0.5 to 1.0 per square metre. Generally speaking the area is owned by import and export businessmen. The area has three identifiable periods: the first being up to the removal of the city wall in the early 1950's. During this period the area was occupied by migrants from outside the country; when land belonged to those who brought "life" to it, through development (see section 5.4). Secondly, the removal of the city wall and the construction of a bigger seaport outwith the city wall brought warehouses and new market activities to the area. As I mentioned before, land in this area was

mostly owned by businessmen and developed by them for the purpose of storage and distribution of goods. There were some offices developed in the area for shipping companies. Land prices by the end of 1950's were between SR100 along the Medina Road and SR 10 in the middle of the area. Since the area developed without any pre-planned pattern, the main factor in determining the land prices is accessibility, especially for loading and unloading activities; the second factor in determining the price during this period was the distance from the city centre. The third identified period was from the late 1960's to the municipalities zoning regulation of 1978, which stopped the construction of any kind of wholesale activities and warehouses, and left the area for retail activities, office uses and residential uses. During this period almost 80% of the area was developed and the prices rose from SR 10 to 1,500 and from SR 100 to 12,000. The economic growth generated import activities and general shipping, loading and unloading activities, which resulted in great demands on land around the seaport . Not only this, but also the availability of utilities and the proximity to the city centre attracted a sizeable amount of residential buildings. In the absence of development controls, some developers, developed their sites in one of the most hazardous ways, by designing the ground floor for warehouse activities with several storeys in residential use above. In 1978 the municipality designated a large subdivision outside the built-up area to the south of the city for warehouse activities and stopped all warehouse and wholesale building permits in this area. The decision brought land market activities in that area to an almost standstill. The reasons for the decline of land market activities in the area are: the zoning decision meant that the area should either be

developed for retail activities or residential uses. The physical pattern and appearance of the first was not encouraging for such activities, especially for office uses...for the same reason, the area could attract little if any type of residential use. Land prices in this area by 1983 dropped by about 10%. Experts in the field of real estate argued that the only reason for holding land prices at this level is in the hopes of government improvement projects in the area, which will bring the usual inflated government compensation.

In the last 10 years it is safe to say that there were two factors influencing the land market activities in the area: the zoning regulations and government improvement programmes i.e. the ring road project, enlarging minor roads, improving the general appearance of the area.

The southern and southeast part of the area remains, in general, in the same frame of activities and occupancies of the 1950's. Low income development, slums, mixed uses deprived the area from recognizable changes in land prices (Figure 6.3).

The Northern Area: This area the most recently developed part of the city, was not developed until the late 1950's. The southern part of the area was developed in the 1960's as a high to medium income housing area. The northern part, in general, was in government ownership until the 1960's; when the government started to subdivide parts of it and granted it to applicants for private residential land and the rest was granted in large estates to dignitaries. By 1970 all the northern area had been granted to individuals. The increase in

land prices motivated most land owners in this area to withhold their land from development, seeking higher prices. This action characterized the area with urban sprawl, as we will see in the next chapter. However, what concerns us is the two kinds of land market activities. The first being the development of what is called "compounds". This is where developers built a number of villa type houses provided with a high standard of recreational facilities and surrounded with a wall (heights of 2 to 3 meters), for privacy purposes. This kind of development took a large scale in later times; when some developers developed a whole neighborhood, with almost all utilities and community facilities. This kind of development encouraged other developers to do the same; at our present time it has become a practice that is taking place all over the country and it is being encouraged by local municipalities.

The second one is the development of the new airport. The project has influenced the land market in a different manner than usual, the influence of government on land market e.g. zoning, utilities, land grants, etc. The airport has generated almost 5,000 jobs located outwith built-up area, by a significant distance (15 miles). As a result the area surrounding the airport developed a potential use e.g. residential, services, etc..., which in return attracted private developers and influenced land prices. In other words the development of such a government project, brought to the attention of land market actors and the activities of land market, the extent to which government can influence the land market.

In summary, land market activities are influenced and affected by the following:

- Land ownership attitudes e.g. inheritance, right of use...
- Land development controls e.g. zoning, by-laws, building permits...
- Government investment in land development e.g. REDF, public housing...
- Government land grant programmes.
- Public investment e.g. utilities, community services...
- Public projects e.g. airports, housing developments, new towns...

However, at this stage, it should be known that government does not practice any kind of direct intervention in the land market to control transactions and land prices with the exception of land registration law. However, there are two forms of indirect intervention; namely land grant and the REDF. Whether the governments' attitude has a positive or negative impact on urban growth, will be one of the issues of the next chapter.

### Notes to Chapter 6:

1. Information about this section obtained from two sources
  - a- official interview
  - b -H. Hajrah (1982) Public Land Distribution in Saudi Arabia, Longman, London
  
2. Land Development Policy, Technical Report No. 8, 1979, Jeddah, Hajrah, (1982), p. 1-32
  
3. Data and information about this section obtained from various government documents namely:
  - \* AL Nizaam Alaam Lamanat ALasimah Walbaladiat Fi Almamlabh
  - \* Nizaam AL Baladyat Wal Kurah, Royal Decree No. M/5 1979
  - \* Riyadh-Doxiadis Master Plan Zoning - bulk and height
  - \* Various Royal Decrees and Ministerial circulars, between 1950-1979
  
4. All the information in this section obtained from:
  - \* Survey Information
  - \* Jeddah Municipality
  - \* Real estate agents

## CHAPTER VII : EVALUATION OF URBAN LAND DEVELOPMENT IN SAUDI ARABIA

### 7.1 INTRODUCTION

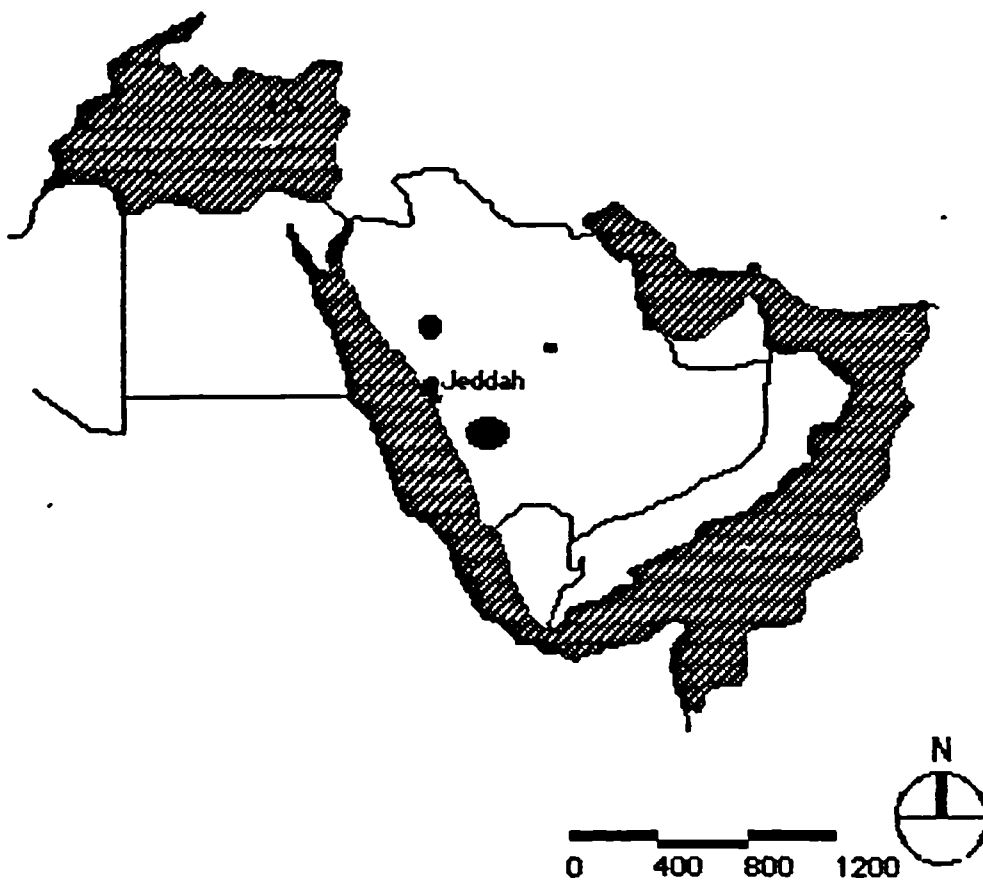
Since the beginning of the phenomenal urbanization process and urban growth in 1970, the government of Saudi Arabia has been concentrating its efforts to control land development in a manner consistent with the National Plan objectives. The efforts led to the formulation of comprehensive physical plans supported by land development policies to insure their implementation.

In Chapter 2, four kinds of problems arising from the urban growth were isolated:

- 1 - Urban Sprawl;
- 2 - Lack of community facilities;
- 3 - Environmental and cultural incompatibility; and
- 4 - The loss of agricultural land.

As a part of the overall methodology of this thesis, three areas have been chosen as case studies for evaluating the results of urban growth and government action to control it. We will analyze the growth of Jeddah in respect of the massive investment by public and individuals as well as the rise of living standards and its impact on general land development. By all means this case is the core of the analysis. The second case study looks at the impact of urban growth on agricultural land; where Al-Medina area has been chosen for that.

**Figure 7.1: National Setting**





Yanbu at the west coast will be analyzed in respect of uncontrolled growth resulting from lack of governmental co-ordination at the local and regional level.

## 7.2 The CASE STUDY OF JEDDAH

### 7.2.1 Background

Jeddah with a current population of over a million and half, is located at the center of the most populous region of the country. It is of prime significance both socially and economically to the Kingdom. Its primary function is as the country's major sea port (figur7.1 ). This function has been supplemented by the growth and importance of its international airport and the associated development of its leading trading and business activities. With the development of its airport facilities, it is the principal airport and reception center for international Hajj visitors making pilgrimage to Makkah and to visit prohpets Mohammeds' resting place in Medina . The importance of Jeddah is reflected in the governments project expenditures. During the Second Five Year Development Plan, approximately 30% of the governments project expenditures were invested in the city and about the same during the third one.<sup>1</sup>

Up to the end of the second world war, Jeddah was essentially a walled city . The only notable development ,outside the walls, were the Sabeel area and smaller scattered housing around a Turkish fort . With the growth of national oil revenues , the city witnessed a remarkable period of expansion; growing from a population in 1947 of about 40,000 living in an area of about 63 hectares to a population in

1955 of about 150,000 extending over an area of 2,230 hectares. By 1971 the city's population had grown to approximately 381,000 covering an area of 4,750 hectares. The present population of the city is now estimated to be about 1,300,000 extending over an area of approximately 10,000 hectares.<sup>2</sup> Figure 7.2 shows the extent of urban growth of the city during the period of 1850 to 1982.

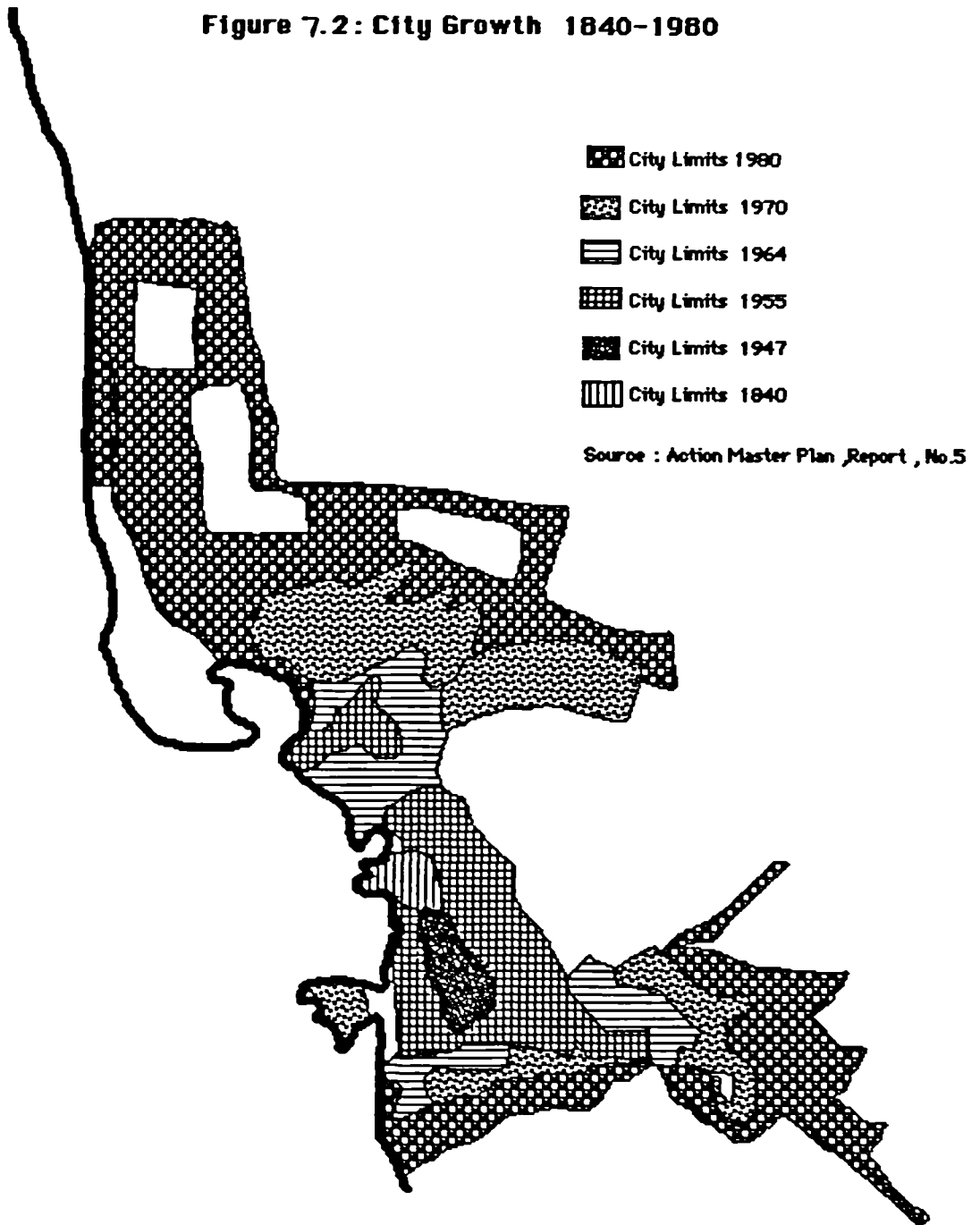
### The Environmental Setting

Geographically, the Western Region of Saudi Arabia is not physically homogenous, lying across three of the major north-south physiographic divisions of the Kingdom; the coastal plain or "tihamah", the escarpment and Hijaz mountains and the interior plateau.

The city of Jeddah is located on the Red Sea Coast of Saudi Arabia on a 12km. wide coastal plain or "tihamah". To the east of the city a break in outlining foothills, provides access to Makkah and the Hajiz hinterland. Thus Jeddah, like many other major cities, developed at a naturally-defined communications node, where sea-borne goods could be trans-shipped, either eastwards enroute to Makkah and the Arabian hinterland or northwards via the tihamah and the Badr gap to Madinah and beyond. The benefits of Jeddah's physical location are still of significance for the regional location of surface transport routes.<sup>3</sup>

Climatically, Jeddah lies in the arid zone between the mild climate of the Mediterranean Basin and the monsoon climate of the Indian Ocean. Temperatures are high, as can be expected in a desert area. The hot and humid climate influenced the traditional architecture and layout of the city. The tall buildings and narrow alleys provide shaded areas,

**Figure 7.2: City Growth 1840-1980**



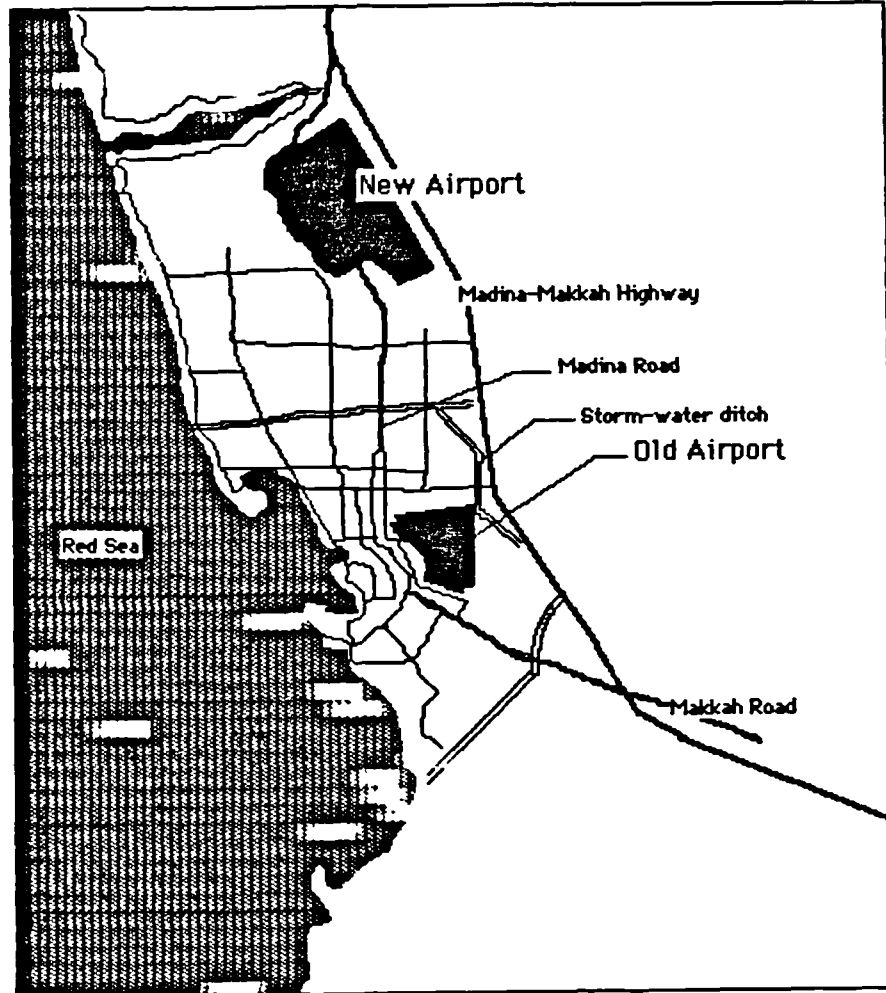
while funneling the sea breezes into the town. Isolated and intense rainstorms can occur during the winter period. The violence and frequency of the storms varies widely and rainless years are not uncommon. The average annual rainfall is about 40mm. The hazard of flash-floods to the city is contained by the recent construction of a system of stormwater ditches or interceptor channels around the city(Figure 7.3).<sup>4</sup>

#### Historical Outline For The Urban Characteristics

When I described the social conditions and the physical patterns of Saudi Arabian cities, Jeddah was no exception to the norms outlined previously. One can conclude that Jeddah's urban morphology followed the patten of what is commonly known as the Islamic-Arabic city. The following is a decription of the urban characteristics of old Jeddah (the condition of the city until 1955; about 20% of the old Jeddah's features have been preserved by a strict comprehensive conservation programme).

Within an Arab town, the home, mosque and market, embodies the characteristic quality of Arab life. The intervals between them, the pathways and the public spaces, provide a social amenity and their importance sometimes exceeds that of the enclosed spaces, but the clear separation of public spaces and private spaces, particularly the privacy of the home is never violated. Articulation of open and enclosed spaces within the town is paralled by the relationship of the town to the outside world and the boundary between town and surrounding lands is usually well defined. The gateway, the image of a defined entry into a place, defines very real transition. The life of

Figure : 7.3 Local Setting



the town the life of desert constitute two distinct detached realities.<sup>5</sup> (see Appendix A for a detailed description of Urban Society in Jeddah.)

In Islamic trading towns, the most characteristic urban element is perhaps that associated with the life and space of the Suq, the market place, and an area of public commerce with both social and economic functions. In Jeddah, the Suq developed along the two major roads, crossing almost at right angles. With the angle formed by the two streets were found masses of narrow lanes, passageways and alleys, with small, open-fronted shops. By the 16 century, therefore, Jeddah's townscape was representative of the typical Islamic city which had evolved to that time, including the characteristic Suq as a major axis, primary concern with social and defensive needs, and a clear relegation of aesthetic effects to a secondary importance. There was, of course, another important factor, Jeddah's climate. The street patterns were such that they usually lead to communal plazas of varying size and importance. The communal spaces were distributed in the town so that each group of houses could be oriented towards its own community area. These spaces are pleasant and comfortable. The surrounding compact masses of tall houses provide shade and protect the area from dusty wind. They shield the street from the heat and glare of the sun, and, by channelling warm air currents, induce convective cooling of the open space. This, in turn, provides the cool air which replaces the rising warm air being pulled out of the houses by differences in pressure between the inside and the outside.<sup>6</sup>

As is generally the case with the Islamic city, Jeddah reflects certain urban planning principles. There is a recognizable hierarchy of multiple levels of linked functions, spaces and movement. Apart from its neatly compact residential quarters, the town is centered around the bazaars which embody a variety of commercial activities, differing in use and intensity of use among primary, secondary and tertiary streets. The main outlet for retail and wholesale businesses is the primary streets where businesses and shops are diversified in items they sell. The bazaars on the secondary streets are small and intimate in scale and generally each small cluster concentrates on a single item or a few special items for retail. The service centers and storage facilities are located immediately behind the shops or in the ground floor of the residential quarter of the shop owner. The bazaars and the clustered separate functions which support the ordinary needs of everyday life provide a definition and identity for the communities districts and quarters. Interconnections among buildings, building clusters and bazaars create the protected pathways and the spaces which characterize Jeddah and affirm its Islamic identity.<sup>7</sup>

Traditionally, a city dweller in Jeddah relates himself to his own Harah, a geographical zone or district of residential and commercial activity, skirting a major city axis and connected primary or secondary streets housing bazaars. A network of alleys and passageways sprawls from these streets into the interior of the Harah. Within a Harah a social hierarchy generally enforces rules governing behavior, both private and public. Major streets lead from active public areas to a second echelon of social spaces where local streets intersect to narrower pedestrian areas which lead to small

common areas and finally to restricted approaches to residences which serve the private side of life. Most often the common area is formed by a simple widening of the street as it turns a corner. A command area is sometimes no more than a setback in the street or the junction of two alleys. Although alleys and passageways can terminate at dead ends, they more often end in common areas of communal courts. Thus the maze of narrow, winding, shady and quiet streets (with their tall buildings of four or five storeys) leading from crowded bazaars reach out to small open spaces filled with children playing games. They are the points where an individual group can come out of its communal seclusions to the openness of a definite public space, a space more intimate in scale than the bazaar or the primary and secondary streets.

The characteristic Islamic concern for privacy and clear separation of public from private life by a hierarchial sequence of progressively more private transitions was the dominant force shaping the buildings and interconnecting spaces in Jeddah's old residential quarters. A typical Islamic city dweller has been described as moving through a series of spatial enclaves from most private and individualistic to the spatial sequences he experiences. In old Jeddah, leaving the entrance hall or private courtyard, with its bright and attractive privacy, he entered a lesser degree of privacy in the narrow dimly lit lane outside, moving then into the places which belonged to the inhabitants of the immediate neighborhood. There was progressive loss of privacy and increase of public identity as he traveled along the land and entered the communal streets of the Harah, where he came out of seclusion into the openness of public



spaces. Arriving at the Suq he reached the maximum extent of public identity.

On the way back to his home he retrieved his privacy in a reverse order. Returning to the Harah, a first he found sights familiar to him, then faces he could remember, and finally he encountered people who greeted him, then who invited him to join them for a cup of tea or to smoke "shisha". In sum, therefore, the spatial order of this city was thus derived from socio-economic patterns and the technological capabilities of the time and before all Islam.

The conceptual framework of the extended family in the Islamic world acted as the nucleus in enhancing and preserving strong social ties, and thus creating the basis for the constitution of the structure of the larger communities and the family groups existing within them. The various residential quarters of old Jeddah represented nothing more than parts of still larger families.

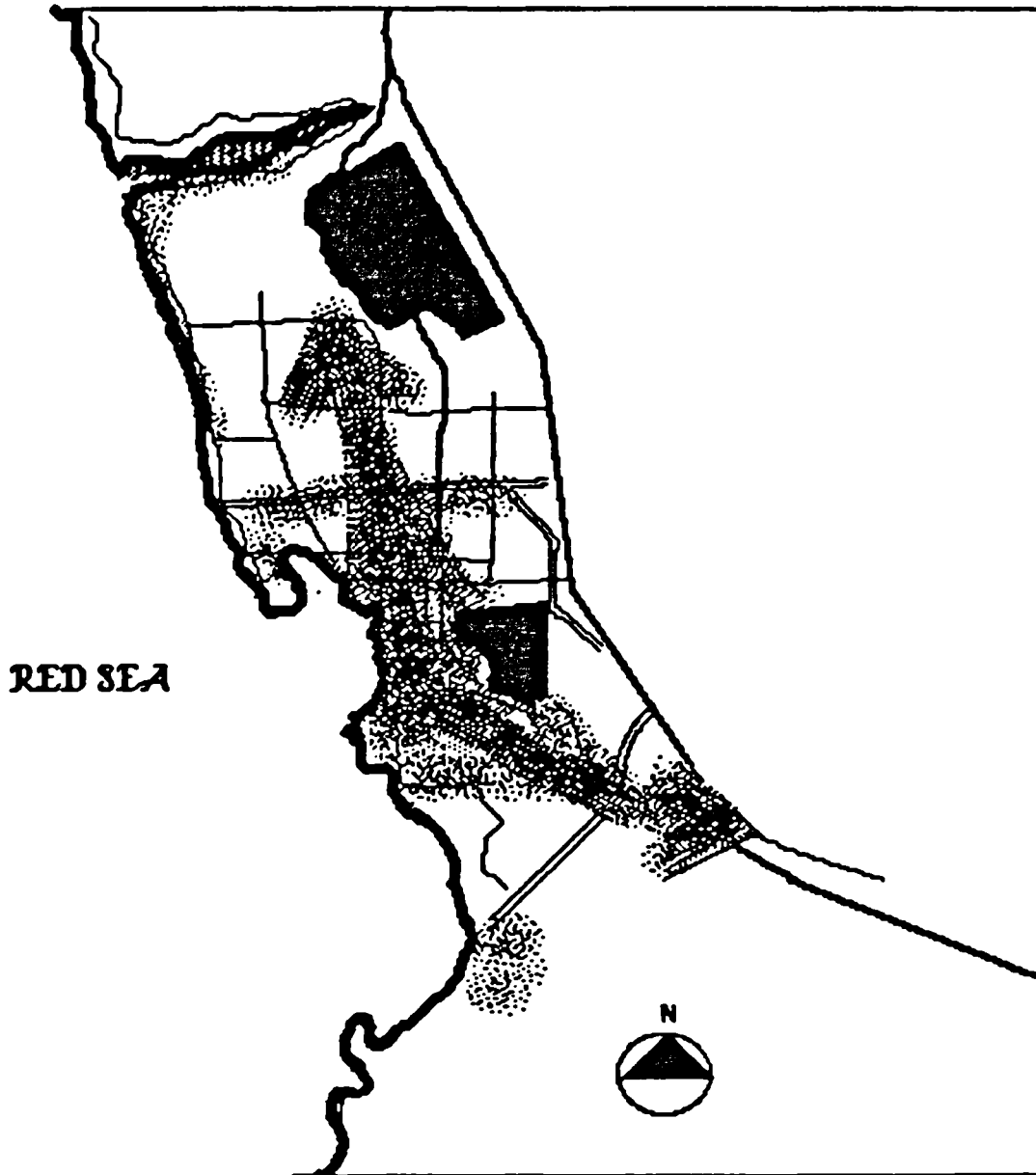
The social and communal activity of Jeddah was nevertheless centered around its most important institution, the mosque. Each residential quarter had one large mosque and several smaller ones. The smaller mosques were called "Zawayah". The Zawayah played a very important role in bringing together the heads of the families in the immediate proximity, while the larger one was used for the bigger community congregation. Often the position of Iman in a Zawayah was granted to the oldest head of a family nearest to it. According to historical records, in the mid 19 century Jeddah had five major mosques and thirty smaller ones.

The town had only one large rectangular open space near the customhouse. This space functioned as the public square of old Jeddah, starting almost at the location of the old Sharif Gate. On the east side of this street the old town still remains almost intact, but the west side has been completely taken over by the central commercial district of Jeddah.

As already mentioned, in spite of the division into quarters it is difficult to identify the demarcation lines among them. Indeed, socially and physically the entire town had a sense of one large, expansive residential district. The lace-like cellular form of streets evolved a cohesive pattern, flowing into each other. Yet, by looking carefully at each district, one may find a subtle difference, in terms of spatial organization and architectural expression of building form and types. The width of the roads of the old town varied according to function and location. The narrower cool and shaded lanes mostly located within the residential quarters were called "zukuk". These were sometimes as narrow as two and a half meters. The wider roads, sometimes as wide as fourteen meters, were generally called as "shari". These streets served as major axis for shopping areas and transport of goods. The narrow streets of the residential quarters were, in effect, extensions of the houses, very often forming a series of semi-private tiny squares. This narrow labyrinth of streets led into a series of small intimate squares and provided the most pleasant and conspicuous feature of the old town. There was a sense of shared territoriality among the neighbouring family houses, which in turn led to social integration and a sense of community.<sup>8</sup>

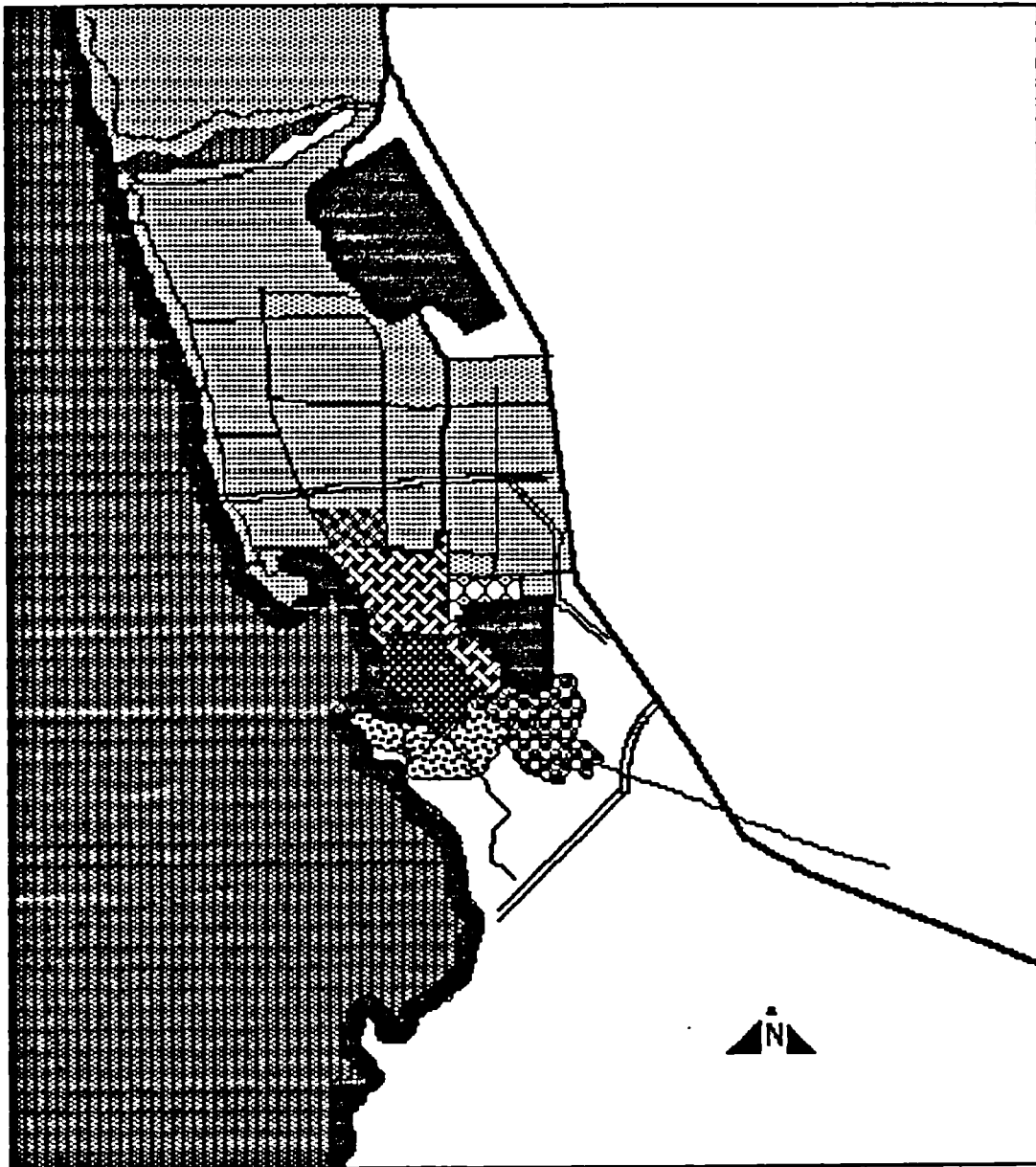
### 7.2.2 The Urban Structure Of Jeddah







**Figure 7.4: Direction of Growth**



Source : Master Diractin Plan , 1978

**Figure 7.5**  
**Jeddah PLanning Areas**



-  Northern Area
-  Central Area
-  Madinah Road Area
-  Makkah Road Area
-  Bani malik Area
-  Southren Area

Because of the city's natural location in the Tihama coastal plain, its urban growth was directly influenced by some salient physical determinants. Confined by the Red Sea on the western boundary and by the foothills on the eastern outskirts, Jeddah's growth from the historic hub, developed first eastwards along Mecca Road (until the late 1950's), and then linearly northwards along the Medina Road (figure 7.4).

The influence of the man-made determinants on Jeddah's growth left its fingerprints on the existing structure. The most prominent man-made elements in this regard were represented by the large old airport grounds, occupying close to 2000 hectares, northeast of the city and the extensive industrial development to the south. Currently there are seven identifiable zones within the limits of Jeddah, each has comparatively distinctive urban characteristics. The following is a brief description of these areas (figure 7.5):

#### 1. The Old Town

The historic hub of Jeddah represents the central zone, encircled by the inner ring road, which also roughly defines the location of the old town wall. At present this zone functions as the commercial and business center (CBD) for the entire city. Land uses are highly mixed in this zone, with the residential sector utilizing the highest percentage thereof (about 70% of the total area). The rest of the land is utilized by the "suq" (market place) and bazaars, commercial houses, banks (concentrated in the southern portion of this zone), office buildings, showrooms, parking lots, etc. Most of these utilities are confined to the area between King Abdul-Aziz Street and King Faysal Street, which has the highest land value in the entire city. Due

to such high land values (in the neighborhood of over four thousand pounds per square meter), high rise apartment buildings are now constantly replacing traditional single-family houses or filling vacant lots. Most of the old part is protected by conservation regulations. However, the west part of this zone, the coast, is undergoing active re-construction for more offices and residential buildings.<sup>9</sup>

## 2. The Outer Central Zone

The second zone is confined between the inner ring road and the second ring road and the second ring road which connects the seaport, Mecca Road, the old airport and Medina Road. The zone, in spite of its highly mixed residential, commercial and light industrial activities, is largely residential, providing housing for over one third of the city's population, according to the survey of late 1972. Since, relatively, little development took place in this zone between 1973 and 1982, its basic structure remains almost the same. About seventy-five percent of the ground levels of the built up area in this zone is occupied by commercial and light industrial activities, while almost all upper floors are assigned to residential uses. In addition, approximately 35% of the total labour force of Jeddah is employed in this zone, specialized mainly in the service industry and service trade. The zone comprises the greatest number of Jeddah's hospitals (about one third of all hospitals) as well as the old pilgrims city (the seaport pilgrims city to the southwest) and the Ministry of Foreign Affairs.<sup>10</sup>

Both this zone and the central area (the old town) constitute the largest business center of present-day Jeddah. Together they employ

about seventy percent of the city's total labor force and provide living quarters for as much as half of Jeddah's population. The outer central area has a gross population density of about 158 persons per hectare.

### 3. The Southern Area

The third area is represented by the southern quarter of the city, and is delineated by the seacoast, the second ring road, and the area south of Mecca Road. It includes the low income areas of Al-Sabeel and Gholeal as well as the large industrial estate. It is the location of most of Jeddah's heavy industry, such as the oil refinery and the steel rolling mill and provides numerous employment opportunities. This has attracted a large number of low-income squatters, mainly immigrants who built their huts and shanties on public land in Al-Sabeel and Gholeal districts.

Located to the south of this zone, the industrial estate was planned in the early 1970's, to encourage private industrial enterprises; it was provided with infrastructure and auxiliary facilities. Each of these units was available for long term leasing at nominal rates to small and middle range investors.

Also within the southern sector of this area is located the state radio and television headquarters (a complex dominated by a thirteen story building), as well as the quarantine and most of the new government office buildings.

### 4. The Makkah Road Area

This area is located east-southeast of Jeddah, along both sides of Makkah Road, and confined between the second ring road and the

eastern foothills. The principal component of this zone is the high and middle income housing, predominantly in the form of single-family detached villas. This type of housing occupies approximately eighty percent of the total built up area in this zone. The largest single land-use in this area was reserved for the Khuzam Royal Palace and its gardens, whose 128 hectares (316 acres) were donated to the city to serve as a large public park. Various commercial and industrial activities also conglomerate on both sides of the Makkah Road, in addition to a large number of government offices and departments and some foreign embassies. Since 1978, four major developments have taken place; the university campus, Prince Fawaseh Project a residential (Planned Unit Development) P.U.D. development to house 2,800 families, a public housing project to house 10,000 low-income families, and a municipality subdivision for limited income groups.<sup>11</sup>

##### 5. The Medina Road Area

This zone lies to the north of Jeddah, beyond the second ring road and along the Medina Road and extends westwards to the seacoast and eastwards to the limits of the old airport grounds. It is mainly a high quality, modern residential area, with varying densities and income levels (largely middle to high income communities). Yet the urban growth of the older districts, such as the area immediately adjacent to Al-Sharafiyyah Street (the westward extension of the Airport Road) is similar to that witnessed in the Central Area. However, most of the urban development in this zone is largely based on a strict land sub-division. Particularly to the north of Palestine Street, the predominant urban pattern is set by scattered villas and



single-family houses, in addition to vast undeveloped properties within the city proper.

The western portion of this zone, close to the seacoast, boast the largest number of embassies and ambassadorial residences, royal palaces, princes' mansions and luxurious detached villas. High and medium rise apartment buildings for middle and high income people, line most of the Medina Road, occupied largely by foreign professionals, technicians and young Saudi technocrats.

The villa is the most popular type of housing in present-day Jeddah. In the Medina Road zone, as well as in the Makkah Road zone, the villa was usually built on a one half to one hectare site, surrounded by walls as high as eight feet. However, due to the tremendous increase in land value, this pattern has long changed in this zone. It has now become more profitable to construct multiple developments on one hectare sites. Therefore, the plot sizes have been reduced to as many as sixteen single-family houses per hectare, instead of the previous plot size of one villa per hectare. Various western styled neighborhood shopping centers and shopping malls have recently evolved in several residential districts within this zone, serving communities in the immediate neighborhood.

The most salient feature of this area, however, is the huge high-density residential complex, the Jeddah Towers. This development, located on the Prince Fahad Street, west of the old airport, is sponsored by the Ministry of Housing. It consists of thirty two high-rise apartment buildings, each building rising about twenty stories high. It is planned to provide living space for over five thousand low

and middle income families, in addition to office and commercial space and other public facilities.

The Medina Road area has the lowest average gross density in Jeddah, approximately 37 persons per hectare. Of all the other zones in the city, the Medina Road zone has the largest potentials for accommodating further urban growth in its undeveloped areas; it also contains most of the vacant serviced land.<sup>12</sup>

#### 6. Northern Jeddah Area

Until early 1970 the area north to Palestine Road was undeveloped with some exceptions in the east, where a squatter low income traditional houses exists. The area is known for being publicly owned. In 1970 Jeddah Municipality subdivided parts of the area and granted it to applicants, for land to build their homes. Most of the granted land went to middle and high income groups. The process of granting land in plots range from 25x25 to 50x50 meters and large real estates 1x1 kilometers continuance and by 1975 the whole area north Palestine Road until the new airport was converted to private ownership and a process of very low squatter density of high to medium income residential developments had started.<sup>13</sup>

Along the outer fringes of Medina Road, there are, in addition, several industrial plants, most of them are non-polluting. The major industrial activities along this road are battling plants, kodak film laboratories, telephone exchange, foam-rubber and marble plants and furniture factories. The cement factory, located on this road, at fourteen kilometers north of the center, is the greatest source of air pollution to the city. The factory occupies, at present, an extensive

ground outside the city proper, has its own housing complex for its employees.

Further north, in addition, to the new airport occupying an area of 4000 hectares, new residential apartment buildings have been erected around the south corner of the airport, mainly for those who work at it. <sup>14</sup>

### 7. The Old Airport Area

The old Jeddah International Airport and its supportive facilities, occupying an extensive area of 1770 hectares, about three kilometers from the city center, represents the sixth zone within the city proper. Currently, no development, other than the airport buildings are allowed to take place on this vast piece of strategically situated land. Thus, the old airport constitutes a serious impediment to a sound urban growth of Jeddah. This situation, however, will soon be mended since the new airport, occupying an area of over twenty six thousand acres, at about twenty four kilometers north of the CBD (in early 1984, an advertisement for subdivisions was erected in the south corner of the old airport site, indicating that the south part of the site had been privately owned and has now been subdivided and in the process for sale).

#### 7.2.3 Urban Growth And Comprehensive Planning

The first turning point in Jeddah urban growth was between 1949 to 1956; Jeddah experienced a remarkable growth rate, which set the main pattern for the present form of the city. There is no accurate information about the population at this time. The second turning

point was the period between 1956 to 1964; there were frequent economic crises with resultant strict austerity measures. These brought to an end the rapid growth of Jeddah. The most prominent public works were small extensions of the airport and harbour and the beginning of King Faysal Street in the city center. No major suburbs were started, although, they were infilling of some areas in the then existing suburbs.

The third turning point in Jeddah's urban growth started in 1964 until 1973. This period commenced with the accession of King Faysal to the throne of Saudi Arabia in 1964. It was during this period that Jeddah had fully established its present urban pattern. The previous chaotic urban growth of the city accentuated the need for more controlled and guided city planning. Various foreign surveying and engineering companies were, hence, employed to lay the groundwork for such planned expansion. The development of the city from 1969 onwards, was continued at a slower rate yet, more controlled. This period of less than ten years, witnessed a great deal of urbanization in and around Jeddah, an enormous build-up which, once and for all, transformed Jeddah from a small traditional town to a vital national metropolis.

The fourth period beginning in late 1973 to 1978. Immediately followed the decision of the oil exporting countries, to raise the price of oil, this led to a phenomenal increase in the Gross Domestic Product of Saudi Arabia (table 7.1), which is highly dependant on oil export. The country's GDP has grown from 17,399 million Saudi Riyals in 1969-70 to 31,264 million SR in 1974-75. Accordingly, the

**Table 5.1 :Gross Domestic Product.**

	1970	1973	1978
Agriculture	0.984	1.089	1.359
		(3.9)	(3.3)
Oil	8.154	16.409	17.534
		(58.0)	(42.1)
Manufacturing	1.672	1.978	2.596
		(7.0)	(6.2)
Electricity	0.273	0.381	0.864
		(1.3)	(2.1)
Transportation	1.243	1.849	5.168
		(6.55)	(12.4)
Trade	1.362	1.795	4.448
		(6.3)	(10.7)
Public administration and defence	1.678	1.981	3.296
		(7.0)	(7.9)
Other sectors	1.099	1.395	2.162
		(4.9)	(5.2)
Gross domestic product	17.399	28.273	41.641

Source: The World Bank, World Bank Tables, 1976,1980.

Per Capita GDP was estimated to have grown from SR 3,185 in 1969-70 to SR 23,980 in 1974-75.

This remarkable increase in wealth had a dramatic impact on the urban expansion of Jeddah. To achieve the objective of a more diversified economy and modernization, the Saudi Arabian government sought to invest heavily in the betterment of the major urban centers and their rural hinterland. Enormous sums of money were added to the annual fiscal budget of Jeddah's municipality to enable the implementation and operation of its programmes (table 7.2).

During this period, extensive operations of road and highway constructions took place in all parts of the city, following the action area plans and the master plan, developed by RMJM (Robert Matthew, Johnson-Marshall, Consultants). This reflected the extent to which Jeddah had become a car oriented and car dependent metropolis. From the beginning of the 1970's, the car became the dominant factor in the planning and urbanization of Jeddah. The popularity of the automobile revolutionized the scale and scope of the city, and altered much of its social habits as well.

A new primary road network was designed for the city in an attempt to provide easy access and mobility, congruent to the urban growth requirements. The network of new high-speed routes was planned by RMJM in a north-south linear form, establishing the transportation framework for further community development. Exorbitant amounts of money were necessary for expropriation of privately owned properties in order to construct new streets and large parking lots. Moreover, whole residential and commercial areas were obliterated

**TABLE :5.2**

**Jeddah Municipality' Budget (£1=SR5)**

YEAR	BUDGET
70-71	28,822,161
71-72	65,732,516
72-73	57,683,949
73-74	152,184,134
74-75	630,377,226
75-76	1,377,121,300
76-77	1,039,345,262
77-78	1,235,116,000

Source : The Master Directive Plan,1979

and a great number of residents and tenants were either relocated or forced to evacuate their homes to give way to the unprecedented process of rebuilding. In some cases this process helped in clearing away some of the social and physical slums in some parts of the city, but in many cases, it also led to public commotion and distress, for the process was often too rapid to allow decent re-housing of many evicted residents.

The fifth turning point, 1978 to present day, initiated by the Crown Princes order, to stop all kind of expropriation of inhabitants dwelling, until the concerned ministry provide an alternative for the potentially affected residents, and the Royal Decree that foreign companies (contractors, consultants, etc.) are not allowed to use the existing residential stock and they have to provide their employees with their needs, for residential units, by building new ones or importing fabricated units. These two Decrees and the second oil boom in 1979 energized the construction and other urbanization activities. In general the pattern of growth during this period followed the same pattern of the previous one. More urban expansion towards the north; increasing demand for housing and some government housing projects completed.

This growth has been generated as a result of economic growth. In the following section, we will discuss the economic condition which led to the physical growth as well as the sources of the population growth. The theme of this section is to outline the various factors influencing the land development policies.

#### 7.2.4 The Master Plan Of 1973<sup>15</sup>



By the beginning of the 1970's, the need for comprehensive master planning for Greater Jeddah, within an overall regional development programme, was virtually indispensable. The official consensus was to request the services of a reputable foreign body of experts for this task. Considering the past events in the city, this was the first bold step towards an extensive, serious and scientific planning. Thereupon, the Ministry of Interior and Department of Municipal Affairs (now the Ministry of Municipal and Rural Affairs) appointed Robert Matthew, Johnson Marshall and Partners (RMJM&P), which commenced its work in Jeddah in May 1971. In addition to RMJM&P team the ministry seconded a counterpart team of young Saudi architects, engineers and geographers.

By 1973, for the major cities in the west region, the master plans were initiated within the overall regional situation and were aimed at providing an integrated land use transportation structure capable of accommodating different rates of growth. The consultants also aimed at spelling out the public utility service requirements, as well as standards for and provisions of schools, clinics, hospitals and open spaces. In addition, they were concerned with preserving some of the historical fabric of the cities.

With regard to the city of Jeddah, eleven feasible growth options were examined, portraying alternative uses of land and considering various directions of expansion. After evaluation, the optimum solution was selected and recommended as the basis of the plan for the city. Once the selected strategy was approved by the ministry, a

draft master plan was drawn up and prepared, and eventually served as the model for the final master plan itself.

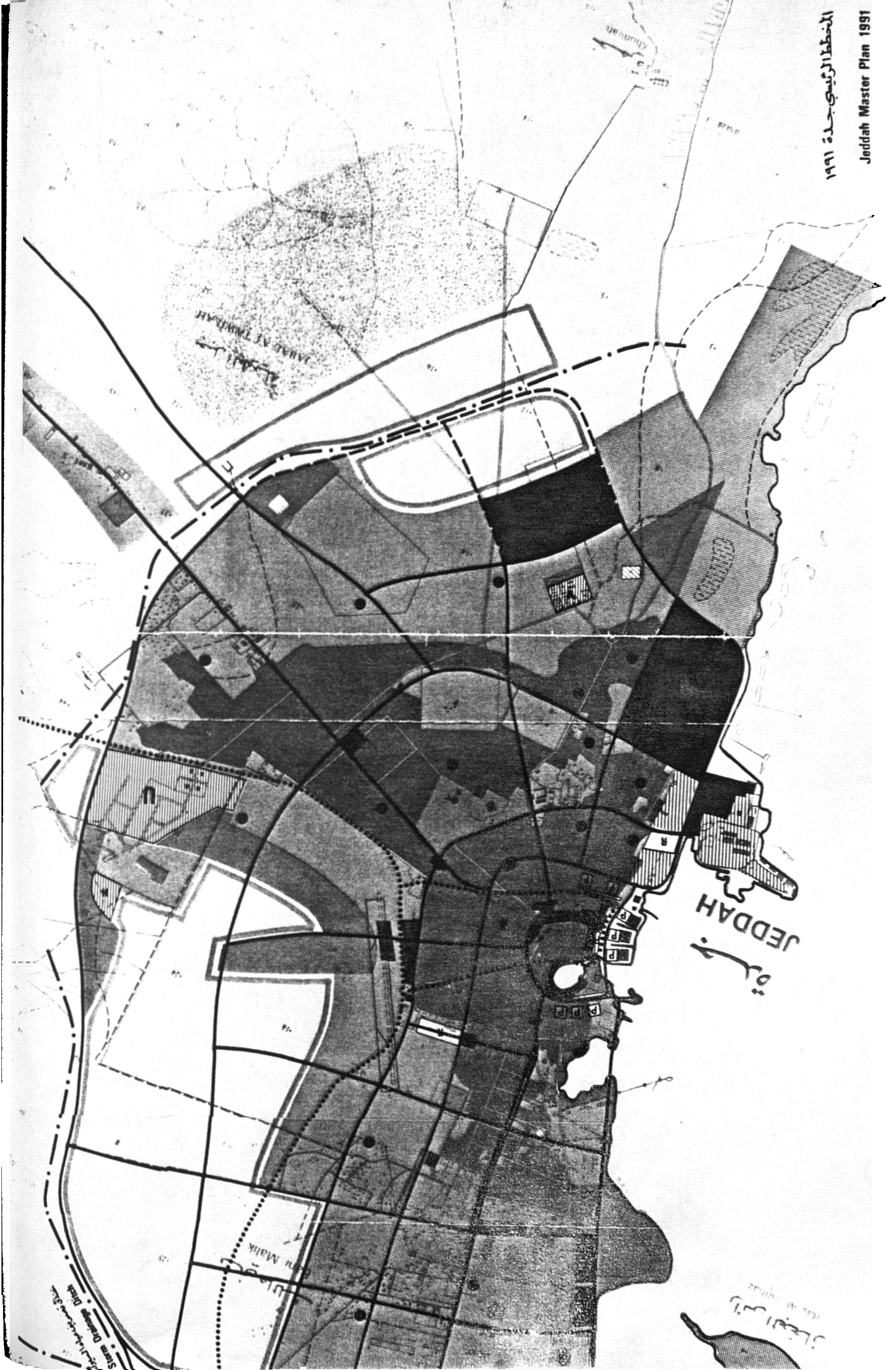
The following thirteen key objectives were used as guidelines in the RMJM&P proposals:

1. To provide sufficient information as a basis for ensuring an adequate supply of water and energy.
2. To promote the maintenance of public health.
3. To provide an adequate road network at city and local levels.
4. To encourage the development of public transport systems so as to create a balance between private and public transport.
5. To achieve an appropriate mixed distribution of high medium and low income groups, and to maintain social cohesion through a well-balanced residential density and housing type.
6. To provide sufficient religious, educational, medical, administrative and recreational facilities to meet the needs of the population.
7. To encourage the development of local industry and employment.
8. To supply the development of local business and commercially planned activities.
9. To control the growth of the city only to the extent that it would allow maximum benefit to all citizens, at minimal inconvenience.
10. To provide development control so as to ensure a balanced growth of the city.

11. To preserve buildings of architectural or historical significance as part of the effort to conserve the Islamic tradition.
12. To develop planning techniques and methods as part of dynamic city planning, responsive to pressure of growth and change.
13. To establish an effective information and classification system for data storage.

The above proposals were supported by a series of Action Plans for various parts of the city and by an advisory report on methods and procedures for control of its development. The form of the plan is illustrated in figure 7.6.

Essentially RMJM&P could not foresee the economic boom that resulted from the 1973-74 oil price adjustment (see Appendix B). The national projected average annual rate of growth of GNP had been fixed at 6.5% from 1970 to 1975 and 5.0% from 1975 to 1980; as it happened the GNP grew at an average rate of 12% during that period. As is well recorded in Appendix B, excess money, liquidity, resulting from the boom, fueled speculative land and building development, which in turn set up tremendous pressure on any development boundary or phasing programmes. Along with economic growth, population increased accelerating the higher estimate of the Master Plan (figure 7.7). Such development pressure to force a "besieged" planning authority to focus on roads and services in new areas at the expense of those programmes, such as the provision of public facilities or neighborhood structure and housing for middle and lower income groups (for more details see Master Directive Plan, 1978, Report 4).



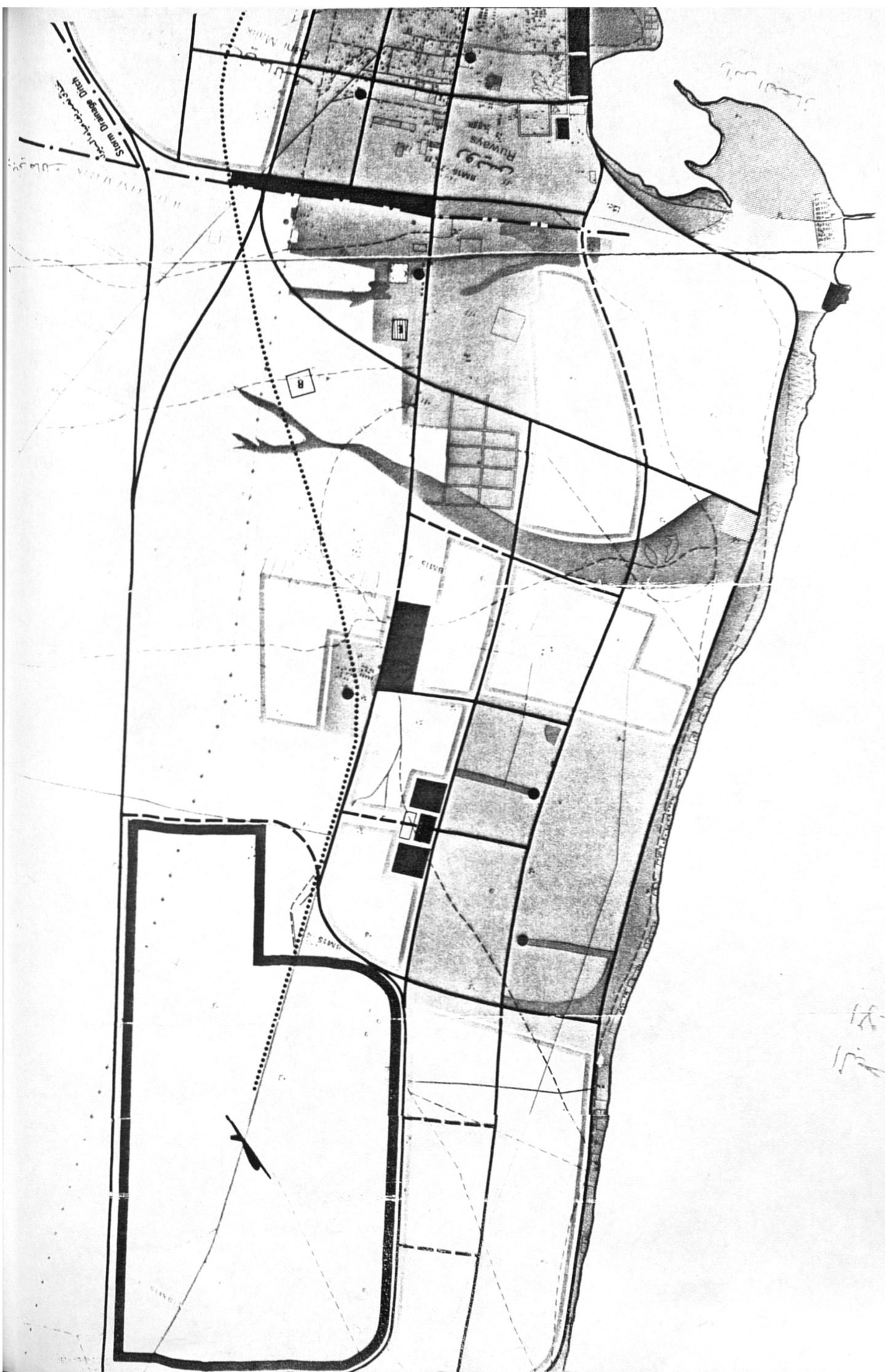
JEDDAH  
جدة

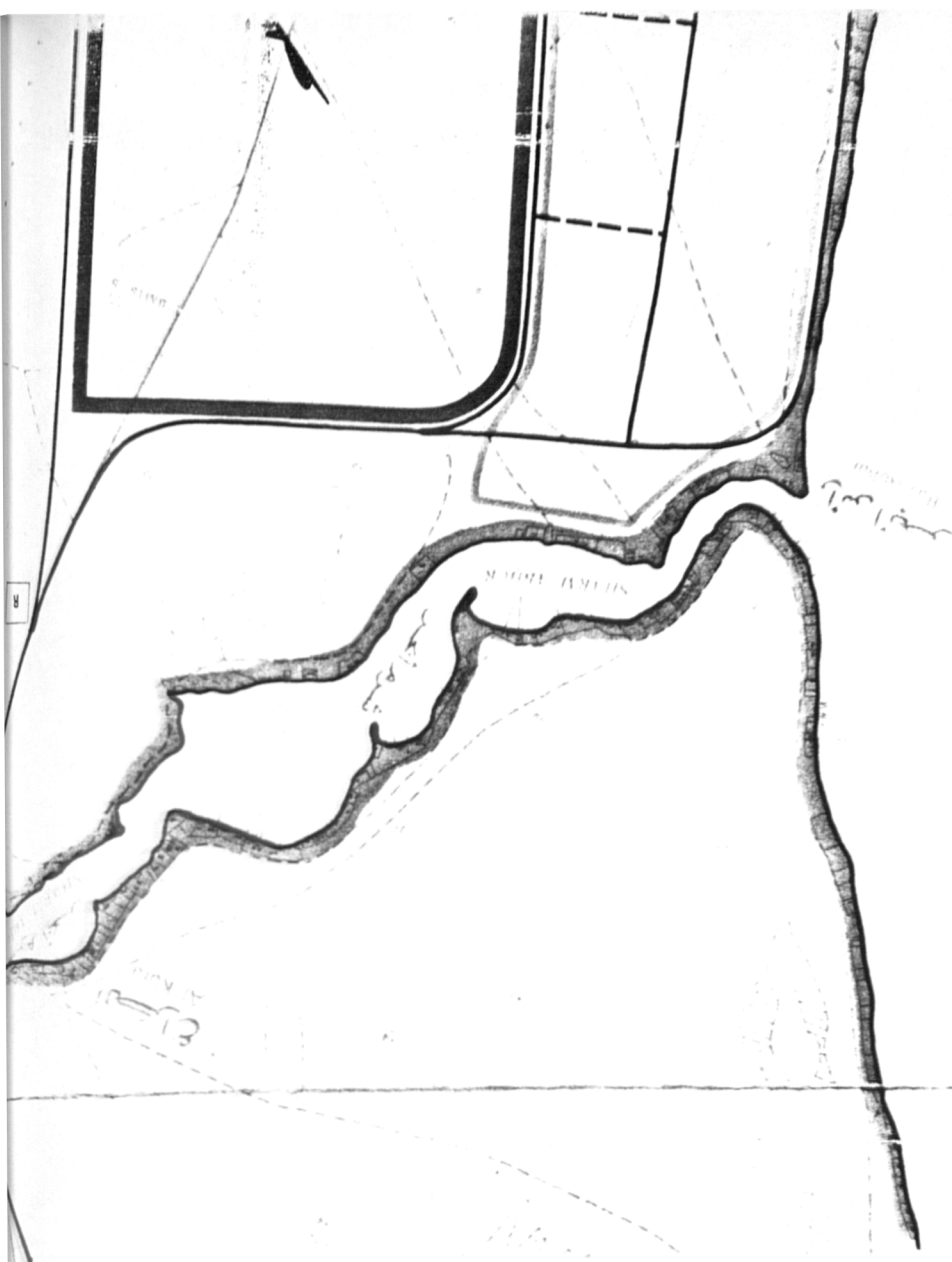
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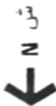
Jeddah International Airport

Jeddah International Airport  
Storm Drainage Ditch

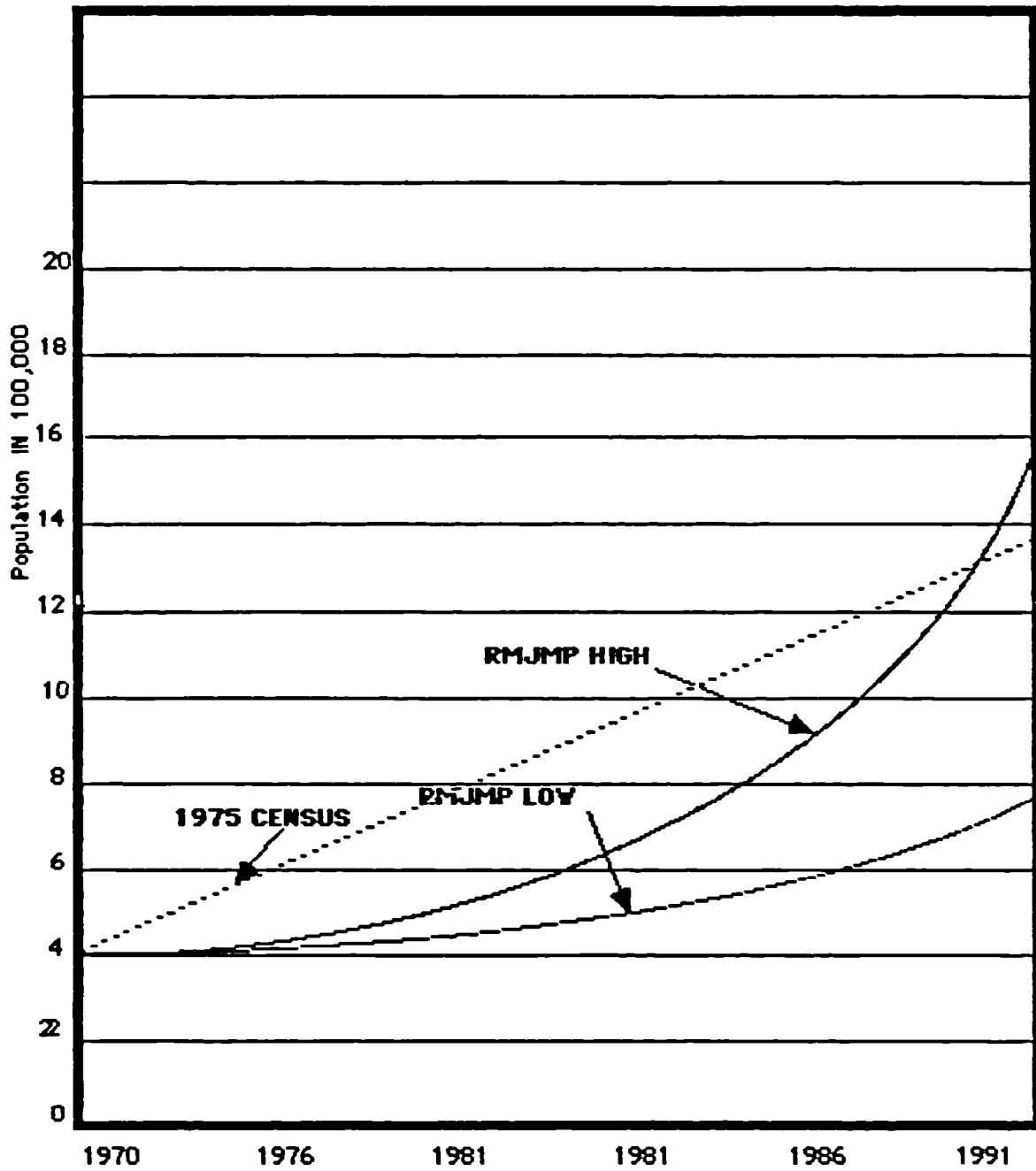




- خدمات حكومية
- مرافق تجارية
- مكاتب
- ||||| مخازن
- مواقف سيارات
- مستشفى كبير
- مناطق سكنية (التقديرات الدنيا)
- مناطق سكنية (التقديرات العليا)
- مناطق للترفيه ومناطق مفتوحة
- مناطق مفتوحة لأغراض خاصة
- مناطق صناعية
- طريق أدبي (التقديرات الدنيا)
- طريق أدبي (التقديرات العليا)
- شبكة عبور سريع
- جامعة
- مركز تعليم
- مركز استقبال الحجاج
- منطقة زراعية
- منطقة حكومية خاصة
- المطار



**Figure 7.7 : Population Growth**



Source : Jeddah Master Plan 1975 Official Census

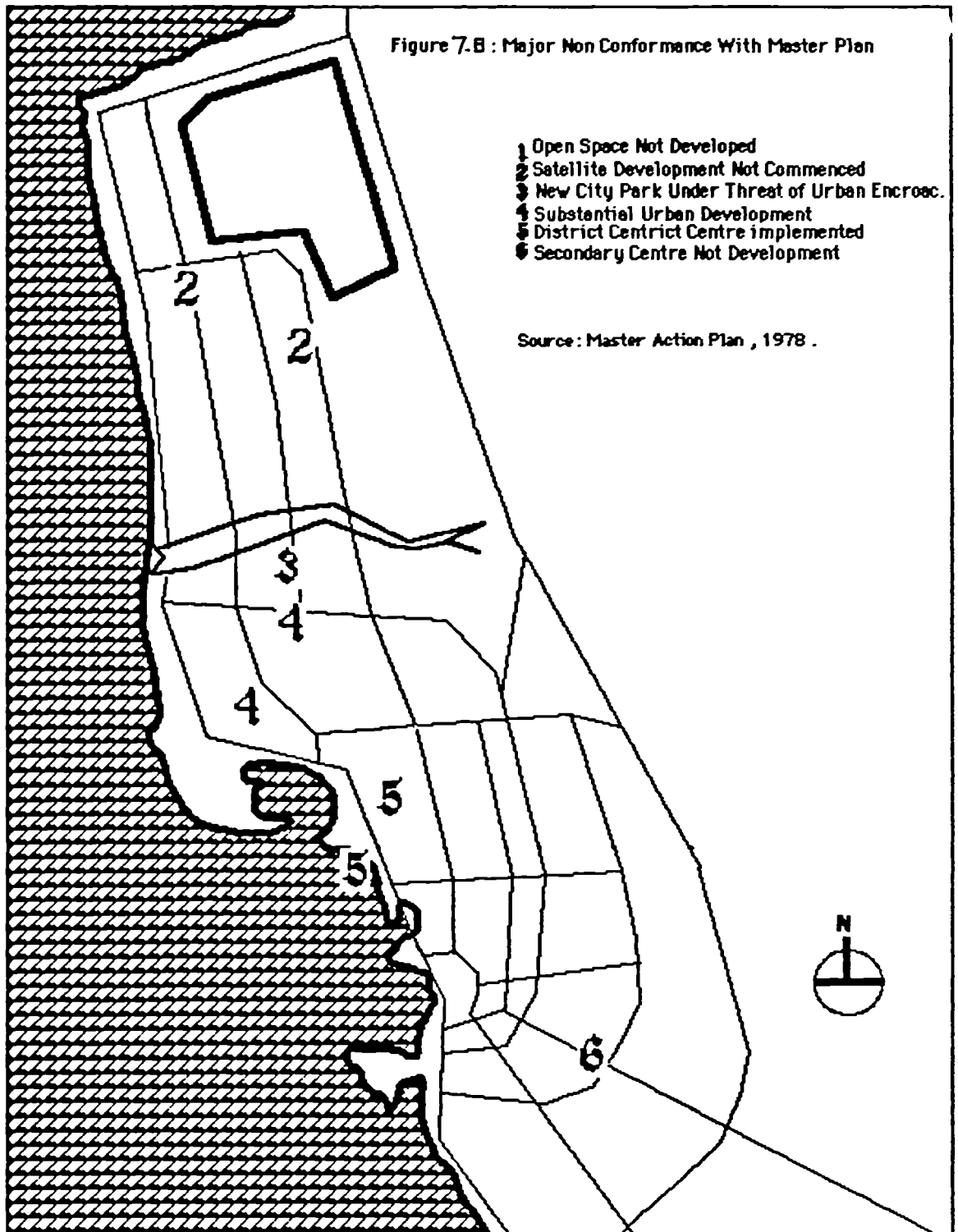
In the report, detailed evaluation appears of what had been planned and what actually happened from the time it was adopted to 1978. However, at a city level, Figure 5.8 shows developments which have taken place outside the zone areas proposed in the 1973 Master Plan. At the local level: Medina Road Action Area, where one half of the area which was originally designated for villas has been developed with apartments. At the same time, much of the area zoned residential has been subject to change of use for offices. Northern Jeddah Action Area where facilities planned for the residential population have not been implemented, little adherence was kept with area zoning. Makkah Road Action Area where, as above, proposed facilities have not been implemented. Lack of community facilities and other services remain the characteristics of most of the city.<sup>16</sup>

In broader terms, the proposed city structure has been adopted, but actual development has diverted significantly from the Plan. Population distribution has not followed that proposed in the plan; residential areas have not developed systematically in the sense of being consolidated and serviced prior to new areas being developed. Non-residential development (offices, shopping, etc.) have been diffused and scattered throughout the city. Provision of public facilities is well below the requirements of the population. In summary, the failure to implement the Master Plan and with a simultaneous high rate of urbanization resulted in the following :

- Urban Sprawl Development: lack of community facilities  
open spaces, mosques and cultural environmental  
compability.
- Lack of community facilities.
- Lack of cultural and enviromental consideration .



Figure 7.B : Major Non Conformance With Master Plan



- Traffic congestion and shortages in parking facilities.

Appendix B discussed the economic conditions and its impact on urban growth of Jeddah. In summary, we have attempted to give a broad account of the major economic currents (the urbanization process) that were affecting Jeddah during the period of 1973-1980. The main theme running through the appendix has been that the pace of economic progress, since the Master Plan was written, has been much faster than anticipated and therefore, most of the implicit economic assumptions were inadequate. Later we will analyze the policies which dealt with land development under the above circumstances.

At this stage of the analysis, some general points may be noted: there had been a continuous growth, in population as well as income, as a result more demand for land to improve their housing as well as to accommodate the increasing population; government has been pursuing ambitious plans for increasing its budgeted expenditure in all areas which in return mounted great pressures on urban land. As a result construction remains one of the main impulses of Jeddah's economy, another being the activities associated with the city as the country's major entreport and trading center. Both of these industries are very healthy, and their future development will move with the fortunes of the country as a whole.

Several major developments have been mentioned which generated a great deal of pressure on land (in return on land policies). First, the growth in the number of cars and other vehicles has created a new industry for maintenance and generated high amounts of traffic on roads. This industry and increased mobility have been very important

in providing new jobs, almost entirely outside the center of Jeddah and predominately in the middle and higher income areas in the suburbs. Second, the growth of banking and financial services was not anticipated in the Master Plan. With the rapid transition from a cash to a credit economy, which Jeddah is currently in the midst of, banking will be a significant factor in the local labour market. Thirdly, the increasing retail activities and the introduction of superstores. Fourthly, the increasing number of multinational companies and the generated demand for accommodating their employees. Hence, these two developments have been generating demand for land, challenging the available development controls and endangering residential areas.

In discussing urbanization and its impact on urban land-use in the second chapter, we mentioned that one of the main victims in the process of changing land-use, is the CBD. Apparently, the economic forces, that have been operating, seem to indicate that the structure of the urban economy is changing rapidly and the direction of change is towards the suburbs at the expense of the central business district. If this interpretation proves to be accurate, then it carries profuse implications for land policies.

The improvement in living standards, road construction and urban renewal, the increase in commercial activities and public facilities, and overall the increase in urban population generated great demand for urban land as well as government intervention in the land market.

#### 7.2.5 The Master Directive Plan

By 1978, it was clear that there was a need for revising the Master Plan. Hence, the Jeddah Municipality asked SJI consultants (Sert Jackson International) to prepare a guide to the development of the city within the context of the National Plan. In parallel with the National Plan, it concentrates on the 10 year period, 1980 to 1990. In addition to following the Kingdom's broad national plan goals, the guide (Master Directive Plan) takes account of established regional policies for the Western Region and Jeddah's role.

Jeddah with a 1980 population of over one million is forecast to grow to 1.6 million by 1990 and 2.25 million by 2000. Employment is expected to increase from 282,000 in 1978 to 640,000 in 1990 and 900,000 in 2000. In this context the Master Directive Plan seeks to locate all the activities related to both the existing and future population in such a way that the physical, social and economic conditions of the populace may be benefitted.<sup>17</sup>

The Master Directive Plan recognized the city structure proposed by the 1973 Master Plan and the 13 objectives. In summary, these amount to trying to develop orderly and balanced growth by means of :

- 1) balancing residential areas to workplaces and shopping to minimize congestion and maximise transport facilities,
- 2) segregation of "bad neighbour" uses to promote a clean safe environment,
- 3) provision of community facilities e.g. schools, open spaces, mosques, clinics, hospitals, to promote social welfare and community,
- 4) provision of a high standard of transportation and

services.

In the process of the preparation of M.D.P., the consultant and Jeddah Municipality evaluated the Master Plan of 1973 and the available land development policies. The evaluation concluded the following :<sup>18</sup>

- "RMJM could not foresee the economic boom that resulted from the 1973/1974 oil price adjustment . Hence it failed to consider the population increase which amounts to 50% difference between what was forecast and actuality ."

- Implementation failure of the former Master Plan was generally attributed to inadequate land policies as well as to inadequate enforcement of available development control regulations and to the lack of any other effective mechanisms for guiding land development.

- RMJM has adopted a planning approach which lead to a rigid lengthy 20 year elaborate plan, which can not function under rapidly changing circumstances.

The consultant outlines points of weaknesses in the land policy:

- It did not address the cultural aspects (mosques, privacy).
- It failed to control the land market to facilitate the supply of land for development.
- It failed to control the use of land.

The Master Directive Plan contained, besides the physical plan, two technical reports. The first one titled Land Development Policies, contained the various policies required to facilitate the implementation of the physical plan. The second one, titled Planning By-Laws, contained planning by-laws to insure optimum use of land,

reduce overcrowding, provide community facilities, etc., to help implement the plan.

However, besides the main objective of the policy, the policies have the following aims:<sup>19</sup>

- i) Achieve a social optimum in the use of land and planned development of the physical environment to facilitate rapid economic growth and to promote a healthier and better life for the community.
- ii) Eliminate conditions of scarcity of land (particularly developed or serviced land) in order to facilitate quick execution of housing and other public and private works and to eliminate the negative effects of urban sprawl.
- iii) Curb undue rises in land values and prevent land speculation.
- iv) Utilize the gains of socially-generated surpluses in estate values for the common good.
- v) Create conditions in which the poorer and under-privileged classes of society get a fair deal in the matter of housing and enjoyment of the common physical environment.

To give more tangible meaning to those policy objectives, see Appendix C.

#### 7.2.6 The Existing Conditions After The MDP

The approval of the MDP in 1980 included the Execution Plan, Action Area Plan, Expropriation Plan and the Zoning Plan and By-law

regulations. The detailed plans are: The Execution Plan: this detailed execution plan is directed to define areas for facilities and the resultant lands acquisition needs. In the case of existing facilities, 'spot zoning' may be applied to regularize such developments. The Execution Plan comprise the basic tools for implementation of the Master Directive Plan and application and enforcement of the planning by-laws. The second detailed plan group are the Action Area Plans: these are directed at development of proposals for critical areas including areas suffering from congestion, high density, lack of community facilities and delapidated housing conditions. Also areas of historical and cultural importance. The third one is the Zoning Plan, which covers the Master Directive Plan area and gives a range of possible options relative to the use of land and the intensity of development. The Zoning Plan is the basic tool in exercising development controls.

In this section we will examine the existing conditions in the light of the above plans. For this purpose, the city has been divided into six zones (same divisions used by MDP for their planning works). We will be examining the existing conditions broadly, the degree of the specificness depends on the availability of the data; if the zone has an Action Area Plan, we will take advantage of the data availability and look in detail into the existing conditions. It should be kept in mind, that there are a great difficulties in obtaining data, due to unavailability or inaccessability.

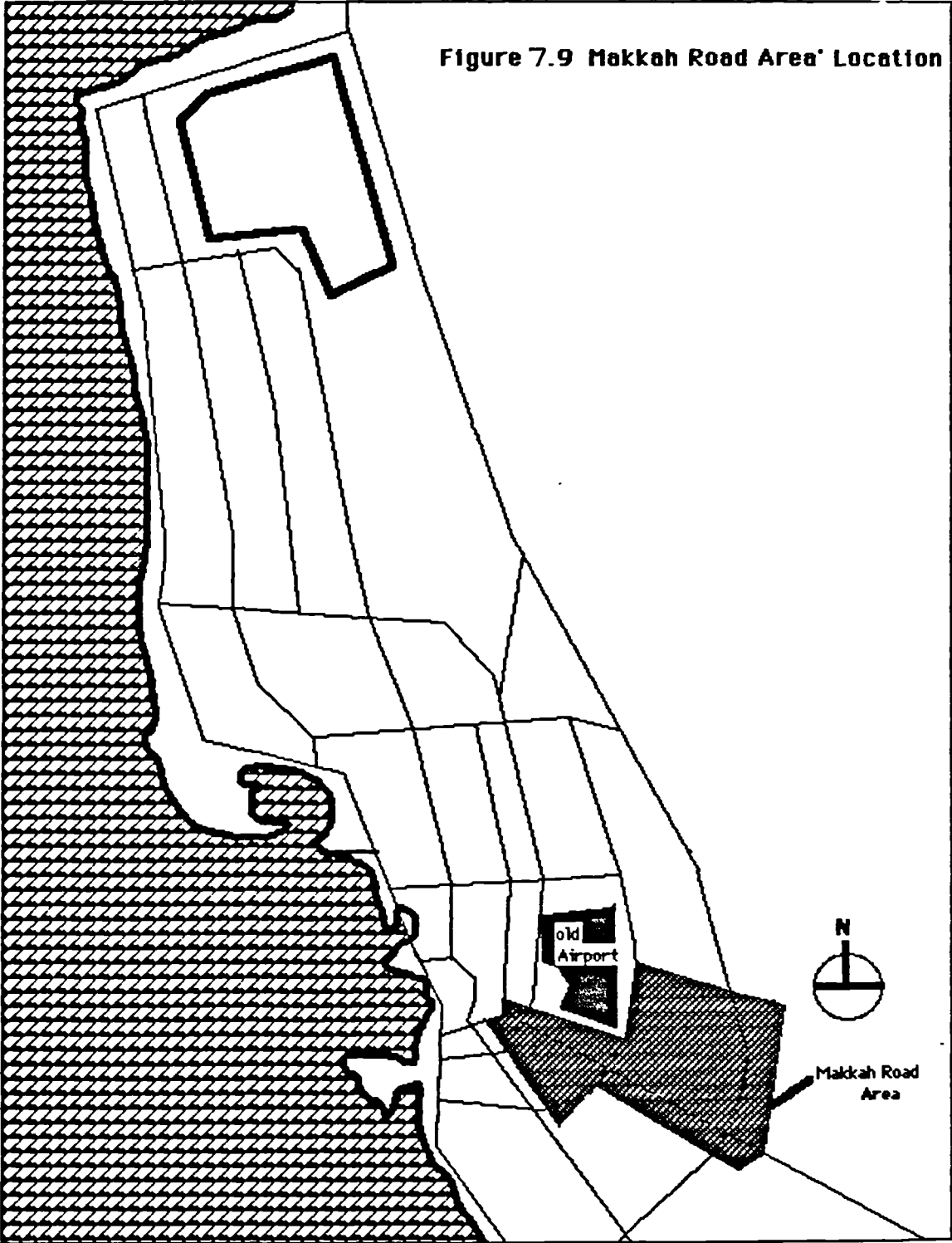
This section has three objectives: (1) to find out whether or not the existing conditions are consistent with the plan (MDP) objectives; (2) whether or not the plan succeeded in implementing its programmes;

and (3) the consistence or inconsistency of existing conditions with the environmental and cultural criteria, bearing in mind that the last objective could be seen as a part of objective one, since hypothetically this objective emphasizes the element of culture and environment.

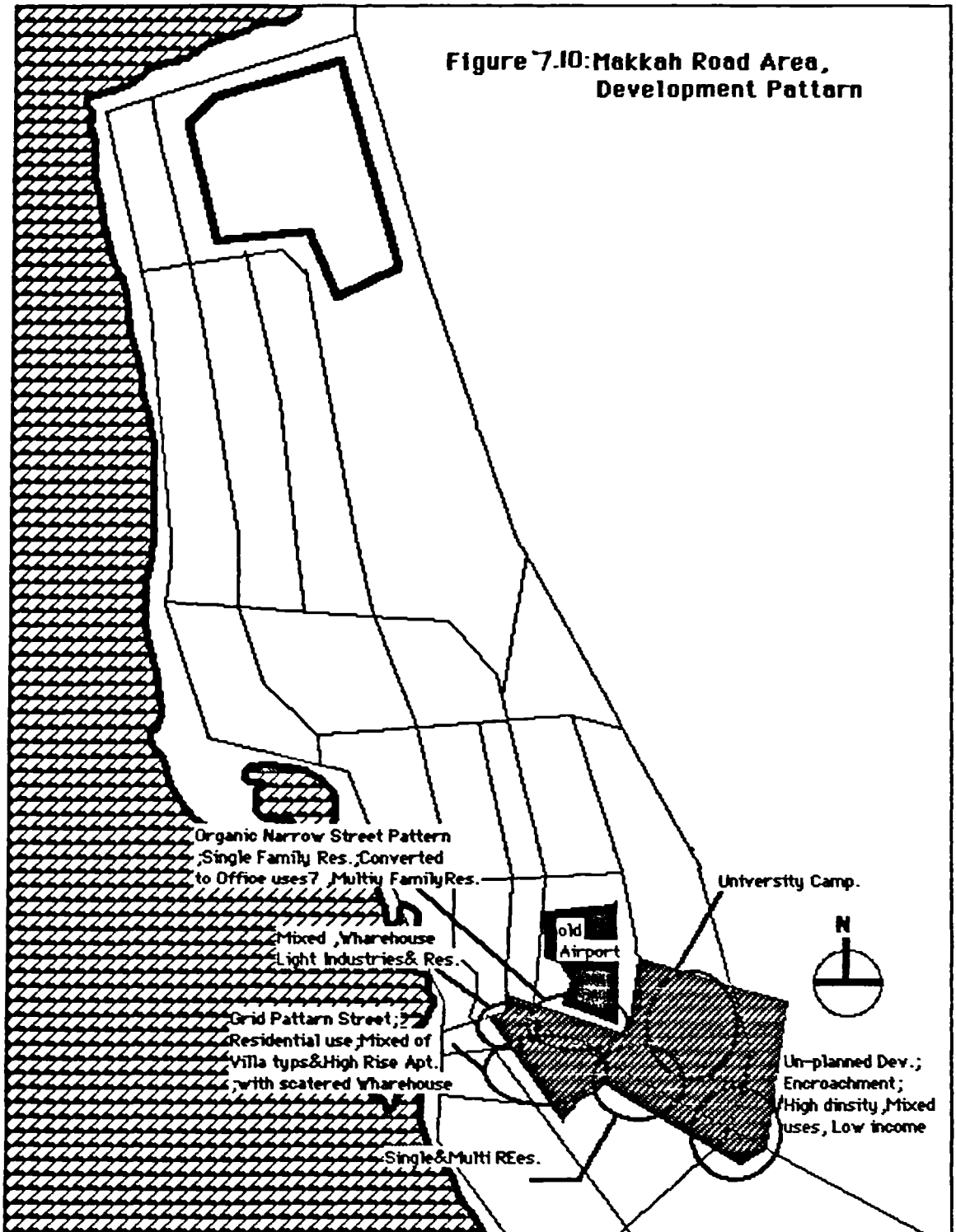
Makkah Road Area: This area can be divided into three parts from Kilo 1 to 3 and from 4 to 6 and from 6 to 7 (figure 7.9 ). The first part, (Kilo 1 to 3) was developed about a half a century ago, when the expansion of the city was exerting pressure and development was taking place across the city walls. It is characterized by a grid-iron street pattern with detached buildings occupying sizeable tracts of land, mixed with low rise villas, a part of this area, between the old airport and Makkah Road, is occupied by traditional developments with winding, narrow streets (figure 7.10). The second part, (Kilo 4 to 6) started developing in the early 1970's. Initially the Al-Thaqer model school was developed, followed by high income palaces and villas in a grid-iron street pattern; plot sizes ranged from 20x25 meters to 50x50, meters to 100x100 meters. Until the early 1970's the area was dominated by single family residential units with apartment buildings and retail activities on the ground floor along the two sides of Makkah Road. Until 1970, Jeddah municipality had little authority in the third part, Kilo 6 to 7, (considered at that time out of the Municipality jurisdiction). Gross residential density is generally high, with a concentration of low income groups occupying traditional houses built originally in the form of squatter developments without any planning considerations or building permits. However, this is a small part of the total area of Makkah road. Thus a detailed analysis of this kind of development can be seen when we deal with the south



Figure 7.9 Makkah Road Area' Location



**Figure 7.10: Makkah Road Area, Development Pattern**



zone of the city, since the overall characteristic of the site is similar to this area.

Since the 1960's the first and second part of the zone had been experiencing the same influences. As a result of the economic improvements in the late 1960's and the great economic boom in the early 1970's, the area experienced, along with the rest of the city a tremendous growth in population density.

For a detailed analysis of the Makkah Road area we chose the area on both sides of Makkah Road between Kilo 2 and 3. The criteria for selection were based on data availability; and previous surveys undertaken by consultants, for Action Area Plans covering detailed land use and building conditions.

The 1972 survey shows that the land use pattern was dominated by residential uses - 27.7% with 0.5% being commercial activities, located along the arterial roads. It was characterized by extensive villa (low density housing) developments. Traditional houses and shanties are few, concentrated on the northern and northwestern edge. Community facilities, with the exception of health facilities, are fairly extensive, concentrated in the centre of the area. Industrial and commercial establishments have concentrated along Makkah Road and southeast of the old airport street (Table 7.3).

The 1973 Master Plan zoned the area into high to medium income use, with commercial activities along Makkah Road; with building heights ranging from 2 to 5 stories (specific to the type of building). In general, the proposals conformed with the existing conditions.

**TABLE : 5.3**

**Makkah Road Area  
Existing Land Use (Perctog)**

Land Use	1972	1978	1980
Residintial	27.7	60	65
Commercial	0.5	2.1	2.6
Government	1.9	2.1	2.1
Community Fasil.	1.2	1.4	1.4
Open Space	—	1.0	1.0
Road&Parking	9.2	17.6	17.6
Vacant	59	15.6	9.3
Total	100	100	100

Source : Action Area Plan, Report No. 12, 1982

However, as we mentioned before, due to the oil related urbanization, the general density changed, with offices taking over residential apartments. Industrial and commercial activities brought extensive storage areas along the western side of Makkah Road. The increased population density was accommodated in high rise apartment buildings, scattered among the one and two storey villa blocks, violating the privacy of the already developed area. One factor leading to the increase in population in this part of the city was the fairly extensive provision of community facilities and public utilities available.

The 1978 survey of the area, as part of the general work for preparing the MDP, stated that : there is an extensive road system, as a result of the iron-grid system, particularly along the Makkah Road area, which encouraged through traffic to filter through residential areas. However, there are some traditional areas, developed in the early 1950's, where streets are generally winding and lack an organized hierarchy. The traditionally built up areas are now the scene of deterioration and neglect. Most of the older buildings are in poor condition and some structures are hazardous for human habitation. It is also worth mentioning that most of the original residents of this area have moved out to better areas leaving their houses, which have become located in a very high density area and as a result become hazardous due to the fast moving traffic. The houses, however, were later rented for office use. The survey also included that there is an increasing trend of vertical development along Makkah Road, which is resulting in traffic congestion and parking problems. However, there are open pockets available within the area which could be used for locating new public facilities.

The MDP proposed several objectives to provide an outline for future development of the area, (keeping in mind that the MDP did not propose any changes in land use):

- "to enable every household to have a decent, safe and sanitary dwelling consistent with indigenous family traditions.
- to improve the existing housing areas and individual properties wherever possible.
- to provide the balanced road network and limit the excessive street openings to Makkah Road.
- to provide *off-street parking facilities in densely built-up, traditional residential areas.*
- to improve the environmental quality of the area by limiting excessive floor space usage, by landscaping and the provision of open spaces.
- to discourage the uses which are injurious to the environmental quality of the area and relocate the existing non-conforming uses."<sup>20</sup>

The proposed Action Area Plan was approved in 1980 and was adopted for implementation.

Information and data of the existing conditions was collected from the SJI survey in 1982 in the area, and from personal interviews and observations in 1984. The analysis of the existing conditions showed the following:

- Land Use: Extensive incompatible land uses which should have been located on sites outside the area; despite the sixth objective for the area which recommended discouragement of uses which are

incompatible with the land use zone of the area. The use of existing residential structure for offices continued, as well as the construction of buildings which later were subject to unpermitted changes of use (e.g. warehouses instead of commercial activities.)

- Building Characteristics: As Table 7.4 shows, the general condition constitutes its deterioration to unsuitable uses and because the original high to middle income residents evacuated to a better location in the north part of the city. We mentioned before that the area during the sixties and until the early 1970's was dominated by high income residents and low density, with fairly good availability of services and facilities. These conditions attracted development (over-development) to the area as a quick solution to accommodate the increasing population. These activities took two forms; one by building high rise apartments in vacant plots, adjacent the built-up area by villas; the second form was by converting single family units to multi-family either by increasing the height of the building or by interior work (table 7.5).

- Community Facilities: From what we mentioned previously, it became clear that as a result of the high increases in the population density of the area, it became necessary to construct more community facilities. The DMP stated that in 1970 most of the existing facilities are not conveniently located. Table 7.6 shows the proposed facilities for the area.

However, the 1982 survey shows that only 40 percent of the proposed religious activities were implemented and only 70 percent of the educational facilities. Where none of the proposed open spaces,

**TABLE :5.4****Makkah Road Area  
Distribution Of Dwelling By External Condition  
(Persintag Of Total Dwelling)**

Year	Good	Fair	Poor	Total
1972	33	39	28	100
1978	41	40	19	100
1980	38	40	22	100

**TABLE : 5.5****Makkah Road Area  
Distribution Of Dwelling By Type  
(Persintag Of Total Dwelling)**

Year	Villa	Appart.	Tradition	Total
1972	29.1	12.3	58.6	100
1978	30.5	34.76	34.74	100
1980	24.6	42.71	32.69	100

Source : Action Area Plan Report No. 12, 1982



**TABLE : 5.6**

**Propose And Existing Community Facilities In Makkah Road Area**

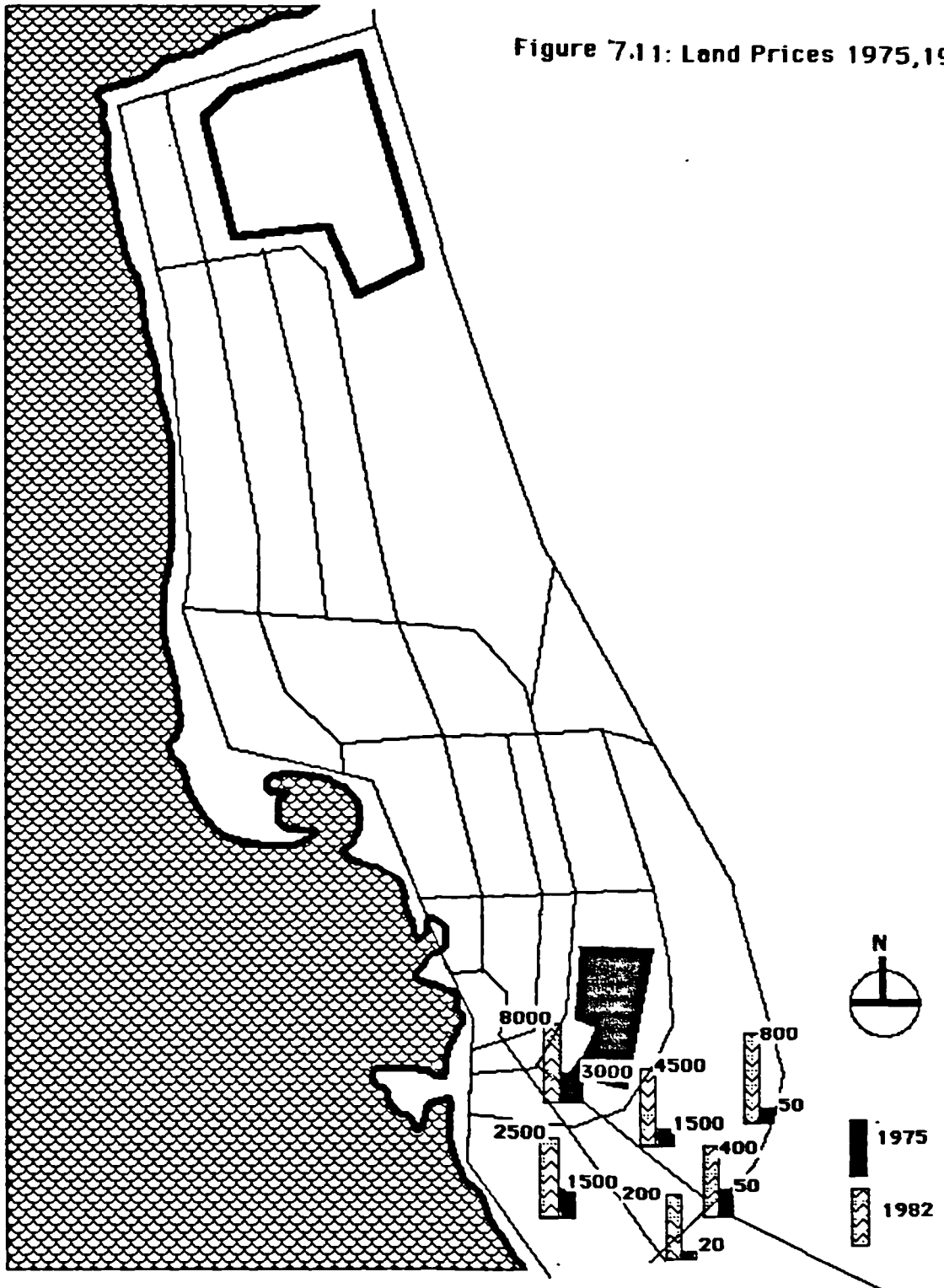
Facilities	Proposed	Implemented
Local Mosque	9	4
Friday Mosque	5	3
Elementary School	11	3
Intermediat School	6	5
Kindergarden	3	—
Open Spase	20,724 m.sq.	—
Health Centere	1	1
Library	1	—
Community Centre	1	—

community centers and libraries were implemented. The proposed development program for this area assumed that the community facilities would be provided on the existing vacant plots, by reserving them for future development. The programme, in 1979, also assumed certain land values for these facilities range from SR 700 to 1200 per square meter. While, the existing land value in the market in 1975 were ranging from SR 500 to 1000 and by 1982 they ranged from SR 1500 to 5000 (figure 7.11). Given the prices and that most of the vacant land in 1978 was developed by 1982 more than 70% of the recommended facilities failed to be implemented.

- Urban Form: As we mentioned before, topographically the sites are generally flat with grid-iron street patterns. The introduction of high rise buildings scattered throughout the area and the application of set-back regulations have worked together to jeopardise the privacy of the residents in low rise buildings (villas) . Privacy, is one of the main principles of the Saudi culture. Therefore, the residents in the villa type housing have resorted to their own methods of achieving privacy. In some cases by increasing the height of the garden wall to over three meters or using corrugated iron as screening.

Previously, we explained the mosque's function and its importance in Moslem life. As Xavier de Planhol had pointed out, "It is a city religion. Originally the city was simply the place of the great Friday Mosque. The mosque is central to the everyday lives of the inhabitants of Jeddah, it is for Moslems not only a place of prostration, but also the center of many social activities". Yet, overall the location of mosques tends to be poor either on a street

Figure 7.11: Land Prices 1975, 1982



corner or on the ground floor of a building or at one of the minor roads in a state of negligence.

In Summary, Makkah Road development began, mainly, as low density residential development in the late 1950's, and remained the same until the early part of the 1970's. During that period the area developed accordingly, in most parts, to grid-iron pattern with villa type residential buildings, with no sign of commercial activities, except along the two sides of Makkah Road. The availability of community facilities and other services promoted more of a high income and middle income residential development to the area. However, the area still had considerable amounts of vacant land. This vacant land, together with availability of community facilities and public utilities made the area one of the first to be affected by the unpredicted high growth of 1974 and onwards. Since 1974 the area witnessed a wave of apartment buildings, as well as a new activity, i.e converting single-family units to multi-family units. This process of over-urbanization took place until 1980 when the municipality succeeded in preventing the illegal conversion process, but the process of building apartment buildings within the areas that were already developed as single-family units, continued. Also, it failed to regulate the type of use according to the 1978 Action Plan of the area. All this produced higher densities than planned and consequently resulted in shortages in community facilities as well as utilities. Finally, the municipality failed to implement the proposed facilities in terms of numbers and locations.

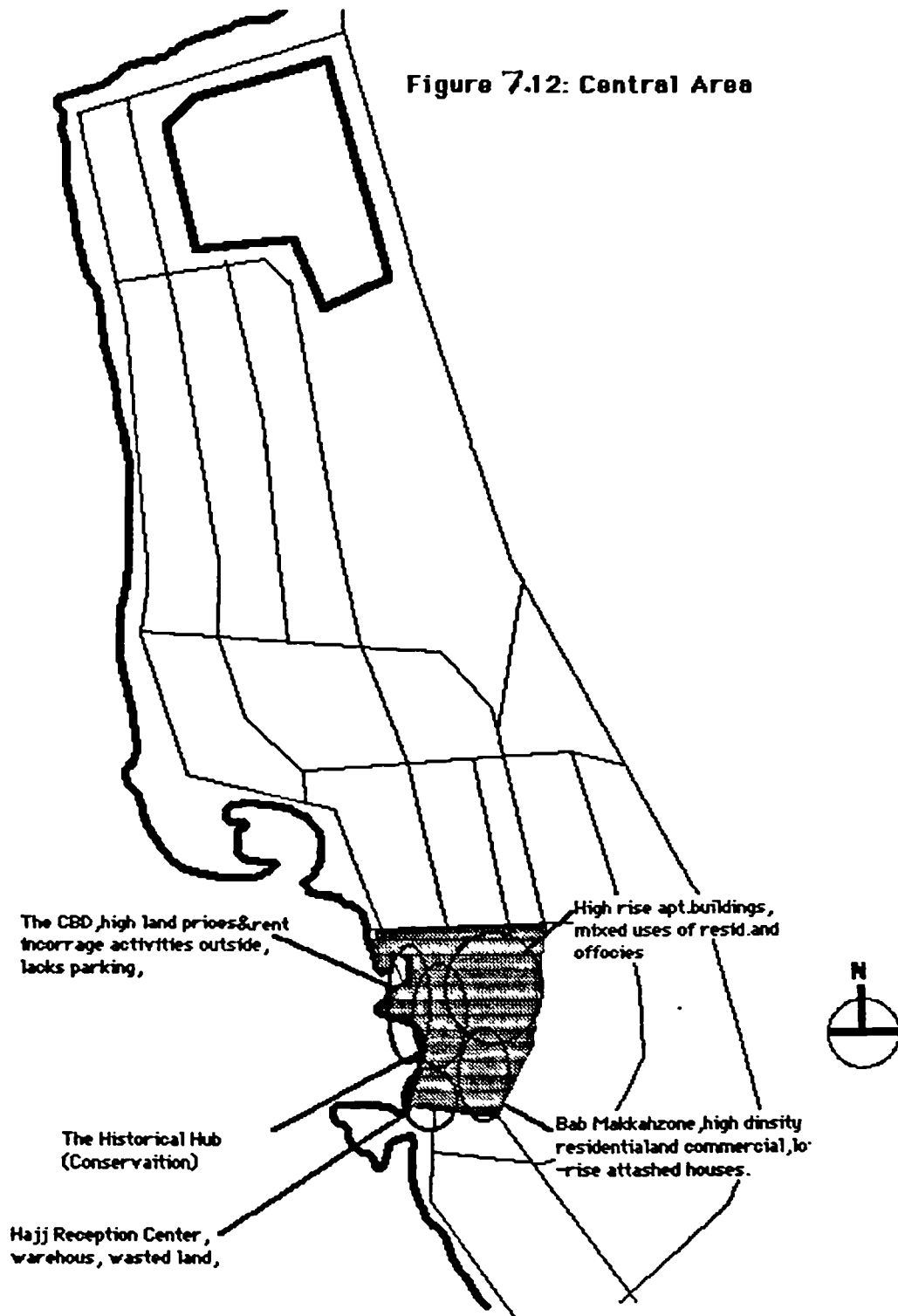
Central Area: This area consists of four identifiable "planning zones". Zone one contained the central business district, shops on the ground

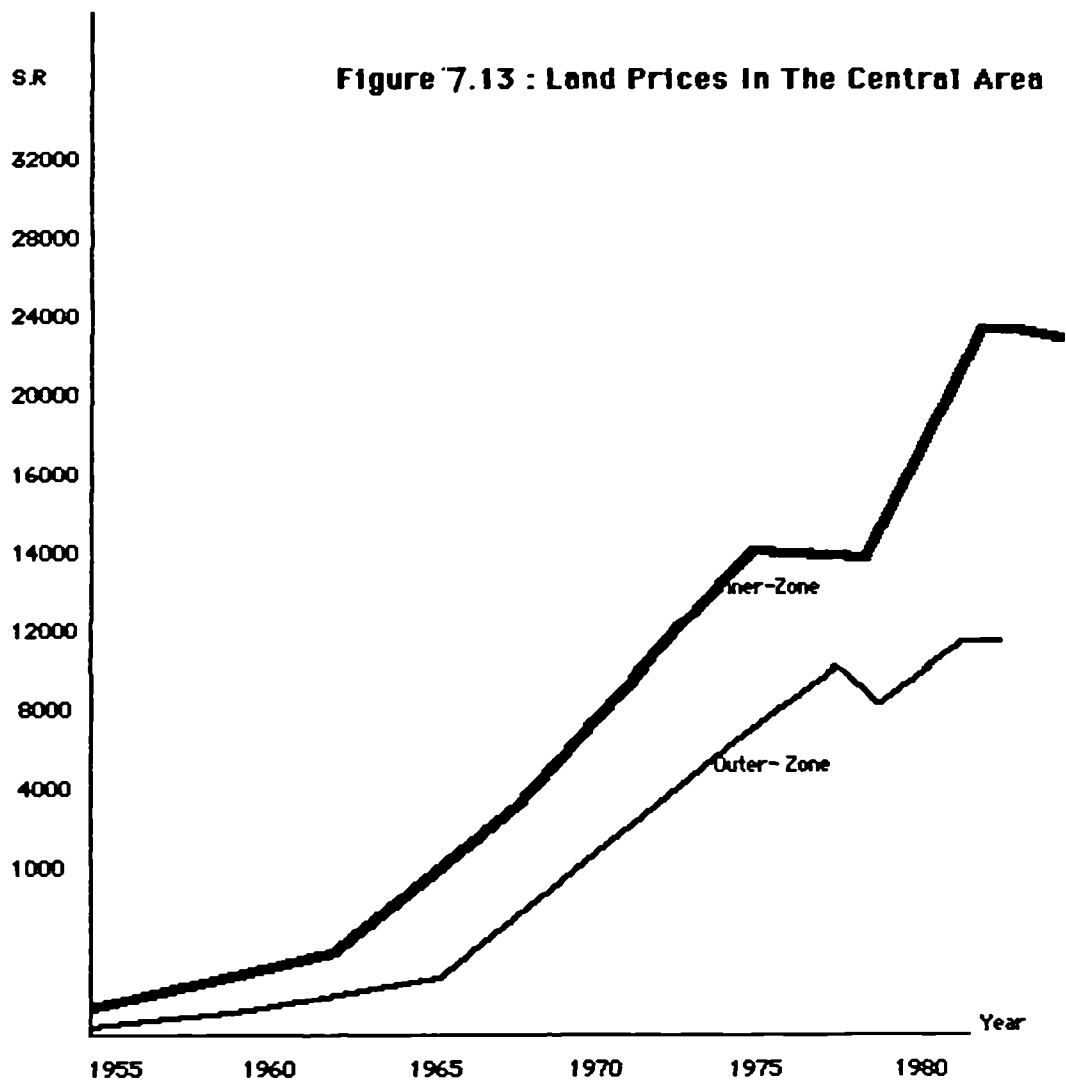
with offices and residential use above, parking facilities, some old traditional housing, mixed uses toward the water front (car parking, fish market, port office, and governmental departments). Zone two, contained the residential uses and a concentration of commercial activities. Zone three, Bab Makkah, a high density residential and commercial area with ground-floor shops interspersed with low-rise housing. Zone four, the water front, contained the Hajj Reception Center, warehouses, low-density to the south and wasted land (figure 7.12).

This area contained the historical hub of Jeddah. For centuries this area functioned as the commercial and business center (CBD) for the entire city. As we see in Figure 7.13, the area has highly mixed uses. Until the mid 1960's the area was dominated by traditional houses (about 70% of the total area) with shops on the ground floor sometimes. The rest of the land was utilized by the suq and bazaars and other commercial uses. Since then until 1979, the area witnessed an increase in commercial uses and high rise apartment buildings, especially after the construction of King Faisal Street in 1965.<sup>21</sup>

In 1973 the Master Plan started a successful conservation programme which led to strict development controls imposed on about 30 buildings of exceptional merit. Also, a comprehensive redevelopment programme to preserve the characteristics of the city. The Municipality was extremely successful in its efforts to preserve the historical core. The water front preservation and the construction of the "corniche", a comprehensive development, containing high speed road and wide pedestrian walk ways on both sides, with various kinds of recreational activities, shade and other landscape utilities. Some

**Figure 7.12: Central Area**





Source : (a) Real Estate Interviews, Field survey in 1983  
 (b) Jeddah Master Plan, 1973  
 (c) Jeddah Master Directive Plane, 1978

areas sit directly on the water front, statues have been erected along the way and man-made bridges all combine to give the site a beautiful image and have made out of the area a national tourist attraction.

As a result of the 1974 oil price increase and the generally high rate of urbanization. The demand for offices and retail activities generated a great demand on existing commercial and residential spaces in the CBD. However, the high rate of growth generated during 1974 to 1980 was much faster than the construction of streets, building, and car parking areas could accommodate. Thus the phenomenal growth has led to a shifting of most of the retail business and office activities out of the CBD to the suburbs (see section The Impact of Urbanization on Land-Use ).

Generally, land-use infraction might be expected in an older, more stable area of the city where land-use patterns are long established, the number of land-use infraction are fewer than in the outlying, more recently established areas. The land-use proposals recommended retaining existing uses and movement patterns. The area generally reflects the MP and MDP recommendation.

The collector road along the sea coast has been completed as has King Faisal Street . No purpose built parking exists yet. All parking at peak periods, including parking in large open spaces, is handled in a haphazard manner. New offices have not provided space for meeting parking needs and will have to rely on parking supplied by others in the future. The Plan proposal anticipated providing public parking only for commercial use (shops)<sup>22</sup>



A major pedestrian facility, the King Faisal Street underpass, has been completed. King Abdul Aziz Street has not yet been closed to vehicular traffic. Pedestrian arcades have been constructed along King Faisal Street where new office and residential buildings have been built. They have a forlorn appearance as they incorporate no major pedestrian route and are uncoordinated from building to building. Improvements have been made along pedestrian routes long established but no new pedestrian route extensions have been developed. The main Suq areas have been covered with plastic vaults and domes. Offices have been built in the zone to the south of central business district as intended, and new hotels and apartments are being constructed to the north.

**Community Facilities:** The MDP recommended a total 29.94 hectares for schools (5%), 9.17 hectares local centers and 2.79 hectares mosques and 42.47 hectares open spaces. The actual total implemented area for community facilities was about 30% of what had been recommended; with higher proportions in open spaces (about 89%) have not been implemented. The major factor, as we will see later, is land value (Figure 7.14).

In summary:

- The rate of land-use change in the area is slower than elsewhere in Jeddah.
- Land-use controls have been respected, but parking regulations have not.
- Utility servicing is well advanced.
- A great shortage in community facilities.
- Urban forms are, relatively, in accordance with cultural and

social habits (the suq, bazaar, etc...).

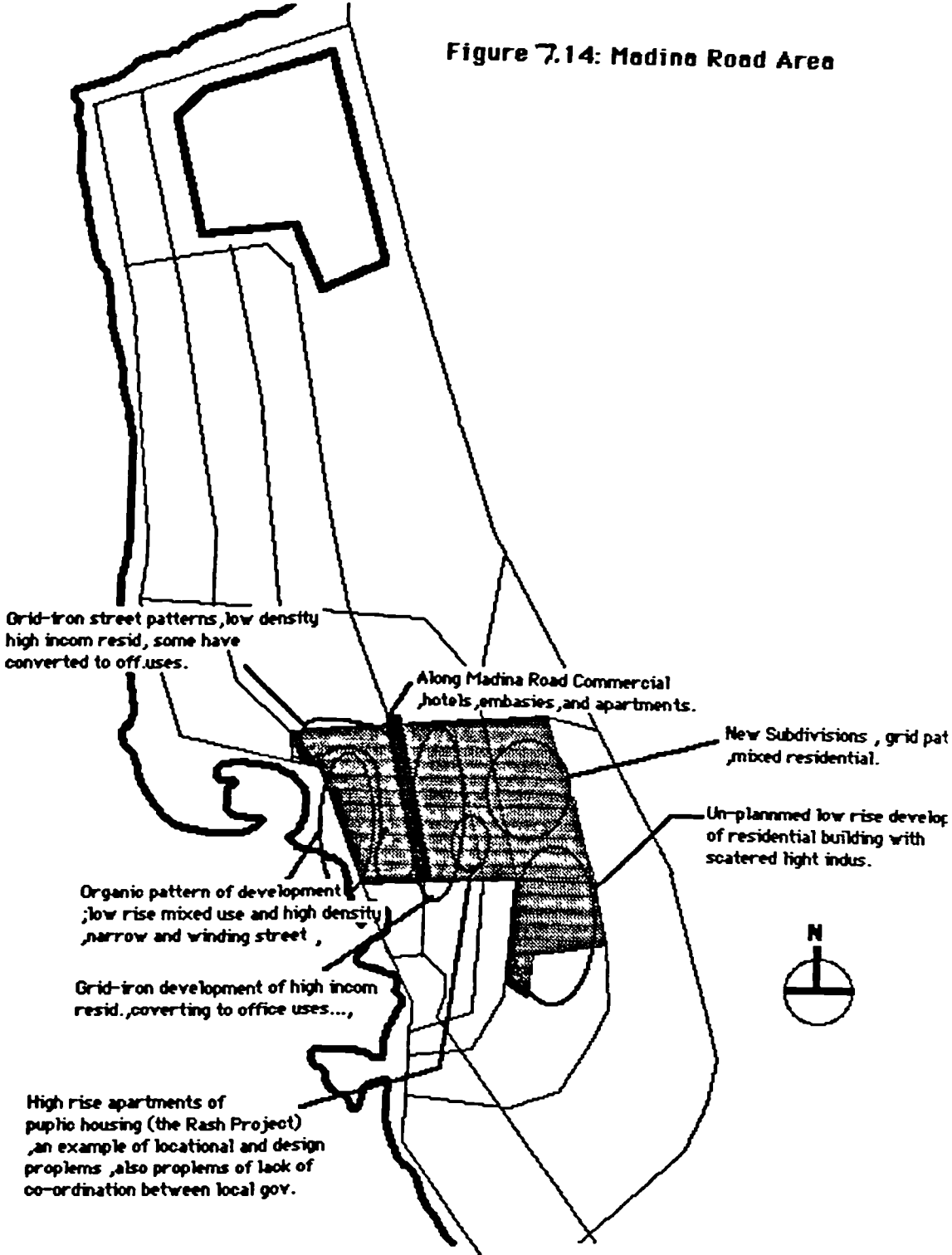
Medina Road Area: Three identifiable zones in the Medina Road area were identified as: one to the west of Medina Road, one to the east and one which was originally a resettlement area further to the east (figure 7.15).

The first zone, to the west, is one of the oldest developed parts in the Medina Road area. This section was initially developed as an independent fishing village which had merged in the metropolitan area as a result of urban conglomeration, the western part of this zone is characterized by a low rise and lightly-knitted organic pattern of development. The bulk of recent high-rise development along Medina Road and Hail Street has altered the urban form of the area.

The consultant in 1978 stated that " the available physical fabric in Al-Ruwais section does not correspond to the urban requirement. Narrow and winding streets, with dilapidated housing conditions, represent traditional development. Heavy and through traffic on Hail Road has also been a cause of major hazards in the area. Traffic congestion on this road causes infiltration of vehicles into residential streets".<sup>23</sup>

The eastern part of this area developed into residential areas following grid-iron street patterns and remained until the mid 1970's as a low-density high income residential area. The Medina Road strip is predominantly commercial with commercial and public affairs, hotels, embassies and apartment buildings.

Figure 7.14: Madina Road Area



The area since 1975, experienced the construction of increasing numbers of high rise residential buildings which later were converted to office use. This created cultural problems. The consultant in Report No. 5 mentioned that "the street network which obstructs smooth circulation, together with the use of residential buildings for commercial and office uses has caused undue pressure on the available parking facilities and circulation system. The absence of any hierarchy within the road network is another short coming".<sup>24</sup> Both sides of the Medina Road are characterized by a great lack of community facilities, open spaces and mosques.

The SJI proposed in 1978 offered several objectives:

- To extend the opportunity to every household to have a decent, safe and sanitary dwelling consistent with indigenous family traditions.
- To improve the existing housing areas and individual properties.
- To develop a hierarchical form of road structure with improved accessibility and efficient circulation.
- To provide a balanced road network and to limit the access to Medina Road to facilitate the free movement of through traffic.
- To develop storage facilities for vehicles by on-street and off-street parking.
- To reduce the detrimental effects of hazardous traffic passing through the area.
- To improve the environmental quality of the area by limiting excessive floor space usage, by landscaping

- and the provision of open spaces.
- To achieve the above objectives with minimal social upheaval and minimal burden on the exchequer.
  - To develop a system of pedestrian accessways linking principal land uses in the area i.e. mosques, school, district/local centers.<sup>25</sup>

These objectives resulted in various changes in land-use; reducing the residential use by 5.9%, increasing the commercial uses by 4.5%, industrial areas to be elevated and community facilities to be increased by 5.4%. The increase in community facilities based on the existing vacant land, 14% of the total area.

The field survey and the SJI Report No. 8 in 1982 shows that the recommended reduction in the residential area has taken place as a result of the pressure on the land for competitive uses. The commercial use is the major invader which is predominant on the two sides of Medina Road. However, the increase in office space resulted from converting existing residential buildings into office uses besides the new office development.<sup>26</sup>

The proposed community facilities have not been implemented completely. Educational facilities have been provided, in some cases by renting residential buildings and converting them to schools. Where in other cases the location is not according to standard. Ten local mosques have been proposed, only seven of them actually implemented; three Friday mosques were recommended, only one was implemented. In general, open spaces, other facilities e.g. police/fire stations, have not been fully implemented (table 7.7 ).

**TABLE :5.7****Propose And Implemented Community Facilities,1978**

Facility	Propose	Implemented
Local Mosque	10	7
Friday Mosque	3	1
elementary School	4	1
Intermediat School	4	2
Health Center	2	1
Open Space	18,000 m.sq.	—
Other	5	—

**TABLE :5.8**  
**Existing And Propose Land Uses (in percenteg)**

Land Use	Propose Land Use In 1978	Existing Condition In 1972	Existing Condition In 1978	Existing Cndition In 1980
Residintion	59.0	59.2	68.3	58.0
Cmmercial (mixed) Com.&Res.	2.9	0.2	1.9	7.5
Government	—	2.0	0.6	0.1
Community Fosilities	6.6	4.0	5.1	5.7
Open Space	3.7	2.5	2.5	2.5
Road&Paking	27.1	13.0	17	25.6
Indastrial	0.7	2.0	0.9	0.4
Vacant	—	17.1	3.7	2.2
Total	100	100	100	100

Source : Action Area Plan, Report No.12, 1982

For correcting roads and parking problems the proposal recommended land acquisition and restrictive controls on "set-back" regulation. This policies failed to be implemented.

The remaining parts of the Medina Road Area, in general, to the east of Medina Road have distigushing characteristics. The area between Medina Road and Khalid Ibn Walid is the first area, in Jeddah, laid out in a grid-iron pattern. In 1962 the area had been subdivided, establishing the pattern of plots and roads. Two percent of the land was committed to apartments along Medina Road; with the rest developed as high income housing in plots of 50x50 meters. Until 1973 no district centers fell within the action area; and school facilities as well as open spaces where inadequate. Along with other parts of the city, this area was exposed to a lot of changes: Apartment buildings have been built on the vacant land in the area, causing many of the high income villa residents to move out. This activity resulted from the zoning of the area for 2 to 6 storey buildings and not specifying their permitted uses. Part of these buildings have been taken for office use, but without the necessary parking facilities. This extensive floor area coverage for commercial and office uses have caused undue pressure on the available parking facilities and circulation system. The absence of any hierarchy within the road network and excessive amount of roadspace obstructs smooth circulation, rather than easing out the traffic problem.

In summary:

- The encroachment of apartments, on land designated for villas, affected planned population densities.

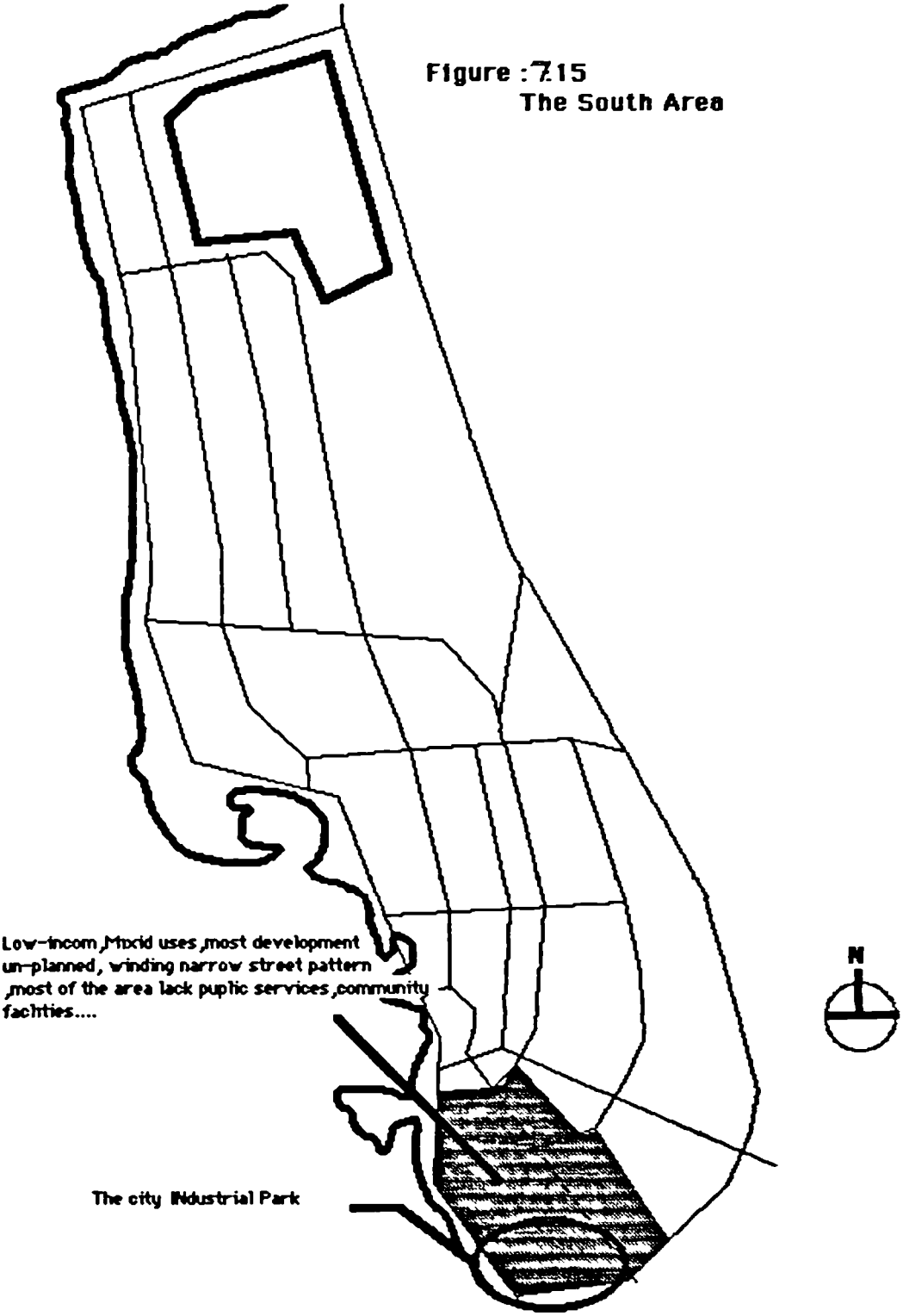


- Significant land-use infractions have occurred especially in the conversion of residences into offices.
- Road hierarchies have not been clearly established.
- The particularly difficult problem of how to relate roadways to buildings and the parking needs they generate has been largely ignored in that insufficient land has been set aside (and totally overlooked from the aesthetic point of view).
- The mixing of land-uses responds to pressures other than those created by the action area plans.
- There is a complete ignorance concerning cultural issues e.g. privacy, mosques, locations...

The Southern Area: This area includes four planning zones according to the DMP (Al-Sabeal, Gholeal, Al-Mena, and the industrial estate). The area is characterized by low income squatters and large numbers of immigrant workers. This area is the most deprived and dilapidated area in Jeddah, with the least amount of public attention (figure 7.16).

The 1973 Master Plan ignored the area in terms of comprehensive planning (Action Area Plan) and the only concern was the third ring road which was planned to pass by the middle of the Al-Sabil quarter as well as the Mena-Makkah highway connection. These two major constructions required a large amount of land to be acquired as well as rehousing for those who were affected by the projects. Besides this, the area did not attract any actual public improvements until 1978.

**Figure : 7.15**  
**The South Area**



One of the tasks of the Master Directive Plan is to prepare detailed plans, and implement programmes and projects for specific areas within the framework of the Execution Plans. For this purpose the DMP established criteria for selection of specific areas; such as:

- lack of community facilities,
- lack of sewer and water utilities,
- distance from central area,
- congestion and housing conditions.

Thus, the area had been subject to intense planning activity. By 1980 the consultant prepared an Action Area Plan for some parts of the area.

We selected one of these areas to look at in detail. The area located between kilometer 6 and 7 of Makkah Rod, is one of the areas that have mushroomed as a result of development pressure experienced recently. The low rise development with small plot sizes and narrow, winding streets, characterises this area. The extensive traditional housing forms a dormitory quarter for the surrounding industrial areas. Building conditions are generally poor, though most of the structures are recently built. Gross residential density is generally high with a concentration of the low income group.

The MDP stated that, the area is probably one of the most deprived areas. In this area the residents suffer inconvenience, health hazards and discomfort due to both high density and a corresponding lack of facilities.<sup>27</sup> The community facilities, like schools, clinics and open spaces, etc., either do not exist or are inadequate. Public utilities have yet to be extended to serve individual households. The area also lacks accessibility due to the narrowness of existing streets, which

causes congestion. The availability of vacant land in 1978 provided the opportunity to propose new facilities and to improve the alignment or widen streets.

The above conditions led to the following major objectives.

- to enable every household to have a decent, safe and sanitary dwelling consistent with indigenous family traditions.
- to improve where practicable existing housing areas and individual properties.
- to develop a hierarchical form of road structure with improved accessibility and efficient circulation.
- to develop storage facilities for the vehicles while not in movement i.e. on street and off street parking.
- to improve the environmental quality of the area by landscaping and provision of open spaces.<sup>28</sup>

Table 7.8 shows 1980 conditions and proposed land-uses. It shows reductions in residential land by over 9 hectares, due to the provision of community facilities and widening of roads and streets. The plan proposed several mosques and schools as well as open spaces and other facilities.

The development concept was based on two main principles: to implement the objectives without distortion of the existing structure; and minimize social upheaval. The policies outlined hereafter, adopted to implementing the prepared redevelopment programme.<sup>29</sup>

To develop a hierarchical form of road structure with improved accessibility and effective circulation, the existing road system has to be upgraded and improved. This process involves widening of some streets which would inevitably disturb some properties. The widening of streets, through the established practice of the Municipality asking the individual developers when applying for planning permission to provide setback for widening the streets, is considered to be a time consuming method for widening and establishing the basic circulation system. The acquisition of the affected properties by the Municipality is considered the only available alternative to widen these streets.

Most of the recommended programmes, failed at least partially to be implemented and in some cases failed totally. The MDP mentioned the great amount of dilapidated and/or below minimal standard housing. Yet, the Action Area Plan did not propose any housing policies beyond the general statement that "sixty percent of the housing stock in the area were below the permissible standards". It is worth mentioning that the housing programmes are the responsibility of the Ministry of Housing and Public Works.

In summary, the area is suffering from poor school facilities, mostly in terms of location and size standards. Other community facilities have experienced the same shortage, especially open spaces. The availability of utilities are still much behind the rest of the city. The only recognized success is in road pavements and road widening.

The Northern Area: The 1973 Master Plan is basically a land-use plan, establishing the arrangement of uses throughout the city. These land-

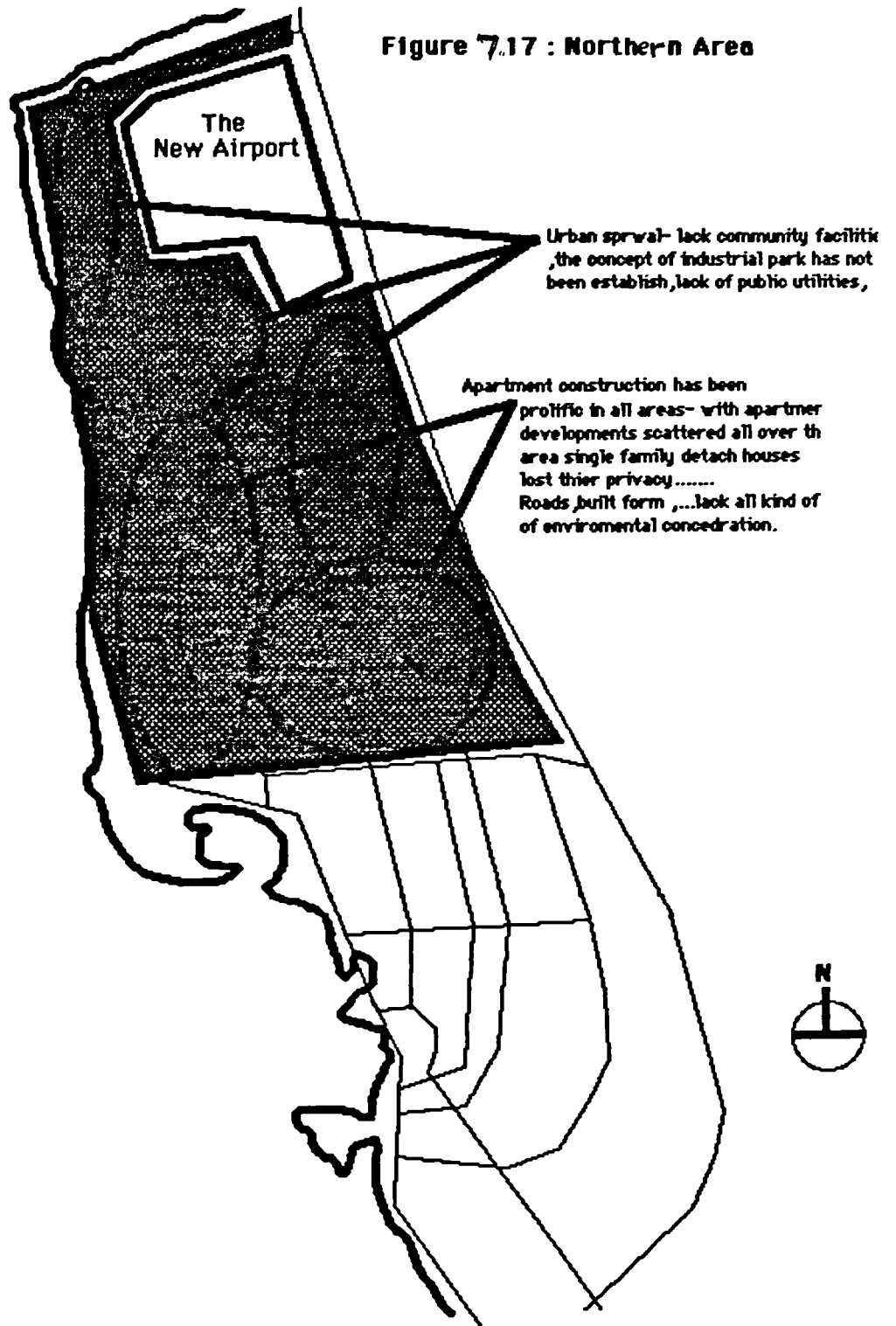
use proposals were arrived at, on the basis of projected population levels within the metropolitan area. Thus, the population and its distribution, constitutes a key element in the Plan, and its components: housing, jobs, commercial and community facilities, utilities, etc., are dependant on it.

With regard to distribution, the 1973 plan initially tested three objectives. Option 1, envisaged the low population level (800,000 by 1981) being located around the city with the old airport remaining operational until 1991. Option 2, assumed a similar 1991 population, but with the new airport operational and with a significant proportion of the high estimate living near the airport. Option 3, was based on the high estimate of 1,650,000. It constituted an extension of Option 2, the new airport and a substantial new northern residential area, forming what was termed as "Northern Jeddah" and accommodating 460,000 (approximately 30% of the total population).

When the decision to build the new northern airport was made, RMJM was then able to select a preferred option. Thus, Option 2, was taken as the basis on which the Master Plan was developed. In essence, RMJM postulated a future Jeddah in which the main features were consolidated within the confines of the northern and southern storm-water ditches, and the development of a satellite community towards the north, near the new airport (figure 7.17).

Until 1972, development in Northern Jeddah was confined to squatter development, of low income housing mixed with car workshops, in the southeast of the area (Bani Malik), and several high income private chalets to the west. Also, along Medina Road, some industrial plants

**Figure 7.17 : Northern Area**



(Pepsi-Cola, several factories, car assemblies). The main reason that the northern part was allocated for expansion, is that land in that area was publicly owned and vacant, as well as being relatively close to the city centre, from what was available at Makkah Road area.

The area contained four planning zones: the new airport, Kubbat Ashara, Bani Malik, and Sharm Obhour.

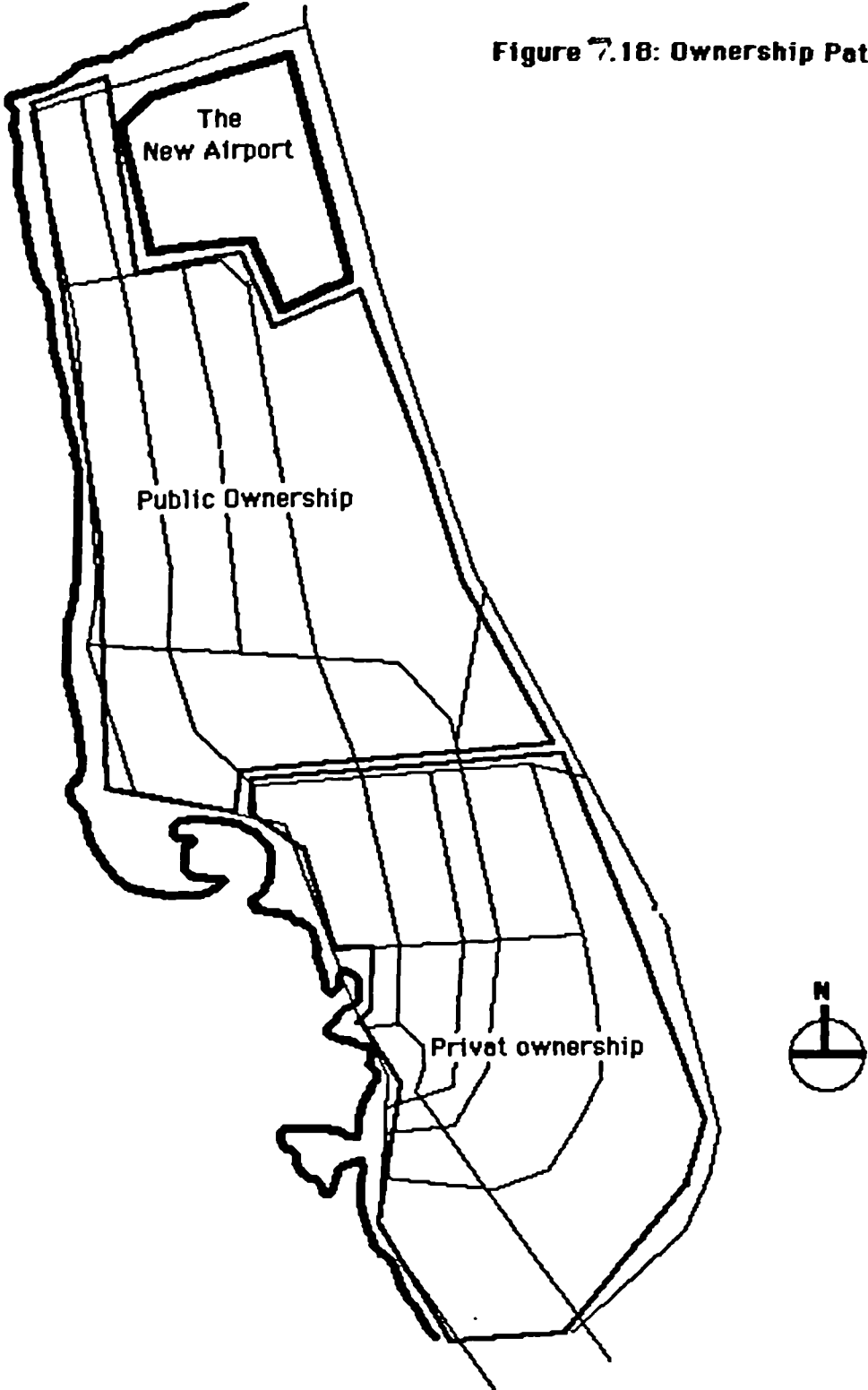
Most of the vacant land in 1971 was publicly owned and based on this fact Northern Jeddah was seen as the most feasible direction for growth (figure 7.18 ). In 1974, about a 3 km square was subdivided into a 50x50 and a 25x25 meter plots and granted for individual use (see land tenure), as well as the northern part of Bani Malik, which has been privately owned and was granted subdivision approval. Some how the rest of the area was granted to individuals in large estates (up to 1 sq. mile) (see land tenure). This process has put an end to one of the main elements, supporting the northern expansion strategy, as we will see later.

In 1975, the part east of Medina Road and south to the storm-water ditch, was the subject of action plan activities. The following is a description and analysis of this area, based on the evaluation of SJI, as part of the DMP work in 1978.

The Jeddah North action area plan contained 640 hectares and was planned to provide housing for 46,000 persons and jobs for about 7,000 persons. The site was sharply delineated - to the north by the storm-water ditch and to the east by Medina Road. Twenty percent of the land was developed as housing, and 75 percent was vacant; 70% of



**Figure 7.18: Ownership Pattern**



the action area, were committed subdivisions and road networks were connected. The exception was in the eastern section.

The primary concern in the action area plans was "to incorporate...principles of layout and form which will provide the most climatically comfortable environment". The proposal focused first on residential development, and then on local road networks, footpaths and auxiliary facilities.<sup>30</sup>

By 1983 40% of the Action Area had been developed. The major primary road network is completed, with the exception of the road along the southern boundary, all district collector roads have been built with relation to local or district centres. No industry has been established in the area designated as an industrial park, to the south of the storm-water ditch. A hospital is under construction near, but not on the designated site, in the northwest part of the area. Ten of the 24 schools have been constructed. Construction of new mosques is limited; 30 was the figure planned; seven is the number that actually exists.

More land was allocated to the development of apartments, than in the earlier action areas - about 16% percent of the gross land area. Nearly twice that amount is already developed as apartments. Half of the net developed residential land area is in apartments, which indicates that, excluding informal, ad hoc developments far more than half the dwelling units existing in the area are apartments. Twenty percent of the dwelling units were designated as apartments in the planning proposal. The 35% plot coverage requirement is seldom respected; parking at one car per apartment is generally not provided;

but front, side and rear yard requirements are invariably respected. Two to three storeys is the typical height for apartments although some five to seven storey apartment buildings are under construction.

The net residential density range proposed 16 to 500 persons per hectare - indicating that a broad variety of housing types would be constructed. Larger apartment buildings were to be constructed near major open spaces with good access off collector roads. The proposed consolidation of apartments would act to identify neighborhood centres and provide animation to the area through the variation in building heights. The present pattern of apartment development is scattered, unconsolidated, and not identified with local centers (see figure 7.19 ).

Twenty-five percent of the industrial park planned south of the storm-water ditch has been acquired by a hospital, apartments, informal ad hoc developments and mixed commercial use along the northern east-west road. Isolated by a major storm-water ditch, the land-use encroachments are less appropriate than the planned industrial use. There is some scattered industry throughout the area, generally on land designated residential.

Piped water is generally available in the southwest section of the action area and in the Bani Malek village; elsewhere, water is supplied by tanker. Where new development has occurred electricity is available; additional work is required as work proceeds in both the ad hoc, informally developing areas and in the substantially developed areas. Sewerage facilities are not to be provided until 1985; sewage disposal is by cesspool. Storm drains have not been constructed but

**The conflict of use-Apartment ,Villa,Offices...**



plans exist for future work. Undeveloped sites are used for refuse disposal. The telephone is available only in the southwest section and Bani Malek. Street lighting exists on major streets only.

In summary: In general, as a result of transforming land from public ownership to private ownership, the local authority lost the opportunity to develop the area, in regards to the plan, especially since the existing policies do not contain instruments for phasing growth. Specifically:

- Major roads are established in close approximation to the Plan; local roads and pedestrian networks are undeveloped .
- School construction has proceeded in advance in the southern area, where in the north and west (low density urban sprawl characterizes the area) has not yet, been provided.
- Apartment construction has been prolific in all areas, with no attempt having been made at consolidation around local centers or open spaces.
- Nothing has been built with respect to local or district centers.
- The concept of an industrial park, to the north has not been established.
- Additional work is required to provide complete public utilities.
- With apartment developments scattered all over the area, and the regulation of set-backs and building lines, single family detached houses lost their privacy,

- The absence of district and local centres, result in locational problems for the existing mosques, as well as for the construction of newer ones.
- As a result of land speculation, about 60% of the total area remains undeveloped, seeking higher prices, the strategy for the northern area to absorb most of the land demand, has failed.
- Road patterns and building form does not conform with environmental conditions .

The area west of Medina Road as well as the northern area east and west of the road, experienced the worst of urban sprawl. The area north of Al-Hambara palace, contained more than 70% vacant land, where the area north of the ditch contained more than 85% vacant land. This uncontrolled growth, could not be provided with the necessary facilities due to the extremely low density . Most of the area in this part of the city was, originally, obtained by grants. To understand in more detail the nature and the pattern of development and how it has been developed, we select an area north of the storm-water ditch and west of Medina Road. The area covers approximately one mile square. Most of the data and information about this area was obtained through a personal field survey carried out in 1983. The survey attempted to obtain data and information about the area in terms of :

- Land value evolution.
- Zoning regulation and Building types.
- Socio-economic data.
- Land development process.

**Table 5.9 : Land Use in Madina**

Type Of Use	Area in Hectares	%
Residential	1105	30
Residential & Commercial	181	5
Commercial	7	0.5
Industrial	14	1
Agricultural	600	16
Vacant	690	18.5
Streets	1,053	29
Total	3,650	100

Source : GACDAR Technical Report No. 8

The area subdivisions were approved in 1969 and 1971, and the whole area put on the market by 1971. How the original owners of subdivisions obtained the land, could not be ascertained, but the land became available in the market originally (before being sold and subdivided and then obtained a subdivision approval) by a grant from the King to a dignitary citizen. The following is a summary of the conditions that existed in 1983: The area was well served by paved grid pattern streets and side parking, with no hazardous traffic congestion. All buildings are in new and in good condition, 93% of the built-up areas are residential and the rest are a mixture of commercial and community facilities.

As we mentioned before, Northern Jeddah was looked at as the area which would accommodate Jeddah's expansion, (which has resulted from opening up the existing city). The Mayor of Jeddah in an interview in 1983 stated that "in 1974 when we were looking for a strategy to expand and accommodate the affected residents and commercial activities from opening up the city for wider roads and other facilities; the only alternative was to expand to the north, because the south and the east were already developed and it will take time to redevelop and up-grade it to accommodate the anticipated need. Thus, we looked at the north for Newer Jeddah"<sup>31</sup>. Hence by 1974 most of the eastern area was subdivided by the municipality into 50x50 and 25x25 meter plots and granted to Saudis who applied for a grant to build his/her house (see Section 6.2.2 ). The area to the west of Medina Road and the area to the east, north of the storm-water ditch was granted in large tracts to dignitary's and princesses (mile sections and over) and were later sold to investors.



The survey area is one of the areas which followed the above process. The survey showed that 80% of the built-up area was sold 2 times before being developed, 14% was sold three times and 6% was sold four and five times. Those transactions took place over a period of ten years which indicated the scale of speculation in the land market. The most noticeable element is the price of the plots, which started around SR 13,000 in 1972 and reached SR 400,000 in 1983. A detailed analysis of land market is in Section 6.5 . What we are concerned with here is the physical conditions of the area.

Though, the area has been scheduled for the third phase in the MP, which was designed to start in 1980, development started in 1975. This meant that all development that took place before 1980 would not be provided with services and utilities until 1980.

Thirty-five percent stated that they need their car to reach the nearest mosque and 82% needed transportation to reach a Friday mosque; while 13% stated that they didn't even have a Friday mosque near. Schools in the area are out of the walking distance and low in number. The area has not been served by sewer lines or water, until today. The total of open space in the area is 50,000 square meters, divided into four different sites, and is much below the standard.

The MDP mentioned the importance of cultural compatibility in physical patterns, yet all the newer areas lack such elements. According to the survey, 84% of the single family detached houses, lack the basic element of privacy. Also, the scattered 3 to 4 storey apartment buildings resulted in overlooking, despite the design

concept, which intended to create a major open space surrounded by multi-storey buildings in which the neighborhood centre and local stores should be located.

While the municipality has been very successful in preventing industrial activities in the new area as well as implementing the hierarchical distribution of retail areas, it failed in stopping the practice of converting residential houses into office uses. Seventeen percent of the residential units were converted into offices and about 1.5% of villas were converted into showrooms and warehouses.

In summary, the existing conditions of the area are as follows:

- The areas development did not follow the phasing schedule of the MDP.
- Road and development patterns lack any environmental consideration.
- Though the MDP recommended a neighbourhood structure and a hierarchy, all development in the area fails to meet the recommendations.
- Most of the area is still vacant despite the great demand for land (80% vacant).
- The area lacks cultural compatibility (privacy, mosques).
- Lack of community facilities.
- Lack of environmental consideration, in general.

### 7.2.7 Evaluation and Conclusion

From the previous analysis and by testing the finding against the established criteria of Chapter Four, I have concluded the following.

The existing pattern failed to represent the plans (MDP) objectives. The failure can be observed through: (1) the failure in implementing community facilities and public utilities; (2) developments are taking place outside the phasing boundaries; (3) failure in segregating "bad neighbours" and in promoting safer communities; and (4) creating an unbalanced pattern of social classes.

In terms of the cultural criteria, the existing pattern represents a total failure in creating an urban form and pattern of which the mosque represents the focal point of the community. The higher standard of facilities, road, utilities and general local government attention to the North are such a contrast to the poor South. The building height, clustering and land-use create a living space, lacking in any consideration to individual privacy. In general, the city represents no resemblance to what Islamic-Arabic cities should be.

The environmental criteria is the one that has suffered the most. Jeddah, as of 1983, represents a modern city designed to function environmentally comfortably by artificial means, e.g. the car, air conditioning, etc. The low density and scattered dispersed pattern opened the city to undesirable climatic conditions, e.g. heat, dust, and sand. The city form has been heavily influenced by cars and traffic, forgetting the climatic elements and hooled to a lack of shaded pedestrian routes, traditional compact patterns where buildings are huddled together so that they not only shade each other but also considerably reduce the exposed open spaces around them. Building heights have risen in a manner that create an obstical for favourable winds to reach lower buildings. The villa type of housing creates a

pattern lacking any consideration for micro-climate. The grid-iron road patterns characterize most of the city's streets, depriving the inhabitants from the more climatically suitable organic patterns. Not only that, but also roads have been constructed without taking into account the wind directions.

Thus, eight identified problems can be concluded:

Firstly, urban sprawl is characterized by:

- Lack or inadequate public services; because of the unjustified density (northern Jeddah).
- Unregulated growth of poor quality subdivisions in areas where public agencies are not prepared or able to regulate decent subdivisions, housing, building and health centers (Makkah Road Kilo 6-7).
- Waste of land resources in bypassed areas suitable for no economically productive use, neither for housing, industrial nor for public recreation (Eastern part of Medina Road).
- Monotony, lack of community identity and inadequate social and cultural opportunities (northern Jeddah).

Secondly, though, the authority succeeded in segregating most of the harmful and hazardous uses from residential areas, yet, it failed to prevent office and commercial uses from residential buildings and residential areas, with the exception of the city centre.

Thirdly, complete ignorance of cultural and environmental conditions. The dominant features of this problem are: the lack of privacy, as a

result of heights and mixed use and various other building regulations; and grid-iron street patterns oriented southeast and southwest. The number and locations of mosques and the surrounding buildings highlight the complete mis-understanding of the functions of mosques.

Fourthly, the city is increasingly following patterns which invoke social class segregation, Poorer highly congested areas in the south with a lack of facilities and deteriorated housing conditions and are highly congested; and low to medium density relatively well served and well kept areas in the north. This pattern contradicts with Saudi culture and the way in which urban areas have developed historically .

Fifthly, inadequate open spaces, characterizes the whole city.

There are three types of open space problems; lack of open spaces, inadequate sizes for active recreation and/or poorly designed ( most of the open spaces that exist are heavily planted to the extent that it prevents any active recreation, as well as creating a great demand for water which the city has a shortage of).

Lack of Community facilities, especially in populated areas and areas with sufficient numbers to justify any kind of facilities, experience a great shortage in public facilities (different from the one associated with urban sprawl).

Sixthly, though there is a surplus of housing stock, the congestion and dilapidated conditions of some areas, indicate a great shortage of housing for low income and the surplus is only in middle and high income groups. There are about 8,000 public housing units ready and

vacant ,since 1980, for low and middle income groups. However locational problems and/or design problems in terms of cultural considerations, have prevented their occupation.

Seventhly, the surplus in some kinds of housing and office spaces in some areas will create a "ghost town" type of environment, due to high levels of vacancy.

Lastly, the wide streets and their patterns, the high rise apartment buildings, the villa type and the shortage in size, number and mis-location of mosques, left the city with no identity , with the exception of the historic central area .

Having identified the existing problems of urban land development in Jeddah, it is the time to look at the problems in the context of the Master Directive Plan (since we already argued that the 1973 MP was overcame, in many aspects, by the DMP. However, any analysis of the existing conditions, should coincide with the two, since the MDP had adopted many objectives and policies from the MP. In other words the MDP contained its own objectives, strategies and policies and included those from the MP which were thought to be valid ).

At this stage we are focusing on the question of whether or not existing conditions are consistent with the plan objectives and strategies. The question of causes and whether the existing problem resulted from the contradiction between objectives and strategies on the one hand, and implementation and policies on the other hand, or the existing conditions resulting from bad planning will be dealt with in the next Chapter.

The 1983 Year Book shows that the population projection and other socio-economic data on which the consultant SJI has based the MDP is valid and only a minor error of 4.3%. This means in the context of our analysis, that the growth in population and economy, which have occurred between 1978 and 1983 have been expected and planned for.<sup>33</sup>

From reviewing the objectives and strategies of the MDP it appears that they are inconsistent with the National Five Year Plan and reflect the social and cultural needs.

However, the previous analysis shows that the reasons for which the MDP was formulated, still exists . The great shortage in community facilities; housing for low income groups, housing to be renovated or demolished, have not been implemented according to the Plans' priorities (the southern areas conditions) and the Plans' schedule; the emphasis on social cohesion and well-being as part of city growth and development by a balance of residential density and housing types to achieve an appropriate mixed distribution of high, medium and low income groups, the actual pattern has been increasingly characteristised by class segregation , such as in the north and the south of Jeddah. The Plan emphasises the importance of Islamic cultural and social habits and the main design criteria for land-use planning and in building regulations. Yet, as we saw in Northern Jeddah, which should have been the easiest area in which to implement such criteria (since it was entirely new development), neither the neighbourhood structure nor the building forms and types are compatible with the culture and environment of the country.

To sum up, although the Master Directive Plan addressed the problem issues ( urban sprawl, community facilities, lack of identity ) throughout the objectives of the Execution Plans and Action Area Plans, the conditions of the existing pattern do not reflect them. Also, it is worth mentioning that the interviews (see Appendix E ) of municipalities as well as the review of some governmental documents shows no evidence of a lack of financial resources.



### 7.3 URBAN GROWTH AND THE CONVERSION OF AGRICULTURAL LAND<sup>32</sup>

In the Second Chapter we discussed urbanization and its impact on agricultural land. We concluded that if urban growth could not satisfy its need of land within its boundaries, it usually tends to direct its growth towards agricultural land; the reason for that is the suitability of agricultural land for urban uses. Also, urban growth could be associated with the conversion of agricultural land when the competent authority failed to control the land market, e.g. speculation, land prices, encroachment, etc. In this section I will look at the above phenomenon as it is taking place in Saudi Arabia. For this reason Medina has been taken as a case study.

#### 7.3.1 Location And Physical Structure

Medina lies 150 km to the east of the Red Sea, at a height of 600 meters above sea level. Medina is situated in a natural basin surrounded by arid hills, and has volcanic areas bounding the city to the south and east. An area of agricultural land lies within this volcanic zone passing to the heart of Medina. There is a range of mountains bounding the city to the north and west. One of the most important features of Medina is the central location of Al-Haram, (the Prophet's Holy Mosque).

The soil in most parts of Medina is good for agriculture, the major determinant for agricultural potential is the availability of water,

the areas to the south and to the north of the city are rich in ground water.

Medina's road network is characterized by a ring road system which has been developed in recent years. This road network has greatly influenced accessibility to different parts of the city, and operations are currently being implemented which will help to overcome some of the remaining traffic problems.

### 7.3.2 The Urban Block

This comprises the built-up area of Medina, *including the vacant and* the agricultural land within this built-up area.

Table 7.9 shows the amount and proportion of land in different uses in Medina in 1977. No recent figures are available, which indicates the weakness in updating the data and monitoring progress. However, it should be noted that by 1995 the Municipality Consultant (GACDAR) have forecasted that the urban block of Medina will cover an area of 9000 hectares of which 5000 hectares will be devoted to urban growth, more than double of the area the urban block as a whole in 1977.

### 7.3.3 Constraints And Trends Of Urban Growth

Certain natural and physical constraints are restricting the urban growth of the city in certain directions:

- The volcanic areas in the southeast and west of the city are not suitable for development activities in some

localities, because of the steep slopes and ground condition in which it is hard to install infrastructure.

- Uhod Mountain is about 4 km to the northeast of Medina and it is a historical site protected from development. Other mountains are far from the city and they are bounding the city from the north and west.
- The existing agricultural land in the southeast and the north, northeast and the west are supposed to be protected from development as the policies of the municipality indicate (will be discussed in a later chapter).
- Land owned by the Ministry of Defence and the National Guard is protected from development by the private sector.
- The existing trends of growth follow in some cases the locations of agricultural land especially in areas to the south (figure 7.19) because such agricultural land is very close to the existing urban area, and the growth of such areas will be at the expense of agricultural land.

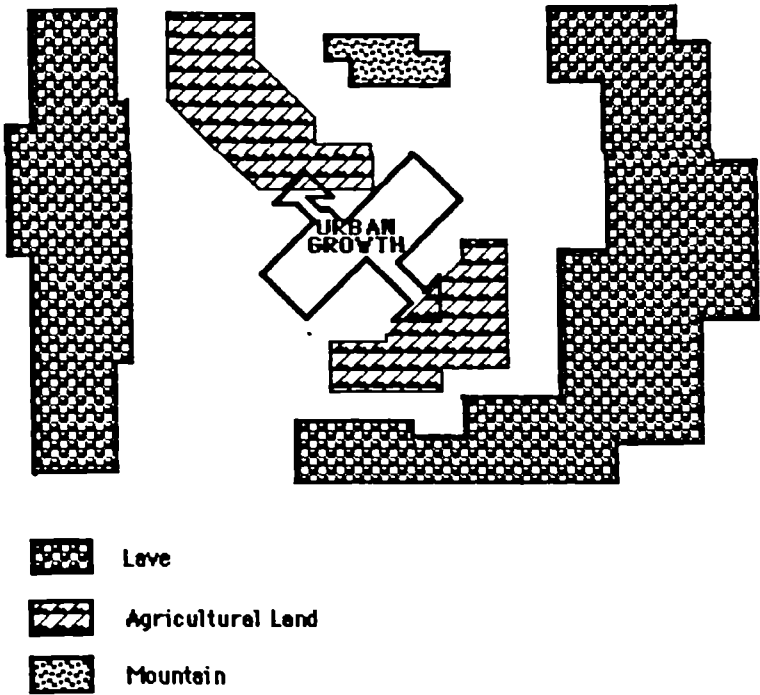
#### 7.3.4 Existing Conditions Of Agricultural Land

Almost all of the agricultural land in Medina is in the hands of the private sector; and consists of three main tenures:

- a) Al-Mulk Al-Khas (land owned by individuals) 55%.

Such properties are owned by a single person declared by a legal title of the land registered in Katib Adl of Medina (Registry of Real Estate)

FIGURE 7.19  
Urban Growth and The conversion of Agriculture Land 1971-1983



b) Al-Sharaka (partner ownership) 40%.

The land is owned by a group of people maybe two or more which is also declared by a legal title explaining the terms of partnership.

c) Waqfs (charitable endowment) 5%.

Waqf, or charitable endowment, where a person may dedicate property to the public good. Waqf becomes inalienable public property shielded from the changing purposes of successive owners and from fragmentation through the Islamic scheme of inheritance. Therefore, Waqf land cannot be sold, gifted, mortgaged, inherited, or otherwise disposed of. The Waqf is administered according to the stipulation specified by the person who donates the land, and the Court that oversees its administration.

The first two contribute to the conversion of agricultural land through fragmentation of the land between the successors of the owner. Where usually these successors are engaged in occupations other than agriculture, they are much less concerned with continuing the agricultural use of the land.

According to the existing pattern of agricultural land three types of land could be classified in accordance with their location relative to the built-up area of Medina.

- a) Agricultural land within the urban block of Medina was estimated to be about 600 hectares in 1977. Recent estimated losses may have reduced this by 15%. It should be noted that this category is dispersed in

different parts of the city. The location of such land gives the impression that it is always under threatened of urban encroachment.

- b) Agricultural land outwith the built-up area. Usually this is at the edge of the urban block especially at the south and Sayed Al-Shuhada at the northwest. The total area is about 700 hectares. This category has shown a small increase in area and there is a total potential of up to 2,000 hectares.

The above two categories are within the existing boundaries of the Municipality of Medina and therefore, within the jurisdiction of the Municipality.

- c) Agricultural land in the villages around Medina. These villages are under the control of the Ministry of Municipal and Rural Affairs. Unfortunately, no figures are available for this land .

### 7.3.5 Urban Growth And The Loss Of Agricultural Land

Medina was famous in the past for its agricultural production, due to the relatively large areas of agricultural land around the city as compared to other cities in Saudi Arabia. In the last few years this agricultural land has been threatened and taken over by urban development.

The GACDAR Master Plan estimated the loss of agricultural land between 1971-1977 as 233 hectares. In 1971 agricultural land totaled approximately 1500 hectares, by 1977 this had decreased to

1277 hectares (including 600 within the urban block), a loss of about 15% of the total and an annual loss of about 2.5%.

Officials in the Directorate of Agriculture in Medina estimated the loss between 1977 and 1983 at about 17% of the 1,277 hectares which existed in 1977, again a loss of productive agricultural land.

### 7.3.6 Major Factors In The Loss Of Agricultural Land

The major problem was the expansion of the city in all directions irrespective of the proposals contained in the RMJM Master Plan of 1971. The real growth of the city was far beyond what was anticipated in the Master Plan and undermined the assumptions on which it was based. It is noted that the area of the urban block in 1977 exceeded by 3,650 hectares than what was expected by the low estimates of the Master Plan reaching almost the same area assigned for the high estimate, i.e. 4,500 hectares with a difference of 850 hectares.

Furthermore, the Master Plan in 1971, adopted a preferred strategy of urban growth for Medina. It recommended growth in the vacant land around the built-up area towards the east. Contrary to the strategy it seems that urbanization took different directions covering large areas of vacant and agricultural land without conforming to the directions and axes of growth specified. Although, the latest Master Plan has re-emphasised the same strategy, the conditions explained above still prevail.

### 7.3.7 The Process Of Conversion

The consequent increased rate of economic development produced physical growth in Medina which was faster than the anticipated growth in the Master Plan of 1971. However, the development and growth of the city, has been of two main types:

- a) Rapid urban growth in approved sub-division areas which are considered to be the legal extension of the city, but which are devoid of public utilities.
- b) Rapid urban growth in undeveloped areas where buildings were developed by the unlawful seizure of land forming squatter settlements some of which occurred on agricultural land.

In the two processes little attention was paid to possible alternative uses for the land, beside urban uses. Thus through sub-divisions, land with agricultural capability has been converted to urban uses.

Building permits, were approved by the Municipality to build on agricultural land especially those at the edge of existing urban land development. The owners of the land were clever enough to let the land dry out, thereby allowing the green element to die, and converting a productive resource into something to get rid of because of its poor and wasteful appearance. So building permits were issued, contrary to the policies of protecting agricultural land, i.e. conserve rather than just preserve them. Because people found ways to circumvent the policies with what appeared to be a logical argument. i.e. dry land is not an agricultural land so why not build on it.

The question which must be asked is: why has not all the agricultural land within the urban block been lost? Why have 600 hecatres of



agricultural land been conserved? The answer is more or less dependent on the owner of the land, rather than existing control. The emotional linkage between the owners and the land, especially those owners who had physically participated in reclaiming and farming the land. Such people are not willing to sell the land, whatever incentives are given.

But people who inherit the land on the owners death do not appear to have the same attitude and they seem to look at the land from an economic perspective i.e. what is the income of the land, and how does this compare with the value of the land (i.e. what is the yield from the investment).

The income from agricultural use is not more than 2% of the existing market value of the land, whereas if the potential development value was realized, this would generate more money, releasing capital to invest elsewhere and generating higher income.

Therefore, existing and potential farmers are discouraged from buying land within the urban block for agricultural use because of the high value of the land and the limited income generated. Consequently, agricultural land within the urban block has been gradually decreasing rather than increasing.

However, land values differ from one part of the city to another, the prices of land on the outskirts of the city are low, but they are higher in agricultural areas than they are in vacant localities. The private vacant land varies from 400 to 600 SR per square meter.

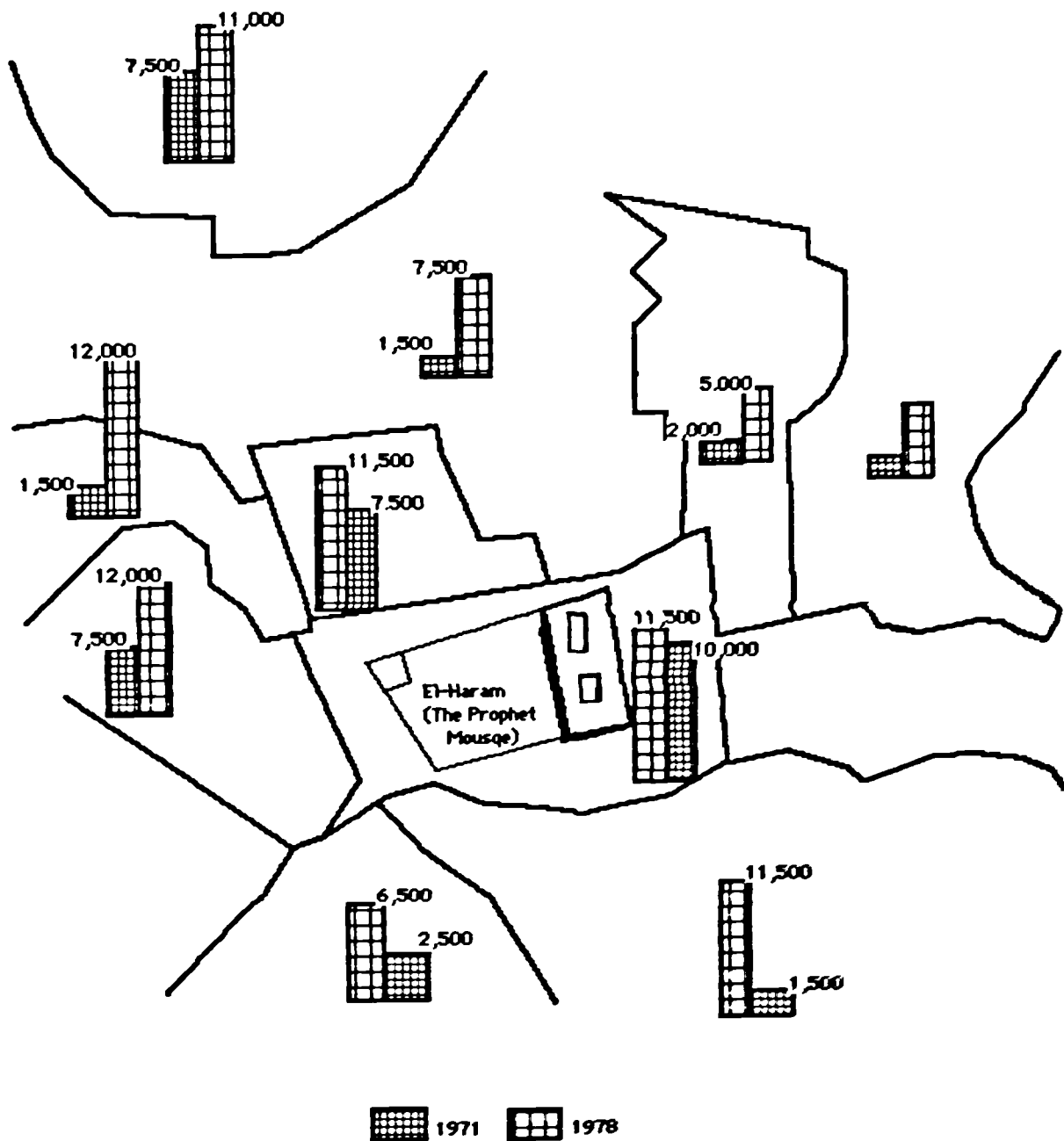
Comparatively, land prices are higher within the urban block ranging from 1,500 to 50,000 SR per square meter for agricultural and vacant land as indicated by some of the Real Estate Agents. Such variation is associated with the accessibility of the land and its proximity from Al-Haram.

Figure 7.20 illustrates the prevailing land prices at present in the various areas of Medina, as viewed by some Real Estate Agents.

Areas No. 6,7,8, and 12 were dominated by agricultural use, but recently development took place at these locations and consequently the prices have increased especially in Area 12, because the intensity of development was higher. Therefore, agricultural use is no longer a profitable activity in these locations assuming a change to urban use is allowed because land prices have been increasing by a factor of between 2 and 10 times.

When urban growth affects agricultural land, it increases its value by 100% in some cases, consequently, agricultural use is not economically viable. Therefore, land owners usually market the land for development after drying it to by-pass the controls via the following process. By this process, agricultural land is permanently threatened by the normal market forces associated with urban growth.

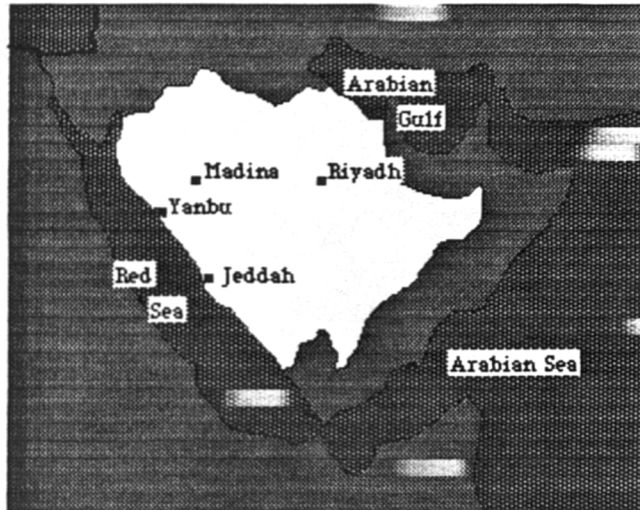
Figure 720 : Land Prices In Madina



Source : Madina Municipality

Figure :7.21

Yanbu lies on the Red Sea coast ,350 Kilometers north-west of Jeddah and 240 kilometers of Madina



#### 7.4 URBAN SPRAWL AND GOVERNMENT INVESTMENT<sup>33</sup>

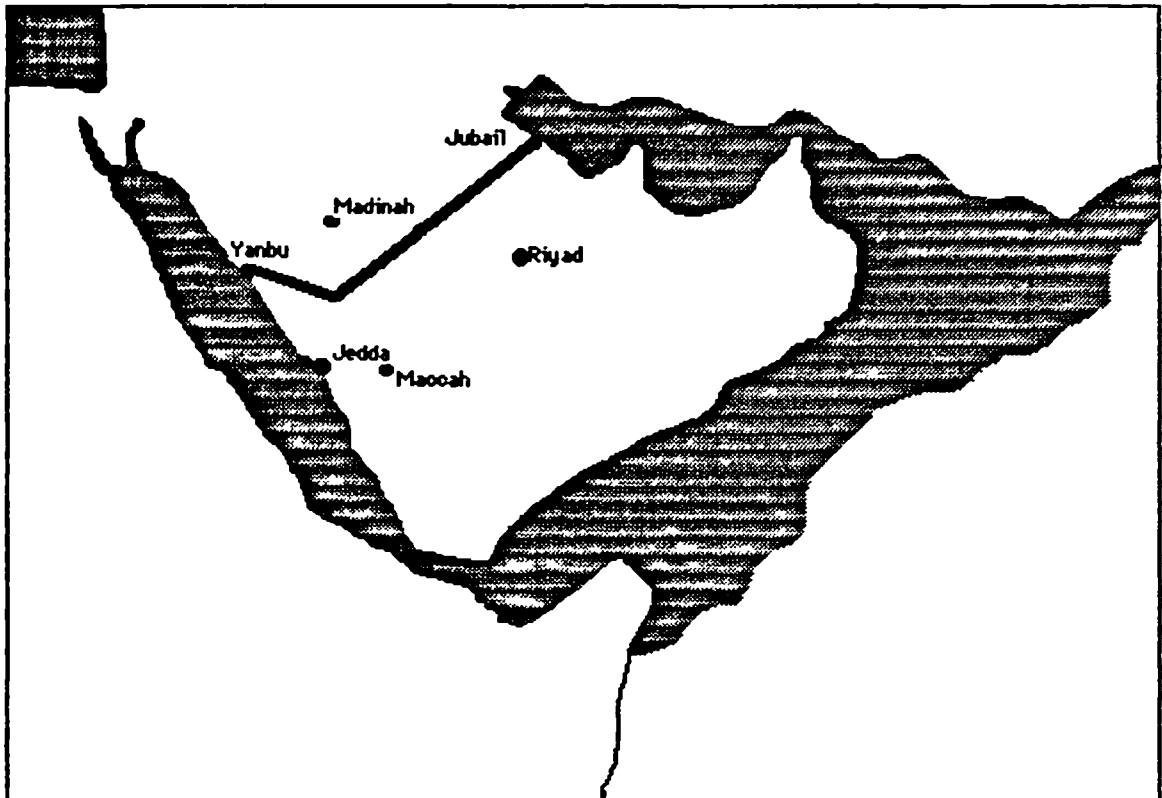
Urban sprawl is caused by various factors, e.g. it could result from speculation, high land prices, working opportunities, etc. In the case of Jeddah the existing urban sprawl, mainly, resulted from a combination of speculation and high prices. The aim of this part is to examine the impact of a major governmental investment on the adjacent urban areas. For this reason the Sub-region of Yanbu has been chosen as a case study.

Also, an important issue the case study provides is different from the case study of Jeddah. By looking at Yanbu we are examining a different level of government than that of Jeddah, which in , helps to cover problems associated with the administrative system of land development, as we will see in later chapters (figure 7.21).

##### 7.4.1 Yanbu Industrial City<sup>34</sup>

Since the early 1970's the Kingdom of Saudi Arabia has been pursuing a national strategy of reducing its economic dependence on the export of crude oil by developing its natural resources and diversifying its industrial base. This strategy is clearly described in the second development plan for the period 1975-1980, whose objectives express the fundamental value and principles on which the government's present policies are based:

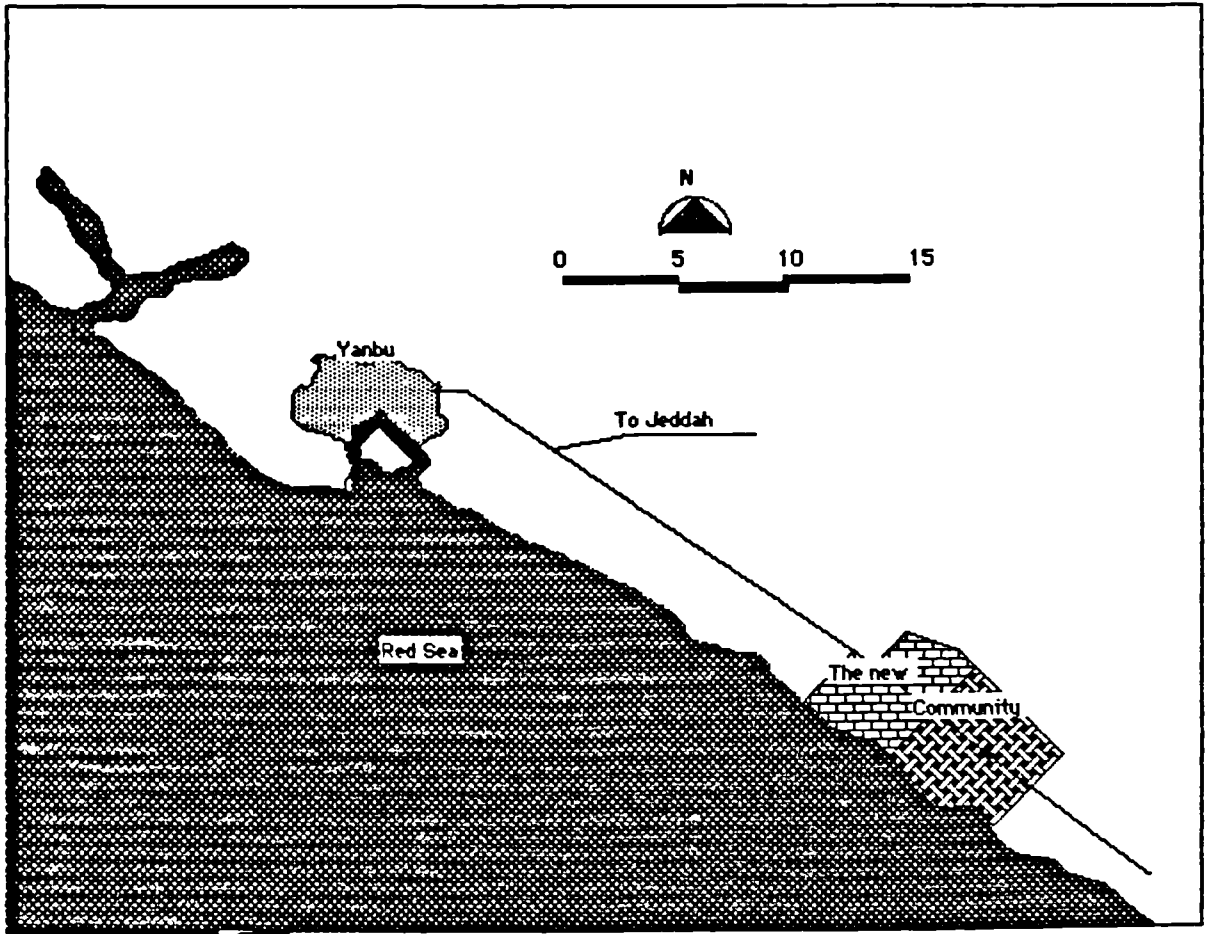
**Figure 7.23 Yanbu and Jubail Location**



- 1) to maintain the religious and moral values of Islam,
- 2) to assure the defence and internal security of the Kingdom,
- 3) to maintain a high rate of economic resources, maximizing earnings from oil over the long term, and conserving depletable resources,
- 4) to reduce economic dependence on exportation of crude oil,
- 5) to develop human resources by education, training, and raising standards of health,
- 6) to increase the well-being of all groups within the society and foster social stability under circumstances of rapid social changes,
- 7) to develop the physical infrastructure to support achievements of the above goals.

A fundamental obstacle to efficiently developing cities in accordance with these goals, however, was the heavy-handed Saudi bureaucracy, at that time. To avoid bureaucracy problems and other implementation inadequacies, a powerful instrument for implementation national strategy was created in 1975 specifically for the development of two new industrial complexes. The Royal Commission for Jubail and Yanbu, as it is called, was established as an independent agency outside the traditional ministerial framework. The Royal Commission is empowered to disregard all existing legislation and procedures in order to plan and implement construction of the Jubail and Yanbu industrial cities (figure 7.22 ).

Figure 7.23: The Sub- region contxt





The establishment of such a commission was considered essential by the Ministry of Planning and the Cabinet of Ministries, because of the Kingdoms' aim of swiftly attaining their development objectives. Thus, by 1976 the construction started on both sites.

Although, at Yanbu Industrial City (called after the near-by town, Yanbu ) the heavy industries - NGL plant, domestic and export refineries, crude terminal, and petrochemical plant - will form the base for development, a substantial proportion of the eventual development in the Industrial City will be generated initially by the need to provide a wide range of services to the 150,000 inhabitants of the new community. Yanbu Industrial City will eventually be the largest city on the Red Sea coast north of Jeddah. Not only will it attract people and activities from Medina, 130 miles to the east, but in the longer term, affect Jeddah, which lies 200 miles to the south .

The most immediate impact of the new town will, however, be on the existing town of Yanbu , whose center is approximately 14 miles to the north of the site of the new Industrial Complex. There had been a strong concern that all the housing and other social infrastructure available in the new city will cause a rapid out-migration from Yanbu to the New Town.

By 1979, the sort of co-ordination that was necessary in the sub-region in order to protect public investment in the sub-region as well as to protect the new town from undesirable competition. Also, it was clear, at that time, that Yanbu was growing in a pattern and speed which will bring undesirable conditions to the area. All this motivated the Royal Commission to issue a report titled-Alternative

Strategic Report—which stated the following goal for development in and around the new town:

- The new town is the reason d'être for the Royal Commission's existence and the viability and efficiency of the Complex, must be seen as the fundamental goal.
- The New Community is derived from the needs of the Industrial Complex. Modifications to its Master Plan may be tolerated though not encouraged, provided they do not preclude its eventual achievement.
- Given the workload of the Royal Commission in fulfilling its major tasks, administrative involvement in Yanbu should be minimized, consistent with the achievement of the above two goals.
- Consistent with the goals for the Industrial Town, the Royal Commission aims to spread the benefits of development with national policy.
- Consistent with its fundamental goals the Royal Commission aims to minimize political discontentment and disruption in the sub-region.

The report recommended the Royal Commission's involvement in the development of the existing town of Yanbu . The Royal Commission would take an active role in planning the economy and physical growth of the town. It was assumed that a sub-regional review would be conducted and if necessary the plans of the Industrial Town amended, to ensure a viable role for the existing town in the future. Also, the report recommended more control on development in Yanbu, to insure that no undesirable competition takes place out of the Industrial

Town, and prevent the physical urban sprawl which are taking place in the south side of the town, spreading towards the New Town. Such growth, the report mentioned, could not be serviced by community facilities and other services including utilities, due to the density and the unplanned pattern (which makes any attempt by authorities unjustified, economically).

The report constructed three scenarios for the development out with the New Town, if the recommended strategies were not adopted.

The first alternative, a sustained independent growth. It assumed rapid and substantial population growth during the next 20 years. It assumed that Yanbu would benefit in the short term from opportunities generated by the New Town before the later become self-sufficient and able to cater for the needs of early settlers. In the medium term, as the New Community grew and become more self-sufficient, Yanbu could no longer rely on development spin-off. In order to ensure a viable long term future, government support would be necessary. It was assumed that such support would be forthcoming thus enabling the town to develop fairly rapidly, perhaps in open competition with the New Town.

The second alternative, unsustained , independent growth, the possibility of short term growth followed by the gradual decline of Yanbu, once the New Town became self-sufficient. If administrative agencies in the Town were unable either to provide efficient services or to attract necessary funding of projects to sustain the growth of the Town independent of the New Town, then the Industrial Complex

and the New Community would drain skilled, able manpower from the Town and general physical, social and economic decline could occur.

The third scenario, assimilation, envisaged curtailment of short term growth followed by planned decline of Yanbu. In order to make the growth of Yanbu as a potential source of manpower for the Industrial Complex and in order to prevent any competitive development taking place in the Town, employment opportunities would be made available in the Complex for locals who would be encouraged to relocate to the New Town.

However, until today there are no signs of co-ordination between the New Town and Yanbu, and development has been following the second scenario (Unsustained Independent Growth). In the following section, we will look at Yanbu, its Master Plan, existing trends, and the administrative system and structure; evaluate them in the context of urban land development problems in Saudi Arabia.

#### 7.4.2 Yanbu

Yanbu has for centuries been an important Red Sea port offering a deep natural harbor and access to food and water from the farms of the nearby Yanbu Al-Nakhl Valley. The Port brought relative prosperity to the merchants of Yanbu and also provided international contact through dealings with foreign traders and pilgrims.

The economy of the town has been tied closely to the activity in the port, and since this has been determined to some extent by outside factors, Yanbu has experienced both periods of prosperity and

recession. The closing of the Suez Canal in 1967 and the increasing relative importance of Jeddah, appear to have brought the town almost to a standstill.

By 1974, stagnation had given way to growth; new roads and buildings had been constructed and the port expanded to many times its former capacity. While these trends all point to a period of growth and prosperity, it would be unwise to assume that this will occur without continued public commitment to diversify Saudi Arabia's Red Sea activities away from its predominant base in Jeddah.

Other local building activity seems to have stemmed from two waves of speculation based upon the expectation of major growth in and around Yanbu. In 1973, the rise in oil prices and a general boom atmosphere, inspired a round of land claims and construction. Rumours of the coming Industrial Complex may have indicated a second wide-spread wave in which land speculation was concentrated to the south of the Town, while the belief that the Complex workers would live in Yanbu, encouraged the construction of new houses and apartments in the existing town. The gradual realization on the part of Yanbu developers that the Industrial Complex is to be built outside and largely independent of Yanbu, and the virtual completion of many of the major recent infrastructure projects puts Yanbu once again in a position of further uncertainty.

Two previous Master Plans have been prepared to guide development in and around Yanbu. The first plan was produced in 1963 by the Jeddah Town Planning Office - the then regional planning authority for Yanbu. A radial grid was superimposed over a vast area of land,

extending 7 miles from Yanbu. Though this cannot be truly considered a development plan, it has influenced the location of some major roads and most importantly, has determined land ownership patterns in the area.

A more recent plan was prepared by a private consultant in 1973. The plan draws little from the 1963 plan, and shows growth occurring towards the north in a grid pattern. Though this plan was formally accepted, the earlier plan is still used by the planning authorities as a basis for land sub-divisions and some road alignments. However, current water and sewage proposals are based on the more recent plans.

#### 7.4.3 Existing Condition

Previously, we mentioned the four alternatives for the future growth in the sub-region; in the year which followed (1979-81) experience has shown second alternative which assumed unsustained independent growth prevailed. Until 1982, Yanbu benefited from the economic opportunities generated by the New Town. In the last two years the spin-off from development has been shrinking.

However, in 1980 the Royal Commission proposed a compatible growth strategy for the sub-region. The proposition was in the form of a Master Plan. Two basic policies underline the strategy. These are as follows:

- To maintain and encourage a socially balanced community and;
- To establish a consolidated physical form. "While

these respond directly to social and physical goals they also incorporate the means of achieving economic and administrative goals. Thus, in order to achieve a socially balanced community several actions including interventions in the field of economic activity are required, and similarly the development of a consolidated physical form requires the application of co-ordinating administrative controls."

In summary the action plan recommended firm intervention and co-ordination by public authorities to a far greater degree than at present to implement the above strategy.

The second policy of which underlie the strategy argue that if allowed to continue, the dispersed and fragmented nature of present physical development would inhibit the achievement of social and economic goals. It would deny people access to a variety of facilities and limit their opportunities and choices. In addition, it would hinder the development of an efficient utilities system, thereby making public services more costly and increasing the risks of ill health which in turn reduce the potential for active social and economic development in the Town.

The recommended strategy envisages consolidation of urban development both sub-regionally and in Yanbu. It designates three separate development areas: the New Town, the area between Yanbu and the new town , and Yanbu. Each area has different characteristics and development would be channelled, as appropriate, to these areas in a complementary fashion. Elsewhere, and particularly in coastal

areas, development would be discouraged by various means. A "buffer zone" has been designed between Yanbu and the New Town and no development should be permitted. However, between Yanbu and Sharm Yanbu very limited development is allowed, and that which is allowed should be consolidated into small clusters, at selected points.

In Yanbu, itself, development should be encouraged to infill the existing gaps and intersects. Renewal of presently delapidated areas is also an important element of the strategy that aims to limit development to the designated development area (in the proposed Master Action Plan) and to avoid continuous leap-frogging further outwards.

Until 1983, the authorities in the Sub-region failed to adopt and implement the above recommendation. The Royal Commission in the New Town is independently carrying-on the role of developing the Industrial Complex and its Community, while the local government in Yanbu is implementing and following the plans and policies of 1973.

Population density varies widely within the town and reflects the fragmented and irregular nature of development. In 1974 the whole population was located within four of the thirteen planning zones. The density variation started in 1975 when rumors spread around about the new town project. In complete lack of co-ordination between the new comer to sub-region-the new town- and the existing town, Yanbu Al Bahr started its fragmented, irregular nature of development in the area. The present built area of the town is approximately 8/10 square kilometers, but is not contiguous. Thus densities calculated on this basis to give an average of about 43.5



persons per hectare do not reveal the significant local variations that characterize the town. In general, however, more higher densities are found in the central area (85 per hectare) than in the outer areas (32.5 per hectare). The local variations result from the irregular patterns of development interspersed with large and small vacant areas and create an important obstacle to coherent and efficient development.

As mentioned before the purpose of this case study is to look at the problems of urban sprawl in Saudi Arabia as a result of governments' major investment associated with lack of co-ordination. The Master Action Plan prepared by the Royal Commission for the sub-region discussed the problems of urban land development in the area. It concluded that the existing pattern lacked community facilities, utilities in some parts and environmental compatibility. The Plan mentioned that the main reasons for these problems is the extremely scattered nature of the development in the town which makes it impossible to construct any facilities.

#### 7.4.4 Major Development Areas In The Sub-Region

There are three major development areas associated with growth of the New Industrial City; the Industrial Complex, the new airport and Yanbu Al Nakhl. The Industrial Complex, as explained before is the largest of these areas with an estimated population of 150,000 by the 1990's and an investment of SR 25 billion during this period.

The airport, which was completed in 1983, built about 9 miles from the Industrial Complex. The location offers equally good access from

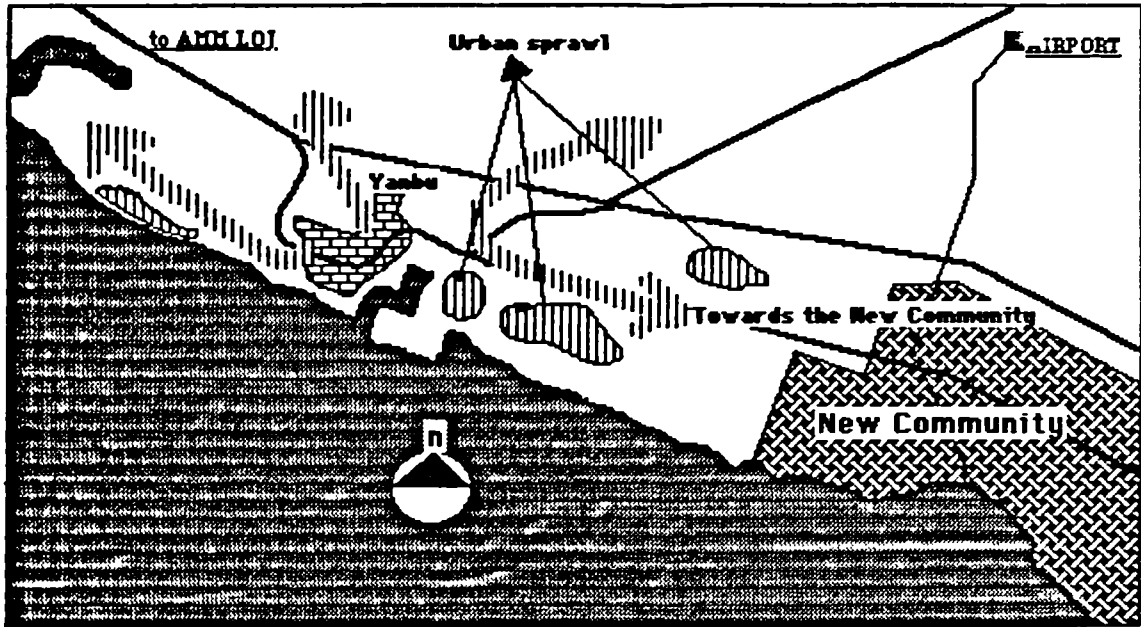
the New Community and Yanbu and there is no development in the area at present. The airport has created a small cluster of development in the area between the airport and Yanbu. These include small industrial activities, wholesaling, service industries, and associated housing. This development should influence the growth of Yanbu, especially since the completion of the airport highway.

Thus, the New Community in the south and the airport in the east, together, attracts the pattern of growth of Yanbu out of its "planned development area" in a very sprawled nature (figure 7.24).

#### 7.4.5 Development Trends

Before the emergence of the Industrial Complex as the most important factor likely to effect patterns of development in the sub-region, various trends had already become apparent. In particular development on both sides of the town along the coast in the form of housing compounds and light industrial premises has begun. Similarly, irregular developments are also taking place along the regional roads leading from Yanbu. These patterns can be expected to continue and will undoubtedly be a powerful force in shaping the short term future. The tendency for development gradually expand outwards from the center of the town, and to take place first on prime land or arterial routes is common to most unplanned communities. However, in Yanbu the drive towards expansion is prompted only in part by an increased population, demanding more space. "Very high land costs, which prohibit economic land development leads to a "leapfrog" pattern of dispersed development, where isolated building groups exist beyond the contiguous build-up areas of the town."

**FIGURE 7.24 :  
DEVELOPMENT TRENDS**







-  Trends
-  Scater Development
-  Yanbu
-  New Town

Figure 5.24 shows the above trends. However, by 1980 it became clear that the presence of the Industrial Complex altered the balance of development from the previous trends (monocentric pattern) and will shift the center of gravity south-eastwards. Furthermore, the construction of the airport inland from Yanbu established a tripolar pattern of development with the old town, the New Community and the airport forming the corners of a triangle. There is no doubt that pressures for development along the sides of this triangle will increase and especially so along the coast between Yanbu and the New Town.

Recently, major infrastructure in the new town is ready, e.g. roads, sewer lines, water supplies, etc. as well, land has been subdivided by the Royal Commission and prepared to be developed for housing by individuals and public. This process has shown a great impact on the growth of Yanbu. The new town by developed to a very high standard which most of the Saudi cities do not enjoy; this high standard on the one hand and low prices of land on the other will attract migration from the sub-region to the new town which in turn will result in an assimilation process which in turn will result in wasting public investment in Yanbu and urban sprawl, that is costly to serve.

Previously, we stated that this case study aims to demonstrate the lack of land development policies coordination especially at the regional and sub-regional level, in addition it provided an opportunity for looking at problems of land development within the jurisdiction of a lower grade of municipalities.

"The existing administration of Yanbu will not be able to cope with expected growth in the town or sub-region". The establishment of the Royal Commission for Jubail and Yanbu reflects the importance attached by the government to both projects, but also results from a recognition of the limited capability of existing administrative system (manpower and policies). Nevertheless, one of the aims of the Complex is that it should provide momentum for growth in the sub-region and there is no doubt that significant benefits and disbenefits will result from the development of the Complex. In order to direct the impacts in the most beneficial manner which has been reflected in the Master Action Plan, the existing administrative system in the sub-region must function in more coordinated manner.

## Notes To Chapter Seven

- 1- The Second National Plan, 1975-1980.
- 2- Jeddah Action Master Plan, "Technical Report No. 5, Introduction and Physical Planning Data", 1979, pg. 7.
- 3- Ibid, pg. 8.
- 4- Ibid, pg. 12.
- 5- A. Pesce, pg. 105-108.
- 6- Abdullah Yahia, "A Study in Urban Formation", 1978, pg. 154-160.
- 7- Ibid, pg. 165-168.
- 8- Sultan Khan, 1982, "The Influence of Arabian Tradition on the Old City of Jeddah: The Urban Setting", in The Arab City, Ed. by I. Serageldin, pg. 191-198.
- 9- Jeddah Action Master Plan Technical Report No. 5, pg. 12-17.
- 10-Ibid, pg. 14.
- 11-Ibid, pg. 99.
- 12-Ibid, pg. 100-102.
- 13-Ibid, pg. 103.
- 14-A. Bokhari, 1978, Formation of Jeddah, Unpublished PhD. Thesis, University of Philadelphia, pg.
- 15-R. Looney, 1982, pg. 107-117.

- 16-Master Directive Plan, Jeddah, 1978, Report No 4.
- 17-Master Directive Plan, pg. 8.
- 18-Action Master Plan, Jeddah, 1978, Report No. 4, pg. 98-103.
- 19-Master Directive Plan, pg. 2-15.
- 20-Master Directive Plan, Jeddah, 1978, Report No. 4, pg. 87.
- 21-Ibid, pg. 89.
- 22-The condition has changed much since I conducted the research, more parking space, new office buildings, more shops, however, the shift towards out of the CBD remained, because of the high rent which resulted from the high price of the development.
- 23-Action Master Plan, Jeddah, 1982, Report No. 12, pg. 90.
- 24-Master Directive Plan, Jeddah, 1978, Report No. 4, pg. 13.
- 25-Ibid, pg. 32.
- 26-Action Master Plan, Jeddah, 1982, Report No. 12 pg.57.
- 27-Master Directive Plan, Jeddah, 1978, Report No.4, pg.42
- 28-Ibid, pg.45.
- 29-Ibid, pg.51.
- 30-Action Master Plan, Jeddah, 1982, Report No. 12, pg. 56.
- 31-A journalist interviewed the Mayor of Jeddah, 1981, Okaz Newspaper.
- 32-Master Plan of Madina, 1979, by GACDAR, for Ministry of Municipality and Rural Affairs.

33-Information on this Chapter mostly obtained from the 1963 and 1973 Master Plan.

34-Action Master Plan , Yanbu Sub-Region , 1978, by Consultant Zohair Faize.



## **Chapter VIII : Land Development A Synthesis of Problems in the Light of Land Policies**

### **8.1 INTRODUCTION**

The aim in this Chapter is to evaluate each one of the problems, which have been identified in the previous chapters, in terms of the relevant land policies in Saudi Arabia. In the Fifth Chapter, I concluded that urban land development in Saudi Arabia experienced several kinds of problems. They can be classified and grouped; as follows:

- 1 - Type of problems caused by land availability - time, location and price - for development:
  - a - problems in lack of community facilities
  - b - urban sprawl
  - c - the conversion of agricultural land
  
- 2 - Type of problems caused by the pattern of development:
  - a - problems of density e.g. traffic, community facilities, community hazards
  - b - lack of cultural and environmental consideration
  - c - urban sprawl
  
- 3 - Type of problems caused by urban forms:
  - a - lack of privacy

#### b - lack of environmental compatibility

The chapter consists of three parts : the first part looks at the problem of land availability, on one side , and the policies for providing land for development in S.A. on the other side. The second part evaluates the problems associated with land use controls and existing methods of controlling land use in S.A. The final part examines the effectiveness of the existing administrative system in delivering and enforcing the above policies.

## 8.2 URBAN LAND AVAILABILITY

In Chapter Two I explained the relationship between urbanization and the demand for urban land. Five elements of the urbanization process influence demand for land and consequently, the supply of it; (1) technological changes, (2) the rate of economic development , (3) social changes, (4) government actions, (5) population increase and population distribution.

Several problems result when supplies fall short of meeting demand for urban land. If government fails to control the land and bring forward the supply to meet the actual demand, the direct result is an increase in land prices. The high rate of increase in land prices attracts many people to invest in real estate, and speculation in real estate becomes a common practice , which in turn contributes to the land shortage. Three major problems associated with land availability are:

- Urban Sprawl
- Lack of community facilities
- Conversion of agricultural land.

Each of these problems is a direct result of land availability; availability here means availability in terms of time, location and prices. In the following section we will analyze and evaluate each of the three problems in relation to the relevant land policies in Saudi Arabia.

### 8.2.1 Urban Sprawl

Urban Sprawl, in the case of Saudi Arabia, occurs because land owners hold land in expectation of maximizing their gain from the sale of the undeveloped land, forcing developers looking for cheaper land to locate further out of the city. The withholding of land from the market on the one hand and the demand for land at an attainable cost on the other, results in developments located on the outskirts of urban areas, with gaps between one developed area and another.

This process results in a physical pattern of development which is sporadic and of low density.

Five problems are associated with urban sprawl:

- Premature characterization of an area by the prior development of housing, factories or commercial development which subsequently makes the area unfavorable for anything but compatible uses.
- The high costs or poor quality of public services;

costly and wasteful extensions to or lack of, utilities.

- Unregulated growth or poor quality rural subdivisions, housing, building and health codes.
- Waste of land resources in bypassed areas suitable for no economically productive use, neither for housing, industry or farming, nor for public recreation.
- Monotony, lack of community identity and inadequate social and cultural opportunities.

The basic elements behind urban sprawl, by now, are becoming generally agreed among authors..... "Many attribute urban sprawl to speculative society, however, the root cause of urban sprawl is the right to buy and sell and develop it".<sup>1</sup> This leads us to the original arguments of this section, land availability.

Thus, if land is provided in the market at the right location, the right time, and at affordable prices, the reason behind urban sprawl will be eliminated. In the following paragraphs we will discuss land supply and land prices. Although both of these factors are related and have mutually influenced each other, for the purpose of the analysis we have separated them out .

### 8.2.2 Land Policies and Land Supply In Saudi Arabia

Land demand for all kinds of development has been at a record level since the initiation of the second National Plan (Chapter Four). Consequently, the government has adopted several policies to

increase and control the supply of land. However, the process of urban sprawl continues to characterize Saudi Urbanization... "There are good reasons to believe that the kind of development that has taken place thus far around the city is going to continue".<sup>2</sup>

Historically, until the 1950's, obtaining land for investment purposes, by means of speculation or developing it for commercial, residential or office use, had never been the practice of the investor. There had been no demand. The dominant tenure was owner occupation those who could not afford this either living in charity buildings, waqf, or privately renting vacant buildings.

Since that time, the country's development brought a continuing increase in the number of expatriates and consequently, the demand for tenement housing increased and exceeded the existing stock. In turn, business activities, retail and other commercial activities increased and diversified resulting in a great demand for land to build accommodation. This process provoked investors to buy land for development. Even, until the late 1960's land speculation was not a common practice in Saudi Arabia; and for this reason urban areas developed in a concentrated, compact pattern, during that period. The initiation of the country's Second National Plan promoted urban land demand to a level that exceeded the supply. Consequently, land prices started to increase rapidly, attracting investors to speculate on their land. The following paragraphs analyse the current situation and help to explain the reasons behind urban sprawl.

**The Direct Process For Providing Land**

We can categorize the process for providing land for urban development in two ways; direct and indirect. Each of these two processes influenced the land market in a different way. In this section we will discuss the problem of urban sprawl in reference to the Direct Process.

By the beginning of the seventies, it was a common practice for Saudi citizens, to submit an application stating their need for a plot of land on which they could build a house. As a result the applicant received a land grant, the size depending on his family size, and in the jurisdiction of the municipality in which he or she lived. Until the 1980's, it was difficult to control the process in terms of who was eligible for the grant and who was not, because of a lack of socio-economic data (e.g.income level , ownership , family size,....) also, the income criteria was dropped, as a condition to secure the grant, for a period of about five years (1969-1974). The process did not include any obligation or conditions in terms of:

- The right to sell, which implied that the grantee could sell his or her grant to another citizen if he/she wished to do so.
- No time limit for development, which means that the grantee was free to decide the time to start the development on his/her site.

Under these conditions, the land grant process produced the following results :

- Land was granted to applicants who did not have the financial means to develop the grant;

these grantees either sold their land or held it until 1974 and after, the year in which the REDF became operational.

- Land granted to applicants who had the means to build did so; these were the largest group.
- Land granted to applicants whose objective was to obtain a land grant for speculative purpose .

The first and second group actually practiced speculation by withholding land from development. A part of the first group, held the land until it secured a grant and the second group sold the grant to speculators or to other individuals who could afford development. According to professionals (Real Estate Agents) in the city of Jeddah, not more than 30% of these grant applications were made for speculative reasons. The third groups' aims were purely speculative.

Since 1979 the direct process has been restricted to limited income groups and those who do not own vacant land or a house. Also, the local municipalities have become more capable of evaluating the socio-economic of applicants conditions ( The First National Development Plan succeeded in facilitating more data in various area e.g socio-economic...) . However, 1979 time the government subdivisions for limited income groups have been located on the urban edge in areas lacking utilities and at a considerable distance from the urban centre. The reason being that most of the serviced land or land adjacent to services which had potential improvement values in the near future had been channelled to the land market by the Indirect Process( as we will see later). In the context of our discussion, the

grants which were meant to help reduce the housing problems, resulted from several reasons, the most important of them is the land availability. The applicants continued to seek land from the Indirect Process, but the majority could not afford the market price of well serviced land (utilities and community facilities) and as a result they moved to areas further out and less accessible, where land was cheaper .

Thus, the Direct Process resulted in the following:

- A Significant number of grants went to speculators.
- The grants provided after 1979 were unserviced and in no therefore condition for development ( lack of utilities...).

However, the amount of land provided by this process has been significant in terms of the total land supplied to the market .

#### The Indirect Process for Providing Land

The second process has been in operation since 1970, and involves the government in channelling land to the market through the donation of large estates to dignatories. The process comprises three identifiable steps;(1) from the time the land was granted, to the time the grantee decided to sell;(2) from the time the land was put up for sale to the time it was subdivided and sold in plots; (3) the final stage when development takes place. Since the process, imposes no restrictions in terms of timing of development and the right of sale,



each stage has been subject to personal and/ or market preferences rather than to the actual needs for land.

After securing a grant from the state, the grantee, in most cases, has attempted to sell the land within a year; however if the grant was located in a remote area, far from public improvements, the grantee withheld it until improvement became feasible. In the early 1970s, grantees used to hold on to their grant longer, because of the relatively low prices compared with the mid 1970's and onwards when prices were rising rapidly. When the grant was put on the market it always involved a second party, the real estate or the stock agencies. After subdivision approval was obtained the land was put up for sale. Based on their motives for buying land, four groups of purchasers can be identified:

1- Real Estate and/or Stock Companies, these two actors came to the market as short term investors seeking profits from the transactions and subdivision process, rather than from speculation; however, the higher rate of price increase attracted them to speculate on land for a period of time before reselling. This practice increased the period of time between the state, making the original grant and, the time the land was actually divided and channelled to the market.

2- Speculators, this group invests in the land market, by purchasing plots from new subdivisions and withholds them from the market for periods of a year to five years, in the hope of a speculative gain.

3- Part time Speculators, land speculation is not their main source of income. The number and the scale of this group practice is

phenomenal, not only in Saudi Arabia, but all over the Gulf countries. It is common practice to use land as a commodity for the purpose of saving and investment. Reasons for this behaviour are discussed in Appendix "D" but include, lack of alternative investment opportunities, fluctuation of interest rates, high rate of inflation, etc.... This group usually withheld the land for more than two years before reselling. Indeed this group has controlled most of the land available for development (especially serviced land).

4- Developers, this group is composed of those who purchase plots to build themselves houses and those who buy plots to develop for investment purposes. This group, usually, developed their land as soon as services reached the area in which their site was located.

The field survey (interview) in Northern Jeddah (Appendix "D"), conducted in one of the early subdivisions in Jeddah and one of the subdivisions which followed the Indirect Process) shows that despite the fact that the subdivisions' approvals had been granted in 1969, until today about 60% of the remaining vacant land is in the hand of speculators, who are seeking an increase in the land value. Also, the survey showed that about 90% of the developed land was owned by second and third time owners, where only 10% of first owners actually bought land for development, not for speculation. Furthermore, development had already bypassed the site, about eight miles further to the north, while the area around it is still 70% undeveloped.

Thus, the Indirect Process resulted in much speculative activity which in return resulted in withholding land from the land market.

### 8.2.3 Land Prices

There is no doubt that the country has experienced a great deal of economic growth, technological change and social change, all of them generating a great demand for urban land. Until 1973/74 land price increases were responding to general inflation. After 1974, as economic growth brought more money than people could consume on one hand and lack of new investment opportunities, on the other, land became a commodity and an investment opportunity for surplus funds. Thus, by the mid 1970's land prices reached levels much higher than the markets need afford. Consequently, developers who could not afford the land market prices for serviced land, were left with one alternative, unserviced land on the outskirts of the built-up area, causing the existing urban sprawl.

In Section 7.3.3, I discussed land appropriation and compensation and how government agreed to pay at least land market value for compensation. It is generally understood that the government intended to use this compensation as a way of distributing wealth. However, what could not be foreseen was that it would generate several side effects on future development. This process encouraged land speculators and others to push up land prices to catch up with the level of compensation. In addition, a great amount of investment went into land which speculators knew in advance had been allocated for public use. Thus, the evolving of higher compensation and consequently higher land prices....., resulted in a higher rate of land price increase.

One policy which has greatly influenced the land market is the Real Estate Development Fund. When the policy was introduced in the early 1970's, the main aim was to subsidize the high cost of construction. This device helped many middle and low income Saudis to own a house. But the free land market took advantage of the device and increased the land prices. In 1970, average cost an serviced land in the suburb of the urban areas was between 15% and 25% of the total cost of single family houses. The REDF lends the developer 75% of the cost with a maximum of SR 270,000 which implies that the total cost of a single family house for middle income families is about SR 360,000. Hence, the price of land for this type of housing should be between SR 54,000 to 90,000. The REDF loans facilitated house construction and generated a greater demand for land. However the loan increases the capability of the potential developer to pay for higher land prices , since he does not need to divide his saving between construction and cost of land by the same percentage as he did before obtaining the loan. Figure 8.1 shows how land prices dropped in 1978 as a result of a government decision to stop REDF the loan ,for six months.

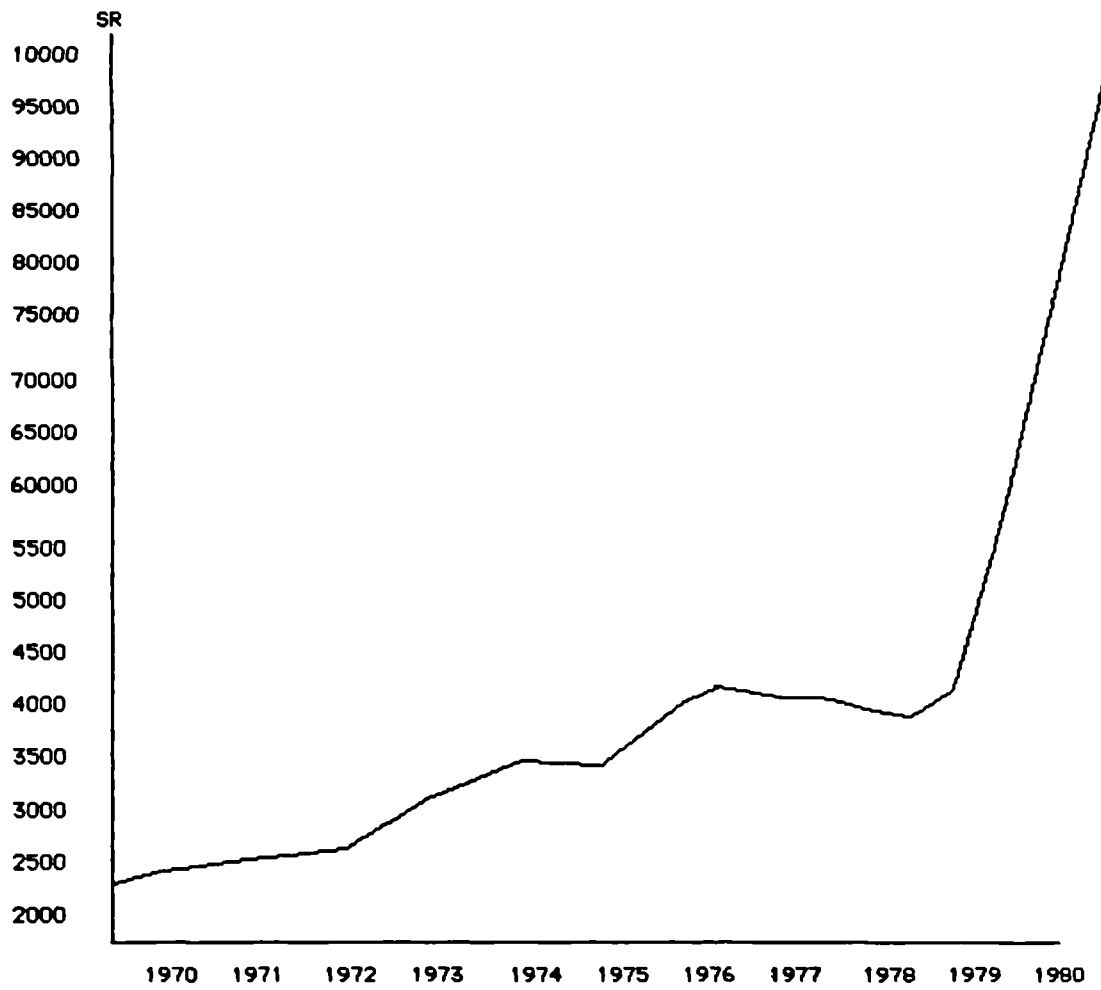
## Conclusion

In summary, government policies influences land prices in two ways:

### A. Policies Inadequacy

- Methods of compensation
- The REDF
- Land Grants

Figure 8.1 : Land Prices and REDF



Source: (a) Field survey in 1983  
(b) Jeddah Master Plan 1973, Master Directive Plan 1978  
and Action Plan Area 1982.

#### B. Lack of policies(such as)

- Land taxation policies
- Land reserve policies
- Pre-emption policies
- Purchase of development rights

Because of the high rate of land price increase and the need for accomodation e.g private housing; sprawl is likely to remain a characteristic feature of urban areas in Saudi Arabia.

#### 8.4 LAND-USE POLICIES

The second group of urban land development problems, fall under the issue of land use and land-use control (see Chapter Three). In general, the second group comprises:

- Problems of privacy which have resulted from incompatible uses and or planning by-laws and regulations.
- Problems of environmental incompatibility which have resulted from subdivision and building regulations
- Problems of traffic and parking congestion, which have resulted from non-conforming uses.
- Problems of shortages in community facilities as a result of increases in density and changes in uses.

These problems differ according to in terms of whether they have resulted from inadequate policies and/or failure in enforcing the policies. In the following paragraphs we will analyse the existing land-use policies in the context of these problems. The necessary information and data for the analysis is generated from Chapter Five.

In Chapter 3, we reviewed the issue of land-use control. In general, the techniques used fall into three basic categories: 1-Incentives, including the provision of infrastructure and services to facilitate development, as well as direct financing of the development site itself; 2-direct investment in the purchase, compulsory acquisition or nationalization of land for development; 3- restrictions, including zoning, subdivision and building controls; and management systems including the administrative procedure for the development of the later techniques as well as the enforcement of them, it also involves intergovernmental coordination of decisions affecting land-use.

### 8.3.1 Incentive Policies

The existing Incentive Policies in Saudi Arabia are limited to two policies. The REDF by which government promotes and encourages private investment for housing; and land acquisition policies, by which government takes over private land for the purpose of public uses. Policies such as land banking, pre-emptions, purchase of development rights and the provision of infrastructure working as an indirect tool for controlling urban growth, do not exist to control land-use in Saudi Arabia.

#### Land Acquisition

The Royal Decree (M65/6.11.1971) permitted local municipalities to acquire land for public use (only municipality grades "A" and "B" are allowed to practice land acquisition, in smaller grades "C" and "D" the authority of land acquisition is elevated to the hand of the regional office of Ministry of Municipalities and rural affairs) . Although the related legislation permits the local authority or government departments to acquire land or property for public use, the compensation has to be assessed at prevailing market rates.

The regulation does not specify that if the compensation is not acceptable to the affected party the property should still be acquired compulsarily. Owners' objections have to be entertained and considered sympathetically. Moreover, if the value of unacquired property decreases or increases because of the implementation of the new project, this difference has to be considered when compensation is assessed. The differential factor (whether added or deducted) should not be more than half of the properties estimated value. In practice, awards have been very close to the market value of the property. Rapid increases in land values in the Kingdom over the past few years have discouraged land acquisition for public purposes and therefore, have delayed the execution of school programmes and other facilities.

The impact of inflated sums of land compensation on urban land prices and urban sprawl has already been discussed the concern here is the impact of the existing policies on land-uses.



The simplicity and limitation of the land acquisition policies, as well as the intention of the state during the 1970's to use land compensation as a means of distributing wealth left no alternative for local authorities or government departments, except the assessment at prevailing market rates. This implies paying large sums of money in compensation, thereby limiting the activities of land acquisition for public uses. The results, in terms of land-uses, meant either postponing public facilities, reducing standards or inadequate locations.

Two types of problem resulted from the lack of adequate policies for land acquisition; one is direct and the other is indirect. The direct one, covered in the previous section, resulted in a lack of community facilities. The indirect problem is the failure of implementing density recommendations, due to the postponing of roads, parking areas and open space programmes. In high density and slum areas, the municipality failed to alleviate their over urbanization problems.

#### The Real Estate Development Fund

In Section 7.3.8 we reviewed the Real Estate Development Fund as part of the existing land development policies in Saudi Arabia. The features of the fund are a significant concern to us here. First, the fund is run by the Ministry of Finance. Second, it grants interest free and long term loans for housing construction; 75% for private loans, i.e. individual houses without any income criteria or 50% for investment loans. Third, the applicant must hold a legal title for land and a building permit from the local municipality. Fourth, for private loans, the applicant should not own another building.

The REDF is one of the most influential policies in land development. During REDF's nine month closure in 1977, development activities were affected considerably, as indicated by the fact that the permanent building permits issued during that period, in Jeddah, totaled 1,672, compared with an average of 2,432 permits per annum issued during the last five years. Approximately 6,000 loans have been granted in Jeddah between 1977 and 1980.

The REDF loans have generated a great impact on land development since their introduction in 1974. The fund has contributed to solving the problem of housing, its main objective. However, the potential of the fund has not been fully realised by the government. As to its contribution to the supply of housing, one feature has been its impact on cost. This point was discussed in the previous section, where we explained how the fund indirectly influenced the price of land. In the context of our concern, the potential of the fund has not been fully utilized, with the one exception that the REDF does not make final payment to the applicant unless the site is cleared of all construction material and debris. Coordination between the REDF and the local authority ,before granting loans, does not occur. Incorporating the REDF with land grants ensures the development on granted land, i.e. although the devise has no direct impact on land development in terms of land-use, it has not been fully utilized by government and local government.

In summary, though the opportunities and the resources exist in Saudi Arabia, incentive policies have not been fully utilized by the government. In some cases (land acquisition) inadequate incentive

policies have had a negative and or undesirable result. While, other incentive techniques e.g land bank ,pre-emption..... have not been adopted.

### 8.3.2 Restrictive Policies

These are the most influential policies to control land-use and direct private developments in a manner consistent with development plans. Three forms policy are currently practiced in Saudi Arabia: zoning, subdivision regulations and approval by government agencies. The first three provide a hierarchy of regulatory techniques covering different sizes of land areas and levels of detail. The third form will be dealt with in a different section (land development administration). In the following paragraphs I examined each form of policy, its objectives and characteristics and then evaluate its adequacy in the context of the existing urban land development problems.

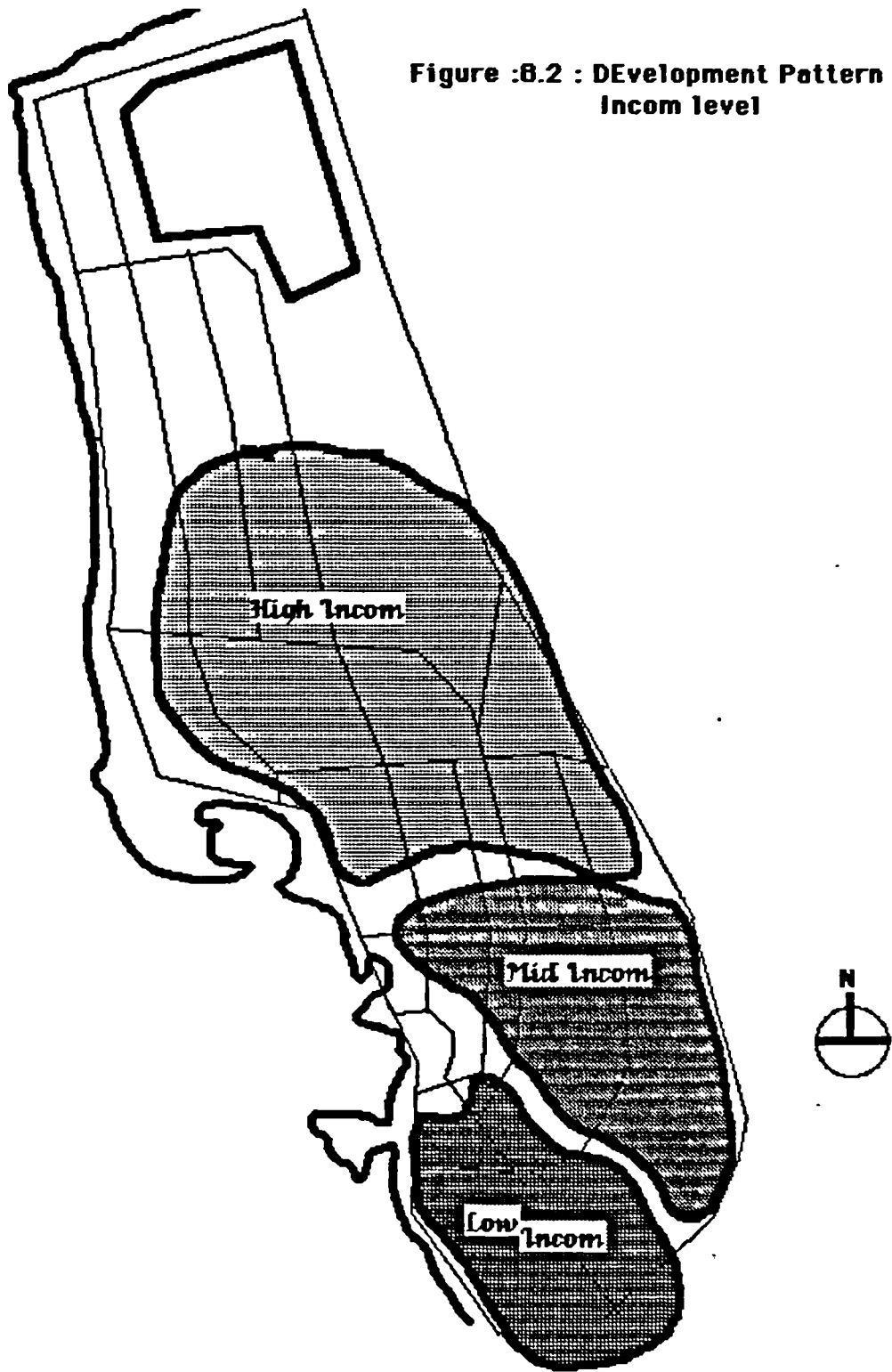
#### Urban Planning (Land-Use Planning)

Urban planning in Saudi Arabia simply refers to land-use planning. Theoretically, the terms usually refer to two things: land-use plans and land-use planning. The former has tended to be a static concept in which specific land-use is identified on a map of the community, which in turn becomes the model for guiding land-use decisions over some specific period of time. Elsewhere planning is conceived as a continuing process, where in recommendations for land-use, densities and location of uses are made and re-evaluated in view of changing needs and circumstances. The first may be applicable to an area no

longer growing, but even in this case its applicability may be questioned. Thus, concern has increased to modify the form of traditional land-use plans, especially in order to accommodate the dynamic process that influence land-uses. A further distinction is made regarding whether or not a plan itself should be binding. If the land-use plans were binding and required conformance to its recommendations, then it would be "imperative". However, if the plan serves as a guide, then it would be "indicative". Planning for land-use may be indicative when the planning authority has little power, is not directly concerned with growth, or has few tools by which to control development or to implement its recommendations. When tools exist in the absence of plans, they may well freeze patterns of land-use according to legislative intents rather than in the context of a plan. Static plans, plans without power, and tools without plans are themselves major barriers to effective land-use planning.

The Royal Decree No. 365 for Municipal and Rural Affairs Ordinance established the general frame work for urban planning. In Chapter Six - Land Development Responsibility - we reviewed the Decree as well as its applications. In general the Ordinance distinguishes between four sizes of towns. Size "A" has been delegated the power to plan and implement which implies the formulation of physical development plans, zoning, subdivision regulations, land acquisition and major land improvement programmes, as well as development plans updating zoning changes and special uses permits. Size "B" has the power of implementation only with the power to planning remaining within the central government. Size "C" and "D" have the power to control land-use according to the land-use plan which is

**Figure :8.2 : DEvelopment Pattern By  
Incom level**



prepared by the regional authority. They have no authority for zoning changes or land acquisition. In the case of plan modification, zoning changes, land acquisition and major land improvement programmes, the local authority will bring the matter to the regional authority for action.

### Zoning

Zoning is the demarcation of a city by ordinances and the establishment of regulations to govern the use of the zoned land. Saudi Arabia has adopted the conventional form of this technique without any modification. Let us look now at zoning in the context of the relevant land problems. Since the adoption of zoning in Saudi Arabia, cities and towns began developing a social segregation pattern. In the case of Jeddah, today, it is becoming very obvious that the city has been divided into a high density southern area dominated by low incomes and low density area to the north dominated by high incomes ( Figure 8.2 ). In the contemporary Saudi city, the process of relying on custom of use for the generation and control of change has been replaced by another process which relies on preconceived, prescriptive convention of pattern and forms. In the present city we have a package of zoning regulations. These regulations prescribe street widths, setback requirements, densities, building heights, lot sizes, etc. The regulations are formulated to tell people what to do whereas the traditional social conventions prescribe certain patterns of conduct. Hence, it brings to a site, in advance, certain monetary values, which in turn could prevent certain potential developers. In other words, the density policies, i.e. floor area ration, set-back, minimal lot size etc., discriminates against a

certain level of people and income. By nature and design, uclidian zoning is exclusionary. In the celebrated U.S. judicial ruling in Village of Euclid vs. Ambler Realty Co. in 1926 Justice Westerhaver recognized that the result to be accomplished of zoning is to classify the population and segregate them according to their income or situation in life. Zoning in Saudi Arabia was never intended to result in such socio-income segregation, but the kind of regulation used to implement zoning resulted in this kind of land development problem.

Zoning, as we mentioned before, is composed of complementary technical and administrative parts. If one part failed to be implemented the second part's performance will be affected. One of the main criticisms of zoning, especially in developing countries is that the implementation of its application, is sometimes intended to favour certain groups. The zoning system in Saudi Arabia is limited to the approval of planning permits; it does not include any appealing procedures to an independant agency and the only way to appeal is to the higher official rank in the same government agencies where the original application has been refused (the system of processing of applications for planning permission is discussed in Section 8.4 ). This situation has left the system open to failure and mis-use . The second weakness in the system is, although local government is required to prepare a zoning map (land-use official map) which should designate land for various activities and although they have general authority to regulate land-use, this is specifically restricted to land subdivisions and regulations of building and road construction. For example the Municipality cannot and do not control commercial and office development in residential areas. Moreover, there is no

regulation which can help the Municipalities to enforce the above regulations. As a result most urban areas are suffering from incompatible uses. In the case of Jeddah, a survey by the municipality in 1980 shows that 8% of the residential buildings are occupied by offices and commercial activities. Resulting in traffic congestion, hazards and lack of safety for the neighbouring residents. Also, failure of one of the most important cultural features, privacy.

In summary, existing zoning policies have generated two different kinds of problems in terms of causes. The first group resulted directly from the implementation of zoning policies, where the second group resulted from the failure of implementing the zoning policies. The zoning policies in Saudi Arabia have been adopted without any modifications as far as implementation techniques and administrative system. The administrative procedures of these methods lack the enforcement tools and the appeals procedure normally associated with the zoning.

### Zoning Regulation

Zoning is a hierarchical regulatory technique. The zoning plan divides the city into different zones in terms of use and density in each of them. Zoning regulations ensure that each site is conforming with the use and density of its zone conditions. These regulations, in Saudi Arabia, specify the minimum plot size, maximum permissible number of floors and setbacks.



In the case of Jeddah, the analysis of existing conditions shows several land development problems, which result directly from the implementation of the above techniques. These are:

- Lack of privacy;
- Social injustice and;
- Conflict with physical and climatic conditions.

In the previous sub-section I discussed the second conflict, resulting from the adoption of zoning. The concern here is to examine the lack of privacy and the physical and climatic conditions of the existing policies. For the purpose of this section its important to recall the following conclusions.

- Saudi Development Plans regarded the maintaining and sustaining Islamic culture as the main goal of its economical, social and physical policies.
- An important feature of Islamic culture is individual privacy. The privacy of families must be safeguarded. The overlooking of private spaces must be minimized. Community facilities for the use of women, such as girls' schools must be located withtotally separate pedestrain access.
- Saudi Arabia, located in a hot arid zone, imposes certain features and constraints on the physical pattern. These guidances and features should be reflected in the land development policies. In summary, these are

1) Reducing Solar Gain

2) Shade and Shadow utilisation.

### 3) Air Movement(capturing of preferred wind)

The zoning regulations have been examined in this context. The following are the concluding points of the examination.

#### Conflicts Regarding The Minimum Lot Size, The Minimum Floor Area, And The Types Of Use

Minimum lot size has traditionally been used to regulate density and to preserve the character of neighbourhoods. One of the reasons invoked for maintaining certain densities in a neighbourhood is to alleviate the problems arising from the inadequacy of public water, sewer and other facilities, so that a large minimum lot size is claimed to be a measure to protect public health. Another argument for enforced minimum lot size is the need to protect the community's tax base through the preservation of high value neighborhoods. Underlying such arguments, however, there appears, historically, to have been an equally strong, though unvoiced, consideration in the minds of both municipal officials and community inhabitants, namely, to exclude certain undesirable people from these communities. Certainly, one of the most effective devices to achieve this purpose has been the establishment of a large minimum standard for lot sizes.

The practice of establishing minimum lot sizes developed comitantly with zoning. In the United States, the practice was upheld by the courts, though lower courts and dissenting judges continuously expressed doubts about its validity as early as the 1920's. As we saw in the case of *Euclid vs. Ambler*, a lower court in 1924 ruled that the

village's zoning ordinance, which established with both minimum lot and floor areas, was invalid since it resulted in classifying and segregating the population according to income and life situation. By upholding the constitutionality of the ordinance, however, the Supreme Court in effect encouraged communities, especially suburbs, to develop large minimum-lot area standards that resulted in the exclusion of lower income families.

Minimum floor area standards are usually justified on the grounds that they promote the general welfare of the community by protecting its character. *But again, in the U.S., they have often been used as a device to enforce segregation by excluding lower income groups from certain areas.* The ordinance of Wayne Township, New Jersey, which established minimum sizes for dwellings throughout the town, is a good example in this respect. When the ordinance's constitutionality was tested in court, it had been rejected on the ground that it discriminated between people regarding their income level.

District zoning according to type of use has also been used as a measure to exclude undesirable activities and people from particular areas. In American cities, such provisions have been instrumental in excluding public housing projects for low-income groups from areas dominated by white middle-income families. The case of public housing in Chicago is a good example. Of the 51 public housing sites chosen in Chicago between 1950 and 1969, only two were in white areas, the remainder being predominantly black. The case exemplifies the strong opposition by Aldermen to locating such projects in areas dominated by whites; according to the plaintiffs in court suits brought against such decisions, the reasoning of the municipal

authorities in clearly based on the fact that the prospective inhabitants of such projects are expected to be blacks.

Yet, Saudi zoning regulations have ignored the American experience and adopted the traditional zoning regulations without any modifications in its general framework, to suit the conditions of Saudi Arabia. Furthermore, they are in conflict with the Development Plans of those areas where these regulations have been introduced. The minimum lot size standards introduced by Jeddah Master Directive Plan divided the city into two parts. North of the old city, the minimum sizes start with 400 square metres and up, while in the old city and in the southern part, the minimum sizes ranges from between 150 sq. metres to 250 sq. metres. Thus, the north becomes preferred by high and middle income groups. Where people with limited incomes and low incomes inhabit the southern parts. However, part of Makkah Road-Kilo 2 to 5-despite the traditional growth in absence of zoning regulations, people with limited and low incomes who came to areas where originally inhabited by only high income, lived side by side with high and middle income groups; another example is the low income neighbourhoods that developed directly on the eastern edge of the Royal palaces and some high income villas. Such mixing of income groups follows a centuries old tradition in Arab-Muslim cities. Neighbourhoods were never based on income, but on place of origin, ethnic backgrounds, or religious beliefs, so that people in these neighbourhoods, some with vast incomes and therefore, large and sometimes palatial homes and others with very limited incomes and therefore, small modest houses, lined side by side one with another.

## Setback Regulations

Setbacks and building line requirements were developed in modern times to alleviate overcrowding, to avoid fire hazards and to protect public health by providing light and air to all inhabitants. The concept of having an unbuilt space around buildings that is mandated by law first appeared in London's Building Act in 1844. According to the Act, a minimum amount of 100 sq. feet was required for private homes, though no stipulations were made with respect to width. Setback requirements were also first introduced in London with the Building Act of 1894. In this Act, working-class dwellings were required to be setback so as to increase the width of the street to the same distance as the height of the building.

Other reasons for the development of setback and building line requirements by modern zoning in the West have been quicker to anticipate future street widening or to accommodate aesthetic interest. The justification for setback requirements by zoning has always been based on the contention that the assurance of large open space between rows of residence promotes public health, safety, morals and general welfare.

Even this cursory examination should make it clear that the context in which setback requirements developed in the West differs markedly from the context of Saudi Arabian cities. These clearly have a different cultural tradition and different climatic conditions. From a cultural point of view, visual privacy has been a comparatively unimportant issue in Western culture, while in Arab-Muslim culture it is a uniquely important issue. The introduction of setbacks which

allow for the opening of windows and therefore, the constant violation of privacy inhibits the full use of a property by its owner in an Arab-Muslim city; in a Western city, this is an accepted cultural norm.

From the point of view of climate, front, side and rear yards are an enjoyable space to have in a Western city. With abundant amounts of water and a moderate exposure to sunlight, it is easy to maintain and use, while in an arid hot city such an open space is almost impossible to maintain and, therefore, to fully utilize, if it can be used at all.

When the Roads and Buildings Statute first introduced the setback concept in Saudi Arabia, it implied the need to meet future street widening. One assumes that the new regulations proposed by SCET International, which established front setback requirements, are also intended to meet this need, though in this case it is very clear that aesthetic values are also at work. On the other hand, there appears to be little justification for the setback regulations, especially the side and rear setbacks, which developed in the 1960's and were confirmed by the Development Plan for Jeddah in the 1970's. These were introduced in residential areas with very large lot sizes and therefore, the possibility of overcrowding or even of a high density simply could not exist. Also, such factors could have been controlled through other means, that is, percentage of lot coverage, floor area ratios, etc. The only purpose for these requirements seems to have been to ensure the development of a certain dwelling type, the villa. Perhaps another intended purpose was aesthetic, that is, to maintain an even alignment of buildings, and thereby to preserve the landscape and presumably improve the general appearance of the street. If this

was the intention, as it usually is in a Western city, then it is clear that the whole issue of differences in cultural contexts was glossed over by the promoters of these regulations. Instead of the expected result of wide streets with an open view and green gardens on both sides, Jeddah as well as other cities, has a different outcome: the fence wall on both sides of the street. What the setback requirements actually introduced was a new life-style, based on the conception of outdoor living as opposed to the notion of the family and an inwardlooking unit. This style of living has been rejected in Saudi Arabia, first through fence walls around houses, and later through other measures that assured the protection of visual privacy.

Thus, setback regulations not only ignored traditions and culture, but also ignored the climatic conditions of the country. Figures 4.4-8 show the importance in arid hot climates of developing certain features and patterns to reduce the harshness of the climate. The setback regulations have failed to conform with this condition. The side, front and rear setbacks have resulted in the following:

- Preventing courtyards by reducing the buildable area.
- Increasing solar gain.
- Uncompact urban layout.
- Lack of natural shading and shadow features.

#### The Role Of Eminent Domain

Eminent Domain, the right of a government to take or to authorize the taking, with just compensation of private property for public use, has been used in modern times to ensure the implementation of master plans. This subject will be evaluated, as part of zoning regulations

when existing policies are evaluated in terms of their consistence with the Sharia values in Section 8.7 .

### Summary

Zoning and zoning regulations have influenced urban growth since their adoption in the early 1960's. Recently zoning became very effective in controlling many aspects of land development. However, it brought many negative changes to the urban pattern. These problems resulted either from the failure in enforcing some of the zoning policies or from the actual enforcement of these policies. The former, resulted in incompatible uses; where local authority failed to enforce uses in their relevant zones. The problems which resulted from the enforcement of zoning policies can be classified into two groups:

- Problems resulting from the lack of cultural consideration in zoning regulations.
- Problems resulting from the lack of environmental consideration in zoning regulations.
- Problems of social injustice.

Where the first two sets of problems resulted directly from the zoning regulation, the third group of problems resulted from the actual approach, i.e. density.

### Subdivision Regulations

As mentioned earlier, zoning regulations have found widespread acceptance as a means for providing public control over land development. Similarly, subdivision regulations which prescribe the



minimum requirements to be met by developments on the fringe of urban areas have been widely implemented as a means of ensuring that new developments will meet certain acceptable design standards.

In Chapter Three we reviewed the theory of subdivision regulations. In general, subdivision regulations govern the development of raw land for residential or other purposes. They prescribe standards for lot sizes and layout, street improvements, procedures for dedicating private land to public purposes and other requirements in far more detail than in the zoning plan.

Once the subdivision is divided into lots, the street pattern of a neighbourhood is established together with the distribution of public facilities and land-uses etc. Subdivision can also contribute to orderly land development by controlling the timing of development. The local authority can forbid subdivision in areas where development is not desirable as not planned. Furthermore, the timing of subdivisions can be coordinated with the planned development of infrastructure and public facilities.

Subdivision regulations were introduced into Saudi Arabia in the late 1960's, when the Direct Process of providing land to limited income groups was begun. Today, it is an established practice in Saudi Arabia that no one can sell land in lots unless it has an approved subdivision, and that no building can be erected unless it has building permit from the local municipality.

On acquiring a large parcel of land (through a purchase or receiving a grant from the King), the owner applies to the local municipality within which the land is located, for a municipality designed subdivision or submits his own plan for approval. The Municipality (central planning and General Building Departments) does not charge the applicant for the design or planning of such services. In assessing the application, there is little or no apparent consideration given to the availability of infrastructure, or the preferred direction development according to the master plan of the city.

In Jeddah, subdivision approvals have been granted to applicants since the 1970's without any consideration of the availability of utilities and public facilities. In Figure 8.3 we can see that the area from Palestine Road north to the Sharm has been developed by a process of subdividing and subdivision regulations. Only one half of this area has any utilities and public facilities and even here provision is incomplete. Yet, the whole area already has subdivision approvals. Also, since 1982, the area around the Cement Factory has witnessed scattered development that is completely lacking in utilities or public facilities.

In Section 8.2.1 the phenomenon of urban sprawl was discussed. It was noted there that the situation where land grants do not have a time limit for development, has been a contributory factor in allowing sprawl. Similarly subdivision approval, does not include any mechanism to prevent speculation. That is why in Jeddah large subdivisions with paved roads and some times utilities remain vacant, without penalty to the owner.

In general, there are no specific regulations that govern subdivisions; however, 34-40% of land is retained or allocated for public uses (i.e. roads, schools, gardens, etc.). The subdivision owner is not paid for land being acquired for public uses other than for schools which is compensated by the education authorities.

The Planning By-Laws provide the general steps required for a subdivision approval as well as the technical conditions and standards. This part lays down the general and specific requirements which shall be incorporated in residential and non-residential land subdivisions. These include:

- 1) Desirable size of land parcel for subdivision.
- 2) Land suitability.
- 3) Integration with environs.
- 4) Conformity with land-use and zoning.
- 5) Linkage with urban network including roads and utility lines.
- 6) Access control and roads.
- 7) Density computation.
- 8) Land-use allocation and disposition of facility area.
- 9) Land reservation/dedication.
- 10) Plotting and minimum plot size.
- 11) Public utilities.

#### 8.4 The Intergovernmental Coordination

The physical planning function of Saudi Arabian municipalities has traditionally been subservient to higher administrative levels. The Ministry of Municipal and Rural Affairs (MRA) and its Branch Planning

and Engineering Affairs departments are located in Regional capitals. It is the responsibility of the Ministries' Undersecretariat for Town Planning to initiate the preparation of local plans, supervise their development in accordance with national standards, and to approve their implementation following a review by the municipal council; the case is different for class "A" where development plans are prepared by the municipality and then sent to the municipal council for approval. Once adopted, master plans are binding and the development regulations they contain are to be strictly adhered to by the municipalities.

There are four cities in Saudi Arabia classified as class "A" municipalities - Jeddah, Makkah, Riyadh, and Medina. Each one of these municipalities already has their own development plan, prepared by their Town Planning Department and approved by the Ministries Cabinet, in addition they have the power to develop and amend their development contracts and other by-laws. In each city there are branches for various ministries to assess the development of their plans. An example being, the city of Jeddah, there are nine branches of various ministries. Each ministry, through its branch, implements its plans for the area as well as generating the necessary data for monitoring and developing its implementation plan:

- \* Ministry of Housing - concerned with local housing projects.
- \* Ministry of Education - concerned with teaching and school construction.
- \* Ministry of Health - concerned with health care and hospitals.

- \* Ministry of Communication - concerned with telephone and post office construction, etc.
- \* Ministry of Transportation - concerned with highway construction.
- \* Ministry of Agriculture - concerned with water supply.
- \* Ministry of Municipal and Rural Affairs - concerned with sewer construction, water piping, urban and regional planning and other municipal services (see Chapter 6).
- \* Ministry of Finance - concerned with the REDF.

Once the development plans (Directive Master Plan, Executional Plans, Action Area Plans, Zoning Plans) receives approval, it moves, to the second stage - implementation and monitoring. Four departments and committees work to supervise and control the overall process.

**Planning Coordination Committee:** this committee focuses its activities on long range planning, including action and execution plans, and ensures co-ordination with other ministries and departments engaged in the task of development within the Master Directive Plan.

**Development Coordination Committee:** this committee would focus its attention to tasks relating to implementation including inter-ministry/departmental coordination and overall development control. The Mayor, as the chief executive of the City Municipality, or Deputy Mayor, is the chairman of this committee.

Development Control SubCommittee: a sub-committee, comprising the Deputy Mayor for Technical Affairs, Vice Mayor of Municipal Affairs, Vice Mayor for Administration, Director of the City Planning and Development Department, Director of Lands, Director of Municipal Services, and two nominated members from professional bodies formed to advise on matters relative to development control. This sub-committee also includes the Assistant Mayors of the local municipalities. This committee should process special cases and cases of appeal. This committee may be designated as the "Development Control Sub-committee" and have the Director of the City Planning and Development Department.

The Planning and Development Department provides the necessary technical support in the overall planning process. The functions of the PDD includes:

- Preparation of activities and execution of plans.
- Phasing and programming of developments.
- Monitoring and revision of plans.
- Rendering ad hoc advice on development control, e.g. planning permission, etc.
- Conducting special studies and liaison with agencies general public.

Within these sub-committees development plans strategies, policies and ideas for coordination are exchanged between the municipalities and the various ministries' branches. Thus, theoretically, urban areas within the jurisdiction of class "A" municipalities do not lack the proper organizational system to implement plans. However,

within this well structured system, there are major signs of a lack of coordination between the municipality and other governmental agencies in the area (example: Jeddah Housing, Rush Project). The lack of coordination at the local level takes various forms:

- in terms of project timing where an area could be developed if it had the required services - schools, mosques or sufficient services without the necessary support population.
- in terms of location, where a government agent developed a project in an unsuitable area contrarary to the objectives of the municipality; e.g. the Housing Project in Jeddah.

However, inter-departmental cocrdination is improving rapidly according to officials in Jeddah and Makkah . They argue that current problems are the result of poor coordination in the past, before the adoption of the new system of coordinating committees.

The general analysis of the administrative system and the examination of land development in Jeddah and other major , class "A" municipalities , can be concluded as follows:

1. The existing shortages in public services, in terms of the existing system, result from the lack of coordination. Even though the administrative structure includes a committee to coordinate the work of various government agencies which involved in the physical development of the city, the municipality does not have an obligatory

rule in this committee. In other words the municipality cannot enforce its policy on the other government agencies in the committee. For example, the Rush Housing Project in Jeddah, despite the objection of the Municipality to the location and the size of the project, the Ministry of Housing carried through the implementation of the project on the original site.

2. Nonconforming uses also result from the lack of coordination between the Municipality and government agencies. For example, the Ministry of Trade approve an application for practicing business in an area without consulting the Municipality on whether or not the area is suitable for office use.

3. Since 1979 the administrative system has been improving in class "A" municipalities due to the delegation of authority which has been granted to this class by the Royal Decree of 1979.

The case is different in class "B" , "C" and "D", we will focus on the city of Yanbu as an example of these classes. In this class the policy making function is vested in a Regional High Planning Committee within the MRA composed of the provincial Governor, the provincial Director General of Municipal and Rural Affairs, local notables and representatives of ministries. Its responsibilities include reviewing draft master plans and recommending action by the High Planning Committee; approving all local action area plans, public projects and large subdivisions proposed by or submitted to the municipalities; and identifying significant or controversial planning issues to be referred to the High Planning Committee.



The municipalities' principal planning responsibilities involve: public improvement projects, building permits, preventing encroachment on the Municipality's property, and land surveys. All revisions to an approved MRA plan must be submitted to the Regional Planning Subcommittee for review, approved by the Regional High Planning Committee, and forwarded to MRA for final approval.

Initiating specific public projects included in the master plan involves similar hierarchical review. It is the responsibility of the chief municipal executive, at the regional level, and his Technical Services Department to prepare an annual list of projects, including the acquisition of land and the construction of roads, utilities and public facilities. The designation of projects as well as their specific locations must be compatible with the master plan. However, if the project involves a line ministry (for example, the Ministry of Education) ministerial concurrence must be obtained before local action is initiated. Municipal responsibility is limited to providing the site for the project. Proposed projects are submitted to the Municipal Council for an advisory opinion and forwarded to the Regional Planning Subcommittee.

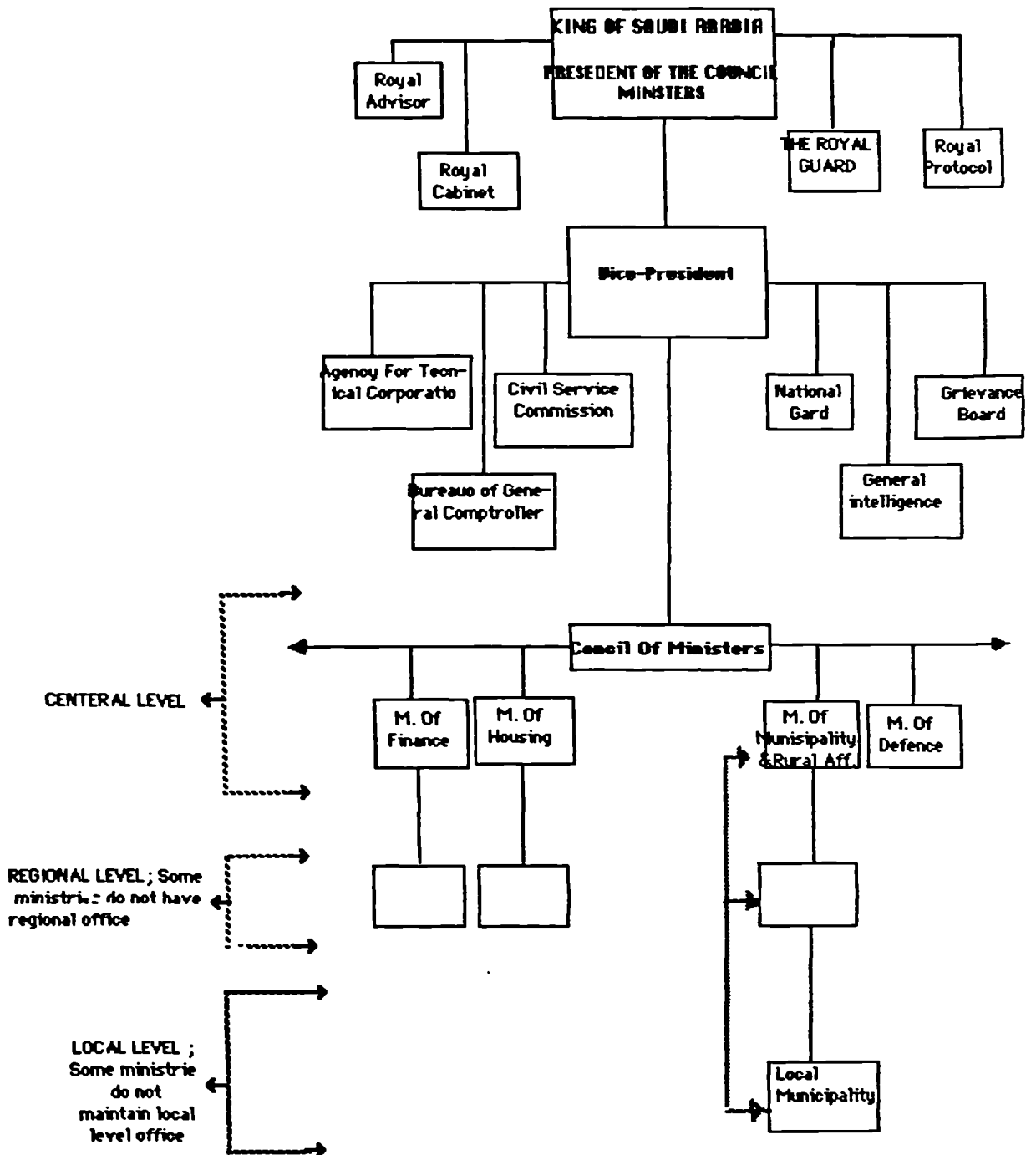
Figures 8.3 show the administrative hierarchy and the decision making process in Yanbu, as an example for class "D".

We can conclude from the diagram, that generally, the decision making process is in the hands of the regional office. Any attempted coordination at the local level may be out of date or sometimes lacks commitment by the time it reaches the regional office. The following is a diagnosis of the systems problems and capabilities.

The analysis of the present organizational structure of Government Ministries and agencies in Yanbu indicate a number of interrelated problems, which severely affect their capabilities. Different Ministries have developed their own administrative structures to tackle their particular responsibilities. No common structural format exists, apart from that of a general hierarchical organization, and this has led to different levels of delegation within each Ministry. However, in general, relatively little power, authority or responsibility is delegated, especially below the regional level and in consequence local offices face a complex, slow and bureaucratic decision making process. This means that the morale at the local level is generally low, and that the regional (Medina/Jeddah and national Riyadh) offices of the various agencies are frequently not aware of and hence not responsive to the interest and aspirations of local residents. In addition, project implementation is slow, and can be out of date by the time a particular scheme is completed.

As well as the problems of internal coordination inherent within each Ministry, the external coordination between them, essential to the efficient provision of social services and facilities are virtually non-existent. Some official channels exist, for example, the Amir-Governor, but local officials generally have little or no power, and are therefore, unable to respond to the issues raised. They can of course send back requests to their respective Ministries, but the internal coordination problem tends to minimize any advantages gained. Thus, in general, whatever official channels do exist, are not capable of tackling coordination problems in any comprehensive manner.

Figure 8.3. : Government Structure



Informal channels, which obviously do exist at the local level, are equally incapable of ensuring efficient on-going coordination.

In common with the rest of the Kingdom, the region has experienced high economic growth rates in recent years and this has created its own problems. It has placed a greater demand on already over used existing services and facilities, and it has allowed less time for the various agencies to resolve their operational problems. Furthermore, it has placed a great demand upon construction activities in agencies whose main duties concern operation and maintenance. This growth and the pressures it has created has overwhelmed the capabilities of the existing agencies, who could probably cope with a more normal situation.

Finally, a special situation occurred in Yanbu sub-region, which left the future growth of the sub-region in doubt. The establishment of an independent government agency, in the form of the Royal Commission for Yanbu, has brought to the region an imbalanced growth which could result in the deterioration of the existing urban and rural areas around it. The independence of the Royal Commission from other government agencies in the sub-region, including Yanbu municipality, inevitably means there is no opportunity for coordination.

In conclusion, since the adoption of the new organizational structure the administrative system has witnessed a great improvement. However, the remaining problem in relation to the administrative process is that the Steering Committee's decisions are not binding on

its members (only an advisory role) which weakens its role of coordinating implementation.

The case, however, is different in small cities and towns where the inter-ministerial branches with relatively little power, authority or responsibility is delegated to them; where the implementation responsibilities and decision making remained in the hands of the regional office of each Ministry and the central government. In addition, at the regional office the coordination process does not, almost, exist because of several reasons e.g each ministry has its hierarchial structure which in some cases does not contain regional offices.

#### 8.5 Development Control Administration

In the previous subsection we looked at the problems of land development in terms of the intergovernmental administrative coordination. In this subsection I will examine the existing problems of land development in the context of zoning administration and other specialized municipal units in land development control. The examination looks at two categories of municipality, class "A" and classes "B,C, and D".

In this Section the aim is to review and evaluate the existing zoning administration in relation to the problems of land development.

The effectiveness of zoning is predicated not only on a sound zoning ordinance, but also upon sound zoning administration. Zoning regulations which are poorly administered may render a good zoning

ordinance inert and destroy the public confidence in zoning. Zoning administration must be carefully coordinated with administration of building codes, construction codes, subdivision regulations, and other government controls that affect the use and occupancy of land and building.

Theoretically, there are four main aspects of zoning administration. These are the day-to-day enforcement of controls, the hearing of appeals for special exceptions to be made in individual cases, the procedure for amending the regulations or the district boundaries shown on the zoning map, and the scope for judicial review of administration action.

Firstly, I will look at class "A" municipalities by examining Jeddah. At present development in the Jeddah Municipal Area is controlled by eight local municipalities. Each local municipality is headed by an Assistant Mayor. These local municipalities are branches of the main Municipality which has the Mayor as its chairman. The Jeddah Planning and Development Department, besides being responsible for the preparation of the Jeddah Action Master Plans, renders advisory and ad hoc services on matters relating to planning and development control. The existing system of development control relates principally to subdivisions, building permits, land acquisition and land survey.

#### Issue Of Building Permits

Applications for building permits (temporary or permanent construction) are submitted to the relevant Municipality which usually forwards the applications to the Planning and General

Buildings Department of Jeddah Municipality, or it may decide the case itself depending upon the nature of the proposed development. Each application is evaluated according to the guidelines laid down by the Steering Committee. These conditions include:

- a) zoning
- b) building regulations.

A building permit is not normally issued for a plot of less than 200 sq. m.; this issue was considered in Section .

The enforcement of the above conditions is seen to be improving, however, the existing inadequacy is due to a shortage of skilled manpower and absence of legislative support. The permission granted by the planning and General Buildings Department or other Municipalities, is similar to an outline planning permission only. Detailed proposals for the design of a building or a group of buildings/or a complex is submitted to the Permit Section of the concerned Municipality .

The Planning and General Buildings Department of the Municipality is improving its capability to discourage non-conforming uses. However, the relatively limited successes relate to warehousing, industry and car repair garages in residential areas. So far the system has failed to control other non-residential uses within residential areas.

Appeals, in the Western world (e.g. U.K, U.S.A.) an independent appeal boards are usually limited to hearing appeals from decisions or interpretations of enforcement officials, and granting 'variances'

whereby an individual is permitted to exceed the restrictions laid down in the zoning ordinance. However, the system also includes a Review, where the citizen may appeal to the courts against any administrative or legislative action on a point of law (constitutional or otherwise), or on grounds that the action was arbitrary, capricious, oppressive, or unreasonable or represents an abuse of authority.

In the case of Saudi Arabia, the appeals process is limited to the Development Control Sub-Committee. It comprises the Deputy Mayor for Technical Affairs, Vice Mayor of Municipal Affairs, Vice Mayor for Administration, Director of the City Planning and Development Department, Director of Lands, Director of Municipal Services and two nominated members from professional bodies is formed to advise on matters relative to development control. In cases of disagreement between the citizen and the sub-committee, there are no specialized courts to review the cases, and the citizen may take his case to the governor of the province.

#### Problems Of Non-Conforming Uses

The analysis of Jeddah shows that since the adoption of the Master Directive Plan, it is now almost impossible for anyone to develop a site without a development permit; also cases of illegal occupancy, encroachment and violation of building regulations have almost stopped. Officials in Makkah and Jeddah Municipalities confirm that the enforcement of zoning and building regulations has been improving since the adoption of the current Master Plan. They attribute the improvement in enforcement to an increase in skilled manpower. However, they confirm the outcome of the case study analysis of



Jeddah that a significant portion of residential areas are still under non-residential uses and the Municipality cannot and do not control commercial and office development in residential areas. Moreover, there is no legislation which help the Municipalities in enforcement of the above regulations. In 1979, the consultant reported that about 8% of the residential floor area in Jeddah was in non-residential use. This figure has doubled since that time. The Al-Sharafia area shows that almost 40% of its residential buildings are in non-residential use.

The existing administrative system operated by the municipality is failing to enforce density regulations due to a lack of legislation which inables the Municipality to control the density and the lack of skilled manpower. Two reasons lead to non-conforming density. The first is the result of the changes of use, as in the case of Makkah Road Area, where a residential structure is occupied as offices. The second is an intensification of use by the conversion of single-family units to multi-family occupation. As a result of the great shortage in housing, especially during the 1970's and early 1980's, many single-family housing units have been physically converted to multi-family units without the approval of the municipality; since these units were originally designed to accommodate more that one family.

#### Zoning Administration In Classes "B,C, and D"

Generally, these three classes of municipality have the same problems as class "A"; any differences relate to the scale of problems and the causes. Many problems in B, C, & D municipalities had already

been resolved in class "A" following the implementation of the 1979 municipal ordinance.

Again, we look at the city of Yanbu to examine the zoning administration. The local municipality has the power to approve or refuse building permits, however, in the case of refusal or any modification to the zoning and/or building regulations the local authority has to send the matter to the regional authorities. All planning aspects associate with development control are at the regional level with little or no coordination with local levels on the basis of day-to-day administration. In general they experience the same problems of "A" municipalities, but on a larger scale.

#### Summary

1-Though the municipality enforces the building regulations byelaws, it has not been able to control land-use or use of buildings. This is supported by the fact that in Jeddah in 1978, 18% of residential floor area was in non-residential uses.

2-Municipalities have not been able to enforce zoning regulations in respect of density, buildings and parking provisions. This failure to enforce zoning regulations has not only resulted in a lop-sided structure but has intensified violations of the byelaws and encouraged encroachment.

3-According to municipality officials there has been a general shortage of suitably trained personnel to effect policies, implementation of programmes and enforcement of regulations.

4-The lack of coordination between government departments and municipalities contributes to the problems of land development - shortages in public facilities, density and non-conforming uses.

## 8.6 THE SHARIA VIEWS PERTAINING TO THE EXISTING POLICIES

The fact that Islam dominates all aspects of life in Saudi Arabia - its political institutions, social-philosophy, and its economic organizations - makes the evaluation of the existing policies against the Sharia a complementary process in the evaluation of land development policies in Saudi Arabia. Therefore, in this section the same policies will be tested against the pertinent values and teachings of the Sharia.

This section will evaluate four land policy issues in the context of the Sharia. The first issue is land tenure and the system of providing land for development. The second issue is the system and policies relating to the land market. The third issue is land-use control - zoning - sub-division, and the final issue is land expropriation.

### 8.61 Land Tenure

In Chapter Four we discussed the views of Sharia pertaining to land tenure. It can be concluded from Section 4.2 and 4.3 that land ownership in Islam is governed by the following principles:

#### 1) Right to Ownership

- Islam accepts both public and private ownership rights.
- All land, if not privately owned is owned by the state.

## 2) Exemption

- Property that is by nature for public use such as places of worship, roads, rivers, public open space, etc.
- Minerals, oil, etc.
- Properties of which the title reverts to the state from individuals (Waqf).

From the above it can be said that the existing system of land tenure in Saudi Arabia (Section 4.2) reflects and respects the above principles of the Sharia. However, the same cannot be said concerning the process of land provision and the associated changes of tenure. The evaluation of the Direct and the Indirect process in providing land produces several results which are in conflict with the Islamic Sharia. These points of conflict are:

- No controls regarding the grantee's right to sell; and
- No controls regarding the time span that the grant may remain undeveloped.

The process of providing land, encourages excessive land speculation, which is in direct conflict with the values of Islamic Sharia. The Direct process results in three different groups of grantee's. The first group lack the financial means to develop the grant; and either sell the land or hold it until becoming financially capable of development. These two actions by this group contradict the second principle of individual rights pertaining to land - "The exercise of a right is considered illegal if such an exercise results in an excessive harm or injury". The unrestrictive conditions of the grant in terms of the period in which the grant can remain undeveloped, opened the

process to abuse. Many applicants succeeded in obtaining grants even though they are financially incapable of developing the land. Such behaviour has prevented, or at least limited, those who have the financial means for development, but do not have the land. Also, by permitting grantees the right of sale, the process encourages speculative actions which by nature are in conflict with the Sharia.

The Indirect process, which starts with a large estate grant to a dignitary, shares the same points of conflict with the Direct process. This process (Iqt'a - Donation) is not new in the Islamic Society. Ziaul Haque, in his thorough analysis of land grants, concludes that the Holy Prophet and the early Caliphas, in particular, granted 'iqtas', but only on a limited scale and only from an 'ownerless' land (see Section 4.3). Briefly, the principles that govern land donations are:

- Donation of ownerless land for active use.
- Donated land should be utilized during a pre-set time (for three years as the Second Calipha Omer permits)
- Donation can only be made from land over which the doner has the right of gift.
- Donation should safeguard the interests of both the rich and the poor : the community as a whole.

If we measure the existing donation policies (Indirect Process) against the above principles, we find it contradicts with some of them. The first contradiction is that most donated estates have not been utilized by the grantee, but rather sold. The second contradiction is that the grantee can withhold the grant from development indefinitely. The third contradiction is that the grant, usually, passes to speculation. In addition the Indirect process, in

general, has not maintained one of the main values (Maqsid - intention) of the Sharia - The community is responsible for the preparation of the individual to fulfil his individual collective obligations and the community, represented by he who is in authority, must enforce the fulfillment of such obligations. The absence of some of the necessary restrictive measures to control the grantee's rights has led to the abuse of the original intention of the grant, but the authority is in contradiction with the above principle.

The intention and the objective of the land provision process is to enable every citizen to have a plot where he can build his shelter and although these notions and methods do not contradict with the Sharia, the absence of measures to control the procedure and the rights of the grantee result in several conflicts with the Sharia.

#### 8.6.2 Land Price Control

A general review of land prices in Saudi Arabia over the last ten years shows an astronomical increase. The rate of increase in land prices exceeded, by far, the inflation rate and growth in the per capita GNP. In some areas the rate of increase reached 1000%, keeping in mind land can not be treated as a commodity, ordinary assets (see Section 2.4.3), the land price becomes an important factor in the life of the individual as well as the community.

In Section 4.4 the Sharia views in relation to the issue of land price controls were discussed. Although, price controls, in general, are not permissible in the Sharia, Imam Ibn Tymiya stated that tas'ir (price control) can be resorted to if there are artificial obstructions, i.e.

land speculation. Also, from the general analogy in the concept of abusement of rights we can state that the excessive uncontrolled increase in land prices results in excessive harm and injury to the community. This is considered by the jurists an abusement of rights, and therefore, permits the authority to take over such rights and regulate the price of land.

The absence of land price policies in Saudi Arabia, therefore, imposes social costs on the community as whole which are inconsistent with Sharia values requiring intervention by the authorities if an individual's rights could bring harm and injury to the community.

### 8.6.3 Land-Use Control

From reviewing the jurists and judges views on the issues of land-use controls, and from the discussion of the traditional Islamic physical environment (see Section 4.5) we can conclude the following:

1- The Traditional Islamic physical environment contained evidence of land-use segregation in terms of nuisance control.

2- The concepts of harm and injury have been decisive in determining the location of various uses and in separating them from residential areas. The same concepts have influenced the urban form.

3- All the rules and regulations controlling the individual and the community were based on the principle that 'the community is the end and aim of the individual's activity, and is the limit at which the individual's activity ends. Within this communal framework individuals have complete freedom of action.

4- The exercise of a right should not bring harm or injury to others or it is considered illegal.

5- The Islamic physical environment is a place of religion, therefore, it should facilitate the practice of it (eg. Mosques' location) and it should reflect its values and culture (eg. privacy).

The above points are the evaluation criteria against which the existing policies in Saudi Arabia will be measured.

Section 8.4 discussed the evolution of zoning in Saudi Arabia as a technique to control land-use. However, all the controls included in zoning regulations can be grouped into two types, in terms of their purposes. The first group concerns itself with use, the second group with density. In the following we will evaluate the conformity of each of these groups with the Sharia.

#### 8.6.4 Use Regulations

Zoning regulations are really a means of defining types and intensity of land-use. The most significant part in the zoning system has been to define types of use district precisely, to take account of the relationships between uses, and to assess the locational requirements of particular uses as well as the conflicts between uses. The general aims of these regulations is to promote a healthier environment and to prevent harm and injury to residential areas.



In the above context the use regulations have no contradiction with Islamic Sharia. Ibn Khaldun has shown us in his *Mugddimah* how Muslim cities had separated types of use that could bring harm or injury to residential areas or to other uses. The process was on custom rather than a preconceived pattern. Such differences between the two processes does not imply a conflict with the Sharia. In Chapter Four, I mentioned that the Islamic legal and administrative system is value-centered; laws exist to realize certain value goals. Therefore, zoning as far as its aim is to prevent the community from any harm or injury resulting from an individual's use of his property is a novel aim and does not contradict with the Sharia. However, the method by which the zoning system achieves its aims is the area of conflict.

In the case of Jeddah, the Master Directive Plan divided the city residential uses into five zones. Even though all the zones are residential, we can see great differences in what is permissible and what is not. Such differences can be explained in the U.S., where zoning was first adopted, by various concepts, such as land values, market forces, and sometimes social segregation. The case is different in Saudi Arabia where the constitution of the country is Islam and Islamic Sharia. In Chapter Four I stated how social conduct influenced by Islamic egalitarian principles, in turn influenced the physical pattern of early urban areas. Evidence of social harmony in its income context can be witnessed in most of the remaining old residential quarters in Saudi Arabia towns. Where quarters were usually based on ethnic groups rather than on income. Also, concepts such as market forces, i.e. land values are not acceptable by the Sharia, since community is the end and aim of the individual's activity and is the limit at which the individual's activity ends.

Thus, the Sharia accepts only the prohibition of use which would be harmful to the community. And, in order to be valid, zoning restrictions and limitations must have a tendency to promote the general welfare, of the whole community by prohibiting, in particular areas, uses which could be detrimental to the full enjoyment of the established use for the properties in that area. However, to reach this objective the authority - God's representative on the earth - should eliminate, as far as possible any individual gain which is at the cost of the community any cost should impact equally on all parts of the society.

#### 8.6.5 Density Regulations

Of vital importance to the community is the prevention of excessive overcrowding of the population. Zoning has controlled population density to some extent by limitations on the height and bulk of buildings. Population density control may also utilize one or more of the following different methods:

- 1- Limitations on the number of families per acre.
- 2- Limitations on the number of persons per acre.
- 3- Limitations on the percentage of a lot which may be occupied by buildings.
- 4- Minimum requirements as to lot areas on which dwellings may be built.
- 5- Minimum requirements as to space which must be allocated to each individual occupant of a house.

Because of the enforcement problems inherent controlling in the density of population, Saudi Arabia - like the U.S. - has relied upon the more indirect approach of specifying minimum lot size, minimum floor area and setbacks. In Section 7.4, I discussed each of these regulations and its implications. I concluded that these regulations have been challenged on the grounds that they resulted unintentionally in class segregation and social injustice. The two negative aspects of the above regulations have been achieved, generally, on the grounds that where particular minimum requirements differ for different sections of the city, the question is presented whether there is any legal justification for such differentiation. If the standards are adequate for one residential district, a presumption is raised that they should be adequate for other residential districts.

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With the same argument of the previous subsection, the Sharia conflicts with the above regulations because it discriminates between certain classes eventhough, the intention, in general, is to promote the general welfare. Also, they should not result in violation of individual rights and the Sharia values which prohibits any kind of social discrimination. Therefore, the existing regulations for density control are in conflict with the Sharia on the grounds that they are unjust in their restrictions and they lead to class segregation.

#### 8 6 6 Zoning And The Violation Of Privacy

The irregularity and lack of a predetermined layout present in the classical Muslim City are not soley the result of a crystallized nomadic life within the format of an urban city. These characteristics are also the consequence of a socio-cultural

behaviour and religious faith that are unyieldingly Islamic, and which in the city are expressed in a very prominent manner. The Quran, specifically in verses 4 and 5 of Sura XLIX, whose meaning paraphrases as follows: "The interior of your house is a sanctuary, those who violate it by calling on you while you are in it do not keep the respect which they owe to the interpreter of heaven. They should be patient and wait until you leave your house, decency demands it, but God is All-Forgiving, All-Compassionate". This important divine communication provides the Islamic City with a thoroughly religious character, which emanates from the dwelling, that for the Muslim is tantamount to a haram (sanctuary), inviolable, overflows and penetrates all facets of life. Another relevant issue which greatly influenced the form and pattern of Muslim communities, is segregation of the sexes. Islamic teachings have stressed the importance of sex segregation, in terms of female and male and direct relatives and outsiders. Islam prohibits the exposure of the female to any outsider (any male except the father and the brother). This social behaviour has influenced the form and the pattern of Muslim cities. As we can see clearly in the analysis of traditional Saudi cities, the concern for privacy was reflected in the physical form in several ways. Among these are the courtyard or the inward openings rather than the outward openings, the replacement of doors within the street, avoidance or the architectural treatment of windows and the limit on building heights throughout the city. The issue of privacy has been maintained by controlling the attitude of individuals towards three physical elements. These are the height of the building, the setbacks and the openings. In Chapter 4, I discussed the Sharia point of view pertaining to these issues and I concluded that while there is no clearly defined set of regulations to maintain privacy, there are a set

of values and principles that govern the individual rights to their ownership.

The analysis of land development policies in Saudi Arabia shows a continuous violation of the above principles in terms of privacy. This violation takes two forms; the use zoning and the rezoning, and the second is the density regulations and building regulations.

In Chapter Five, the analysis of land development in Jeddah shows that many areas of the city had witnessed rezoning. Some parts of the Makkah Road Area is a good example for the problem of rezoning in relation to privacy. As we saw the area had been developed into single family dwellings with one or two floors. In 1974 developers were permitted to built multi-family units with more than two floors in the form of apartment buildings. These buildings have inflicted a great damage on the existing single family units (villa types) as a result of the intrusion into the private life of the former residents by overlooking of the apartment residents. Dr. Saleh Al-Hathlol brought many examples and elaborations in his thesis to confirm the ignorance of the regulation pertaining to the privacy issues. Al-Hathlol explains in his review of several cases on this issue how the resident had to go to the court to alleviate the damage that had been inflicted on him by permitting apartment types in a single family area. He stated that, although, the policy recognized the importance of privacy in Saudi Arabia (visual privacy is the most important factor determining the design of private houses in Saudi Arabia; zoning regulations should provide a legal framework for safeguarding the privacy of each house and ensuring the full use of property by its

owner, in accordance with Saudi traditions and jurisprudence), they failed to implement it.

The second form of violation of the Sharia privacy principle are the density regulations. The conflict of these regulations with the environmental conditions in Saudi Arabia, has already been discussed. Figures 8.5-6 , show how the existing regulations in Jeddah are in conflict with the privacy concept (see Dr. Hathlol, Tradition, Continuity, and Change). The presumption that the new setback regulations have considered the privacy principles of Muslim culture fails. The graphical analysis of the subdivision, setback and minimum size lot regulations, in figures , shows that eventhough the Master Directive Plan has mentioned its intention to promote cultural and environmental aspects, the zoning regulations in practice fail to do so.

#### 8.6.7 Expropriation

Expropriation is carried out under the right of the eminent domain. The law applied in the Kingdom covers the rules which enable the local government to acquire land necessary for public projects such as the construction of roads, public squares, utilities services and social services. The law defines the procedures, measures and steps to be followed in property expropriation and the estimation of compensations .

Is the principle of expropriation accepted in the Sharia or not. To answer this question their is an issue that needs to be clarified. That is, the concept of private ownership right vs. public interest. Eminent

domain per se is a wide concept that needs to be well defined before applying it for just expropriation.

Eminent domain, the right of a government to take or to authorize the taking, with just compensation of private property for public use, has been used in modern times to ensure the implementation of master plans and programmes. Three issues are involved here: the first is the condition under which expropriations are made; whether such expropriations are for "public good"; and what constitutes just compensation.

Eminent domain is often applied in cases where the public good is clearly being served. When seeking a right of way, or providing for utilities, facilities and services, municipal government resorts to eminent domain in the interest of the community as a whole. In this case the public interest seems to be very clearly established and, in such cases, its use has been challenged only on the basis of just compensation. The practice, of eminent domain, by the municipal government of Saudi Arabia, has been accepted and understood by both individuals and jurists. In almost all cases of expropriation, the government, has been more than just in compensating affected citizens. The second case, where eminent domain involves urban renewal and slum clearance, and those cases involving the implementation of zoning regulations, especially as related to non-conforming lots, uses and structures.

In the case of urban renewal and slum clearance, two issues are involved. First, the public interest is not always so obvious and hence the Sharia principle that justifies the public right to take over

private property is often challenged; and secondly, there is the issue of who will use and benefit from the property once the reasons for its taking have been removed, that is, whether the government, when confiscating a property, has the right to give away this property to someone other than its original owner. The Sharia is very clear here, if public interest is served and no injury is caused for the individual, the application of eminent domain is acceptable, in other words the aim does not justify the means (Bearn vs. Parker in Haar). The case of urban renewal programmes are very limited and, almost all the time, the public interest is very clear; where slum clearance cases are common practice and it contradicts in some cases with Sharia principles that the aim does not justify the means.

However, the policies which govern these issues come under the non-conformance ordinance. There are three major types of non-conformance, namely:

- 1) Non-conforming uses in buildings
- 2) Non-conforming uses in parcels of land
- 3) Non-conforming plots - vacant.

The first type I have discussed previously, where I explained that the former has the right on the later. For example, if an office use took place in an area and that area was zoned residential, the former has the right to remain, otherwise non-conforming uses in buildings conform with the Sharia. However, the non-conformance uses ordinance in Saudi Arabia do not consider the issue of existing use vs. zoning or re-zoning. The second type does not vary from the first type as far as the Sharia is concerned.



The third type, non-conforming plots, the Jeddah ordinance concerning the non-conforming plots state the following: "Any plot below this size (400 sq. m.) should normally be considered as a non-conforming plot. A non-conforming plot should either be consolidated with an adjoining property or dedicated or acquired by the municipality with a view to effect consolidation. The municipality may use a non-conforming plot for a suitable public use, deemed fit by the competent authority". This issue involves two notions both of them in contradiction with the simple principle of Sharia. If the ordinance aims to control development by controlling density, previously I explained in detail this issue, then the ordinance is in contradiction with the Sharia because of the discriminating nature of it. The second, even if the ordinance avoids the above cause of conflict; the simple fact that the plot may result in the hands of the other individual, the owner of the adjacent sites could bring a cause of conflict.

In brief, urban renewal has been and still is a justified public purpose in a Muslim context; however, the means to achieve it as they have been practiced and established in Islamic tradition differ from those practiced elsewhere. At the other side land expropriation for public purposes such as utilities, schools, etc., are accepted with a just compensation. The clear conflict is the non-conforming plots, that result from the density policy.

Summary

1-Land Tenure in Saudi Arabia is consistent with the Islamic Sharia. The conflict exists in the lack of measures preventing speculation in government granted land.

2-Land Price Control justified in the Sharia based on the principle that urban land in our time is of an importance as commodity (such as food, etc.) to the community and any excessive level of prices could bring injury to individuals as well as the community as a whole, which in turn permits the authority to regulate it. And any failure to do so is considered a contradiction with the Sharia.

3-Islamic tradition and teaching has accepted the control of land-use, however, the existing zoning policy, in its aim to control land-use have failed to consider other essential issues in the Islamic culture.

4-Expropriation is accepted in the Sharia, if the public interest is clearly evident.

## **CHAPTER IX : RECOMMENDATION – A Policies Framework.**

### **9.1 INTRODUCTION**

From Chapter Five, I have concluded that urban land development in Saudi Arabia has experienced several kinds of problems:

- Urban Sprawl;
  - \* Lack of public services
  - \* Waste of land resources
  - \* Monotony and lack of social and cultural opportunities
- community facilities shortages;
- Social and cultural conflict–class segregation;
- Lack of social and cultural identity; and
- Incompatible uses

Against these problems, existing land policies have been evaluated. The evaluation of the existing land policies has shown several areas of weakness. These are:

- The failure to provide land for development and urbanisation
- The inadequacy of land-use controls.
- Deficient administrative system for development control.

Figure 9.1 shows the urban land problems, land policies and the areas of weakness in these policies.

The aim in this Chapter is to propose a framework by which government intervention in the land development process can overcome the above

**Figure 9.1** Problems, policies , and weaknesses

Urban Land Problems	The Cause	The Policies	The Weaknesses
Urban Sprawl	Land Availability- time, location, pric.	Land Grants- the Direct and Indire. Process	No controls over transactions
Housing Shortages	=	=	=
Lack of Community Facilities	=	Land acquisition and Compansation	Lack of public owner- ship policies- Land banking, Pre imption.
Social and Cultural Conflict-lack of priva- cy, class segregat- ion.....	Land Availability and Land use controls-zoning regulation.....	Land Grants and Zoning and Buil- ding Regulation	No controls over land transaction and inadquacy of land policies
Incompat ible uses	Enforcement of Land use Regulation	Planning and building permit. procedure	Lack of Administ- rative co- ordination ,procedure and skill manpower

weaknesses, within the cultural and environmental conditions of Saudi Arabia.

The first section, based on the cultural and environmental understanding, summarizes the findings of Chapter Four in the form of parameters to guide the formulation of land policies in a manner consistent with the Sharia and compatible with climatic and topographic conditions. The second section suggests several changes for providing land for public and private development. The third section provides alternative forms of land use control to the traditional zoning. The final section proposes changes in the administrative structure and procedure to facilitate the implementation and the enforcement of existing and proposed policies.

## 9.2 CULTURAL CONSIDERATION

Any attempt to formulate land policies in Saudi Arabia must take, at the outset, the Sharia as the source from which policies derive their principal parameters and the physical organization they seek. In other words policies must derive their legislation from the Sharia teachings and the policies must lead to a pattern compatible with the Sharia values.

The previous analysis of the policies in terms of the Sharia shows two kinds of conflict: (1) in terms of the Sharia legislation e.g. the role of eminent domain, land donation, etc. (2) in terms of the physical compatibility with the Sharia's values and teachings e.g. lack of privacy, class segregation, the location of mosques. The following proposed parameters are not intended to set a number of policies or

measures by which the above conflicts can be eliminated, instead they contain general parameters to guide land policy formulation in Saudi Arabia.

### 9.2.1 Sharia Parameters For Legislation

In explaining the Sharia methodology, I emphasised the fact that Maqasid Al-Sharia -the Sharia intention- that must be realized in any proposal for land policies (in other words land policies must be bound by the values of the Sharia, not by the regulations which developed throughout the time since the prophet, unless they are based on the first two sources of legislation, the Quran and the Sunnah-see section 4.3 ).

Perhaps one of the fundamental issues of our subject is the legal-economic conflict between the individual, his rights and authority on one hand, and the community, its rights and authority on the other. The following are the Sharia Parameters for these rights (see Section 4.2):

- the individual is the central unit of activity in the community, and must be given all the opportunities that prepare him to carry on his functions and activities;
- the community is the end aim of the individual's activity, and is the limit at which the individual's activity ends, and;
- the community is responsible for the preparation of the individual to fulfil his individual collective obligation, and the community,

represented by whoever is in authority, must enforce the fulfilment of such obligations.

We can formulate three restrictions imposed on the exercise of rights in general:

- 1) The exercise of the right is only permitted for the achievement of the purpose for which the right was created.
- 2) The exercise of a right is considered illegal if such exercise results in an excessive harm and injury.
- 3) The exercise of a right is not permitted if used not for benefit, but to bring injury to others.

In Chapter Eight the existing policies were evaluated against the above principles. Figure 9.2 lists and identifies these areas of conflicts and proposes action to overcome them.

### 9.2.2 Islam As A Parameter For Social Physical Behavior

The kind of zoning, the zoning regulations, subdivisions, building regulations, etc., all together should have been working to form and shape the physical environment in a manner consistent with social convenience. These measures and regulations cannot achieve social satisfaction without considering the social factors in its formulation process.

**Figure 9.2: Policy Conflicts**

<b>The Policies</b>	<b>The Conflicts</b>	<b>Suggestion</b>
Land Grants	No controls regarding the grantee's right to sell and the time span that the grant may remain undeveloped-sec. 8.7.	Controlling transaction time of development-sec. 9.4.1,2,3.
Land Prices Control Policies	No Policies to control land prices-the abuse of rights-sec.8.7	Policies to control land prices-section 9.4.4.
Land use Controls * Density regulations	Unjust in their restrictions and they lead to class segregation-sec 8.7	Equale application of restrictions & stop of minimum size lot regulations...sec.9.5.3
*Zoning Regulations	Violation of Privacy, Mosque Location-sec.8.7	Modify zoning regulation to accomodate privacy...
*Expropriation- eminent domain.	Abuse of the use of the public right	Ensure the interest of public on the base of the teachings-sec 4.2.



From the previous review and analysis (Section 4.3 and Appendix E ) of the principles of Islamic towns ,we can single out four basic principles which I believe have constituted the deep grammar of the Islamic city; and must guide land policies, in terms of physical pattern and physical formulation of urban areas, in Saudi Arabia:

Equality: Land policies must apply equally to all sectors of the society and must not create or promote a pattern of development in conflict with the egalitarian concept of the Sharia.

Unity: Land policies must enhance solidarity among community members, as well as preserving the family ties.

Privacy: the teachings of the Sharia e.g. sex segregation..., give high regard to the concept of privacy; consequently, land policies must consider this issue in the process of land development control techniques.

Mosque: undoubtedly, the mosque is the most important feature of the Islamic city and the place to which the Moslem goes five times each day to pray and in which community members associate. Land policies must see that the mosque has been and remains the focal point of the community.

### 9.3 ENVIRONMENTAL CONSIDERATION

The importance of climate in the formulation of land development policies in the desert, permeates all considerations of environment. To make a town as responsive as possible to climatic conditions, several

basic techniques for minimizing the effect of the sun and dust may be achieved by development control. It is also important for land policies to guide the architectural design of future buildings in the town. There are three general techniques for promoting the comfort of individuals. They are the use of shadow, wind breeze and the minimization of the impact of solar radiation . In traditional desert settlements, all three techniques are used to a great effect (see Chapter 4).

#### 9.4 LAND AVAILABILITY FOR URBANISATION

The availability of urban land for urban growth is the main factor which influences the pattern and structure of urban areas. The Second Chapter discussed the importance of urban land in the urbanization process and the effect of land shortages on development programmes, e.g. housing, utilities, schools, etc. Several land policies influence the availability of urban land for development. These policies can be classified into three groups:

- 1- Taxation Measures
- 2- Public Ownership
- 3- Control of Rights

Saudi Arabia's intervention aimed at facilitating the availability of land, has shown some weaknesses in practice; these are:

- 1- Lack of policies to provide land, in advance, for future development and/or expansion.
- 2- Lack of policies to control land prices and consequently, easing public and individual development.

**Figure 9.3 : Policies of Land Availability: problems and suggestions**

**The Weaknesses**

**The Suggestions**

Lack of policies to provide land in advance

Pre-emption Rights, and Land Banking .

Lack of policies to control land prices

Intervention in the market by land banking, stop to use of compensation as a way of distributing wealth and land taxation.

Inadequacies in land policies for community facilities.

Pre-emption and Land readjustment schemes.

Inadequacies in land policies for providing land for individuals

Controlling transactions of granted land.

3- Inadequacy of land policies for land acquisition for public development e.g. schools.

4- Inadequacies in land policies for providing land for individual development (e.g. private housing).

Figure 9.3 shows the relationship between problems of land availability, government intervention and their weakness, and suggests ways to overcome them.

The following proposal provides a framework to eliminate the above weaknesses. However, any attempt to solve the problem of land availability, must be preceded by the following steps:

(a) A detailed inventory of existing land-use including the types of land use, the intensity of land use and the areal distribution of land uses. This would establish relationships between land and its use both in terms of current patterns and historical trends;

(b) A detailed analysis of population including a forecast of the future population along with its characteristics:

(c) A detailed analysis of economic activity including population productivity, income, consumer and government spending and income as well as investment, trade and levels of employment and changing social habits.

#### 9.4.1 Public Ownership For Providing Land

The term 'available' means that land must be available in time, location and price. Therefore, the following recommendation to facilitate the availability of land should be seen in the overall context of the whole recommendation-intervention through public ownership and public investment, intervention through taxation measures, land-use regulation and the general policies of providing land (The Direct and The Indirect Process).

Direct land acquisition by the government is the only way to guarantee that land will be available for public purposes in Saudi Arabia. Most commonly, the government acquires sites for utilities, schools, hospitals, other public facilities and for parks and recreation space. If land is acquired in advance of needs, prices may be low since its value depends, in part, on the provision of infrastructure. Often, however, acquisition takes place well after the identification of need, when land costs have been driven up in expectation of the value of future uses, as well as by speculative pressures. Despite high costs, government has also acquired land for housing and industry to compensate for the inability or unwillingness of private enterprise to assemble land for these purposes.

Since the Royal Decree (M65/6-11-1392 A.H.) governing the acquisition of land for public use, local and central government has been authorized to acquire land for public purposes. However, the examination of the case study of Jeddah shows several weaknesses in the existing legislation of land acquisition. First, the existing legislation does not include methods to facilitate the advance acquisition of land. Second, there is no formal administrative system to co-ordinate the process of land acquisition between the various government agencies at the local

level which in return, indirectly, causes the increase in land prices and lack of locational co-ordination for public facilities. Thirdly, the legislation, generally, does not include any method or regulations that can facilitate the creation of a publicly owned reserve of serviced and/or unserviced land (Land Bank).

The recommended framework proposes a two fold approach (1) to facilitate more control over the land market; (2) to build up a public reserve of land. This approach aims to provide more access for public authorities to the land market, to facilitate land at the affordable price, at the right time and at the right place.

However, at the outset, two weaknesses must be alleviated before any attempt to adopt the following recommendations, these are:

- Local municipalities should be the only local government agent that has the power to acquire land for public purposes. In other words the local municipality, since it is the government agent at the local level concerning itself with and handling all aspects of urban planning, should provide land for public programmes at the local level and according to its preferences (local plans). This implies that other local agencies and central government itself should go through municipalities to allocate land for development (For the purpose of co-ordination).
- In cases of clear public interest local authorities should have the power of compulsory acquisition.

#### Pre-emption Rights

In a country like Saudi Arabia where physical developments are on a huge scale but its planning legislation and physical plans have not yet reached maturity, an approach which utilises the concept of pre-emption of various property rights, is essential in order to facilitate land for development. In the case study, we found how the scale of many development programmes had to be expanded or new additional locations were needed under the pressure of rapid urbanization. Pre-emption rights are a variation of the public acquisition of land and are known as the right of first priority. This allows a public authority a greater opportunity to acquire land where a private owner desires to sell. Where such rights exist, the owner of the property must first offer his land for sale to the public authority before offering it to the public or other private parties. If the public authority expresses no interest in the property then the owner may sell the property to a private party.

Other advantages flow from the use of pre-emption procedures. It permits public authorities to influence the private land market in different areas through the purchase of limited quantities of land. A number of these direct purchases can provide a basis of land prices information in different areas which, in turn, gives the public a better framework within which to pay compensation for expropriated lands. Finally, direct purchase in the private land market is much swifter and incurs fewer administrative costs than the expropriation procedure.

#### Land Readjustment Schemes

These schemes provide for the compulsory acquisition of land needed by the public authority for development with compensation given in the form of equivalent plots of land. The main objective of such schemes is to facilitate adequate public facilities, to rearrange land uses and create a more preferable layout. As compared with expropriation, these schemes have the advantage of minimizing the liability of compensation and time delay for the local authority while giving increasing benefits to the community.

In the case of Saudi Arabia, these techniques will help (1) to reduce the length of time for existing methods of compensation; land in newer areas is mostly owned by the state and the high land price which is used in the compensation process has created some financial difficulties. Moreover the scheme can work in conjunction with the Real Estate Development Fund to facilitate development of the new sites. They can also help to reduce the negative side effects of urban renewal programmes e.g. the breaking up of existing communities; that is by providing an alternative site for the affected community.

### Land Banking

Land banking usually refers either to advance acquisition of sites for government use or to larger-scale public ownership of undeveloped land planned for future urban use.

Increasing population and rising land prices give a strong incentive to buy land for future government use before it is needed. The objectives of advance acquisition are mainly to locate future public facilities efficiently and to pay less for the sites.



Although transferring land from private to public ownership helps to prevent premature private construction which must then be demolished, to make way for future public use, for some future facilities that need large or specific sites, advance acquisition is almost essential, because earlier private development can easily make later public use too expensive or even impossible.

To influence land-uses and prices, aside from advance acquisition for future public uses, large-scale land banking has been recommended as a way of providing public infrastructure and capturing the betterment it creates. The argument runs that if the government could purchase all land to be converted from rural to urban use and pay compensation at agricultural value ( in the case of Saudi Arabia often desert value), planners would be better able to direct urban growth and the government could collect the betterment created. If the government were the only buyer of raw land for conversion, its offer price, backed by the power of compulsory purchase at agricultural value, would help to set a ceiling price for private transactions. The bank could service the raw land, then sell the building sites or lease them if the serviced land is to stay in permanent public ownership.

As local municipalities are the land managing authority in Saudi Arabia, they could establish a 'land bank' as a means of both retaining part of the increased value resulting from community investment in roads and services, and also make land available for essential facilities. However, there are several problems:

- In Saudi Arabia it is a common practice for an ordinary citizen to apply to the King for ownership of a vacant plot of land that belongs to

a public authority. Such requests are usually entertained by the King and orders are issued to release such land. There are presently a number of sites that the Municipality of Jeddah is very reluctant to disclose for fear that it may lose such plots. In these cases the Municipalities should state that the needs of an individual cannot be met in areas other than those suitable for the proposed development, so that in the interest of the community, essential sites for future public facilities are safeguarded.

- The government has to act before the information becomes public knowledge and land acquisition is often a slow process. If the government's land-buying intentions are kept secret, there is a great opportunity for private trading with inside knowledge.

### Compensation

The compensation system has an important influence on two aspects of public land acquisition policy. First, it obviously influences the cost of such programmes and therefore, is an important consideration in the allocation and distribution of resources. Second, it may also have significant planning effects. For example, an inefficient compensation system may involve long delays which impede implementation; and the level of compensation itself may influence decisions about where to acquire, particularly if the compensation is close to or related to market value. This brings in, as it were, the effect of the private market through the back door.

In this context the policy of compensation in Saudi Arabia should be viewed. The existing intention of the state to use the policy of compensation as a way of distributing wealth, has unintentionally

contributed to the importance of the land market and property values. However, as previously mentioned, any attempt to formulate land policy measures should involve a comprehensive approach, to provide alternatives where a compensation policy becomes impossible, because of e.g. high land prices, unknown ownerships, lack of financial means, etc.

### Land Grants

This is the prime source whereby land has been made available for development in Saudi Arabia. Land grant regulations, however, must include the following conditions to maximize the benefit and prevent existing abuses of the system:

a) Firstly, all the recipients of large areas (e.g. more than one hectare) requiring subdivision should be required to contribute 50% of the grant for public use. This would enable the local authority to reserve land for public facilities or accumulate it in a "Land Bank" for redistribution after installation of roads and services.

b) Secondly, individual, serviced plots (granted within an approved subdivision) that are not developed within e.g. three years, will be withdrawn by the local authority. This is in accordance with Islamic traditions. Abu Yousuf ("Kitab-Al-Karaj") gives examples whereby the Holy Prophet (S.A.W.) and Caliphas granted 'iqta' (land grants) which were withdrawn if the land remained uncultivated (i.e. undeveloped) for three years. Similarly Yahya Ibn-Adam ("Kitab-Al-Kharaj") would appear to suggest that such grants should be withdrawn from the recipient if they were not cultivated (i.e. developed) after a period of

three years, and given to someone else. Mohammed Ibn Shafi has also expressed similar views ("Kitab-Al-Umm", 1903-1904).

Very recently the Ministry of Agriculture and Water withdrew 463 plots of land granted to citizens which were not developed by recipients within the period specified at the date of issuance ("Arab News" 29.5.1400 AH).

c) Thirdly, if the recipient sells the land before three years, he should be obliged to pay e.g. at least a minimum of 50% of the value received to the local authority. Such funds could be utilized in paying compensation elsewhere and discourage the grantee from using grants for speculation.

d) Fourthly, granted land must be limited to a maximum of two transactions, to prevent speculation.

#### 9.4.2 Land Prices

One of the most influential elements in the process of development allocation is the land price. In the case of Saudi Arabia the proportion of land cost to the total cost of housing projects reached very high limits, e.g. 100% in Al-Hammra district in Jeddah. Consequently, many new or expanded community facilities, have been cancelled. Not only that, but also the high cost of land promotes, with other factors, urban sprawl. Two steps must be taken to influence land prices: (1) through compensation, which I previously explained; and (2) land taxation.

#### Taxation Measures

Taxation measures are another form of government intervention in the urban land and property market, for the purpose of plan implementation. The assessment of any given policy depends on the political and economical conditions for which they are formulated. The following recommended forms of taxation are based on the above facts. Saudi Arabia has adopted a general policy that the state should obtain the necessary funds for public services and development plan implementation from the revenues of national resources, since most of the national resources are owned by the state, e.g. oil, minerals, etc.

However, a tax on vacant land can be considered as a penalty on owners who leave their land unused and hold it speculatively, rather than a means of raising revenue. It is in this context that taxation measures can be introduced into Saudi Arabia.

## 9.5 LAND-USE CONTROL

Since the early 1960's, the tools for controlling land-use have been substantially modified, to facilitate the implementation of development plans. These include:

- 1- Zoning and zoning ordinance;
- 2- Public subsidies (REDF);
- 3- Subdivision regulations;
- 4- Provision of streets, water, and other services;
- 5- Building codes;
- 6- Applicable state and national legislation or regulations.

**Figure 9.4 : Land Use Policies : Weaknesses and Suggestion**

**The weaknesses**

**The suggestion**

Lack of cultural and enviromental  
aspect in land policies.

Modify existin zoning and building  
regulation to accommodate the  
aspect and to provid method and  
mechanism to facilitate modification  
-Conditional zoning ,special permits  
and PUD.

Lack of policies to control growth  
and to privent urban sprwal and the  
conversion of agricultural land.

Timing/Phasing urban development,  
the enforcment of zoning and through  
Real Estate Development Fund.

Lack of adequat enfocement policies

Modify administrative procedures  
section 9.6.

However, the previous Chapter identified several problems still associated with land-use control measures. These weaknesses can be grouped into:

1- Problems associated with cultural and environmental aspects, e.g. lack of privacy, social segregation, climatical uncompatibility...which resulted from inadequate zoning regulations and building regulations.

2- Problems of uncontrolled growth, e.g. urban sprawl, problem of agricultural land conversion..

3- Problems associated with incompatible uses, e.g. traffic, parking, community facilities ,cultural problems such as privacy, ...

The following sections propose a framework which takes the above weaknesses into consideration, as well as the existing administrative systems' capabilities. Three proposals consisting of three complementary steps: (1) modifying existing zoning regulations; (2) timing/phasing of urban development; and (3) regulating the REDF (Figure 9.4).

### 9.5.1 Timing/Phasing Of Urban Development

Chapter 3 of this thesis has dealt with the conditions which influenced the pattern of urban growth and the outcome of improper urbanization. It also dealt with the main trends of growth and the factors which encouraged the direction of growth.

Timing and Phasing of Development is one way to control growth; five reasons for justifying municipal control of the timing of development are:

- 1- Planning for timing is essential to economize on the cost of municipal facilities and services.
- 2- Timing of development is necessary for the municipality to retain control over the eventual character of development.
- 3- Timing helps to maintain a desirable balance among various land use types.
- 4- Without development timing it is difficult to maintain high quality community services and facilities.

To control the direction of growth and reach the aspired future structure of urban areas, master plans must include recommendations about the phasing of growth on the basis of their projections and within the lines figured out by the five-year development plans. In order to control the growth there should be a legal instrument that enables local authorities to achieve this goal. This instrument can be a physical planning law and land subdivision regulations.

The Municipalities must have the power to determine the phasing of growth and fixing priorities for these phases so that development takes place in accordance with the principles laid down for this purpose. Municipalities should also have the power to suspend execution of any sub-division for the reasons related to the directions of growth or the lack of public utilities.

It should be noted that one of the most effective devices for controlling city growth and its direction, is by establishing public



utilities and providing services in the areas where development is scheduled, in phase with the rate of planned growth. Conversely, to keep the other areas unserved by public utilities until their turn comes. Municipalities should strictly adhere to the scheduled phases while implementing public utility projects. The most direct impact of this measure will be on the existing urban sprawl.

### 9 5.2 Real Estate Development Loans

The loans granted by the Real Estate Development Fund to the citizens either in their capacity as individuals or in their capacity as part of a moral entity contribute in encouraging the construction of buildings at all levels and improving the physical conditions of the urban areas. This is an effective device if used properly for realizing a rational policy for physical development. The following is an outline for utilizing the role of the fund in land development to maximum benefit:

- The Fund should be managed by the land development department under the authority of local municipalities (rather than the Central Ministry of Finance), to increase public control on the direction and form of growth.
  
- The Fund should provide grants with conditions for timing and location. The grantee should be limited to use the fund during certain specified periods of time and should satisfy the locational criteria which the municipality, based on its development plans, want development to follow.

### 9 5.3 New Attempts To Control Land-Use Through Existing Zoning

The traditional zoning (Exclusionary Zoning) has been shown to be inconsistent with the cultural and social habits of Saudi Arabia. However, it must be emphasised that the principals behind the justification of zoning are accepted by the Sharia, the contradiction is in the practice of implementation which is exclusionary by nature and biased in favour of the rich.

For similar reasons, various alternative methods have been introduced in the U.S. to eliminate the negative aspect of zoning, such as conditional zoning, contract zoning, performance standards, bonus and incentive zoning, special permit, and Planned Unit Development....

Similarly, there have been a number of attempts to control growth and regulate land-use through modifications of conventional zoning techniques, in Saudi Arabia. One of these has been the Floor Area Ratio and in some cases the use of Special Permits. Although these are considered to be successful techniques in alleviating some of the weaknesses of conventional zoning, e.g. social injustice, privacy, etc.; they have been associated with some counteractive techniques, e.g. minimum size lot standards (see Chapter 7).

Of these techniques, the most applicable to Saudi Arabia, given the political mode, the administrative capability and the context of the existing problems, are Planned Unit Development, conditional zoning, Special Permit and Floor Area Ratio.

### Conditional Zoning

Conditional Zoning is a technique by which development can be exempt from the zoning regulations if the proposed use satisfies certain conditions. These conditions are usually concerned with the general characteristics of the area and negative side effects of the potential use. The opportunities in implementing these techniques are:

- Facilitates the integration of various uses,
- Helps to promote individual attempts to preserve identity,
- Helps the authority to implement current needs, which development plans have not considered, and
- Facilitates the implementation of the general Sharia conditions pertaining to land use control e.g privacy,(for more information about conditional zoning ,see "Urban Growth Management Systems, 1975, Michael E. Gleeson).

#### Planned Unit Development

There are probably as many ways to define the PUD as there are drafters of PUD sections of a zoning ordinance. It may be spoken of as a way to adjust development to the particular conditions of the land or a method to ensure that there will be better design and more open spaces. In terms of the zoning ordinance, PUD provisions provide an opportunity to develop land in a manner that does not fit into all use, bulk and open space required of any of the standard zoning districts. Most PUD's have involved a predominantly residential mix perhaps of single family detached houses with town houses and possibly a high rise apartment building. Such a mix might not meet the customary standards of height, minimum size lot, or dwelling type in any district. The PUD is acknowledged as an effective system of up-grading the

physical environment of an area on a competitive basis and serves as a trend setter.

Regarding the approval procedure of a PUD scheme; the applicant has to submit the requisite details of the proposed project to the competent authority outlining the salient features, design concept and its feasibility. The approval is granted if the design conforms with the general land-use structure for the area.

- Local Municipalities in Saudi Arabia can use this method to depart from the old, seemingly more rigid zoning system and permits more adaptability by local ordinance to changes in subdivision, building regulations and in general in the housing market; such a facility will help to bring more balance to the closed segregation pattern of new urban growth (see Chapter 8).

- Urban Sprawl has during the last ten years created a great deal of vacant land; most of which is difficult or unprofitable under the existing conditions of zoning and subdivision. The PUD can overcome these circumstances and produce an exceptional design which can integrate within the already developed areas.

- PUD is a form of comprehensive design approach to subdivision. It implies more freedom in use mix and location; and provides scope, potentially, to bring back some of the traditional identity which has been lost during the last ten years in newly developing urban areas such as:

\* Neighborhood mosques

- \* Al-saha, small open spaces between housing, for children to play and adults to gather, usually shaded.
- \* Corner shops
- \* Some unarmful uses.

### Special Permits

Special permits are a means for conventional zoning to regulate certain desirable activities. The special permit, also known as conditional use permit, is used to regulate those activities recognized as desirable but requiring special control. The zoning ordinance specifies all of the conditions necessary in order for a property owner to qualify for a special permit. For example, some municipalities use lack of adequate services as the basis for denying permission to develop property. In such an instance, the right to develop becomes a special use according to the ordinance. In order for a developer to utilize the land, the necessary services must be either in place or provided by the developer.

By this method, developers in Saudi Arabia, can overcome some of the negative regulations, e.g. Minimum Plot Size, Setback Regulation, etc.; as well as giving the local municipality the opportunity to provide some of the public facilities and services.

### Floor Area Requirements

A final change associated with traditional zoning has to do with the height and bulk requirements. Certain areas have height restrictions, to ensure that low density development occurs, and others may use

minimum lot size to ensure the same thing. Increasingly there is a movement towards the use of Floor Area Ratio as a substitute for the above techniques. The FAR allows the developer a choice to put either a tall building on a small portion of the lot or a low building covering more of the lot. As such, the FAR technique is part of a general move towards attempting to modify conventional zoning to allow more flexibility without needing to change completely.

Some of the Master Directive Plans in Saudi Arabia during the late 1970's have adopted the FAR method, but have used this in conjunction with counter-productive traditional techniques, e.g. Minimum Lot Size, Setbacks; and therefore the advantages of FAR, as it has been introduced by the MDP, have failed to materialize. Therefore, if the FAR is used as a *regulatory method*, *some of the negative aspects must* be considered.

## 9.6 ADMINISTRATIVE STRUCTURE

The analysis of the present organizational structure of Government Ministries and agencies at the local level indicate a number of interrelated problems which severely affect the capabilities and performance of existing policies and any policies proposals. However, these problems almost disappear in Grade A municipalities e.g. Jeddah, Makkah. Also, the Preferred Policies Framework requires certain modifications and/or expansion of the existing system.

In brief, the existing problem can be classified into two groups: Problems associated with lack of co-ordination; and problems resulting from poor administrative procedure. Under the former, the problem of

co-ordination has two co-ordinational problems: problems of lack of co-ordination between the various agencies at the local level; and lack of co-ordination between local and regional authority. Under the latter, the problem of administrative procedure results from the absence of proper and efficient administrative procedure to control development, especially in the area of land registration and land-use, e.g. donation, sale, etc. The following proposes an administrative framework structure and procedure of policy formulation, evaluation and implementation.

#### 9.6.1 Requirement Of The Administrative Structure

Apart from overcoming the present deficiencies, the administrative proposal must recognize the requirement of the Preferred Policies and must incorporate an appropriate range of managerial and organizational skills to deal effectively with the implementation and enforcement of the requirements proposed. Various aspects of the preferred policies that have administrative implications are outlined in this section.

The primary aim of the proposed administrative system is to provide a means whereby the existing and proposed policies can be effectively implemented. Initial administrative action should therefore be concerned to form two procedures: First, for policies review and modification, for example, the failure of Jeddah Master Plan of 1973 caused by the failure to review and modify the existing policies to accommodate the expected rapid urban growth. This process will require delegated authority from central and regional to local in the case of B, C and D grade municipalities to enable the competent

authority to review and modify or change regulations—such as zoning, subdivision approval, etc.

Secondly, the most recognized failure in the policies is lack of regulations and machinery to enforce development controls. Therefore, any proposed administrative procedure requires the support of enforcement regulations. Also, the existing municipal committees for co-ordination and evaluation should have a compulsory role instead of the existing advisory role.

#### 9.6.2 Recommended Administrative Structure

The proposed structure composed of two complementary parts, together forms an umbrella organization which would be constituted by representatives of concerned agencies and would formulate co-ordinated policies and facilitate and monitor the implementation of land policies. Also, it will work as an enforcement agency of the policies ; the first part is working as an umbrella for co-ordination between various government agencies of the local and/or regional level; the second part concerned is with the implementation and enforcement.

In grade A municipalities the existing administrative structure contains committees for co-ordination and development control and land management departments and committees (figure 9.5). Therefore the proposed administrative structure for grade A municipalities proposes limited changes and modifications in the administrative authorities, responsibility and regulations . In the case of B, C and D



municipalities significant changes are proposed amounting to almost a complete new structure.

#### Administrative Structure For B, C, And D Municipalities

Figure 9.5 shows that the structure is composed of three sub-sections: Planning Co-ordination Committee, Planning and Development Department and Development Co-ordination Committee; Development Control Sub-Committee and Development Control Unit.

#### Planning Co-ordination Committee

This proposed Planning Co-ordination Committee would focus its activities on long range planning, including action and execution plans and would ensure co-ordination with other ministries and departments engaged in the task of development planning within the overall development plan. Because of lack of skilled manpower at the local level, the Planning Co-ordination Committee must be located at the regional level.

#### Development Co-ordination Committee

The second committee, namely the Development Co-ordination Committee, would focus its attention on tasks relating to implementation, including inter-ministry/department co-ordination and overall development control. The committee would be led by the head of the Regional, Ministry of Municipality and Rural Affairs, since the regional office is responsible for all physical planning issues of B, C and D municipalities.

### Development Control Sub-Committee

A sub-committee comprised of a senior representative of the local municipality (the Mayor and his Vice-Mayor) and technical advisor and dignitaries from the town and representative from the land development department. This sub-committee should process special cases, cases of appeal and cases where zoning changes are required.

### Planning And Development Department

The existing Department of Planning and Development would be reorganized structurally as well as functionally to provide the necessary technical support in the overall planning process. The functions of the PDD would include:

a) Preparation of action and execution plans, in the existing system this is the task and the sole responsibility of the regional office with limited participation from the local level. Because of the isolation of the local level from the planning process, the local level is left incapable of carrying out any kind of plan revision, e.g. land-use changes, land acquisition, etc.

b) Phasing and programming of developments is also the responsibility of the regional level in the current structure, which requires the same change at 'a', above.

c) Monitoring and revision of plans is the problem of all grades under the current system. The two basic reasons for lack of monitoring and revision of plans are lack of skilled manpower, and the gap between

implementation and planning. The latter has been solved by the participation of private consultants in the day-to-day administration. It is proposed to overcome lack of skilled manpower by the reorganized structure, which links the department of DCU, the Land Development Department and PDD by the 'application procedure'. The former will be the task of regional and central levels in the case of lower grade municipalities; in the case of grade A authorities, the task must be delegated to the local mayors.

d) Pending ad hoc advice on development control, e.g. planning permission, etc.

e) Conducting special studies and liason with agencies/general public.

#### Development Control Department

A Development Control Unit should also be created to act under the direction of mayors of local municipalities of lower grades ("A" municipalities have a development control unit for which the proposal suggested improvements are proposed in the procedural aspects of application and control methods) with the supervision of the Regional Office. This would become the development control office for local municipalities and would take specific responsibility for land acquisition, building regulation and control, and formulation and execution of development incentives. The staff should include town planning officers, building inspectors, enforcement officers, with direct linkage to land registry officers.

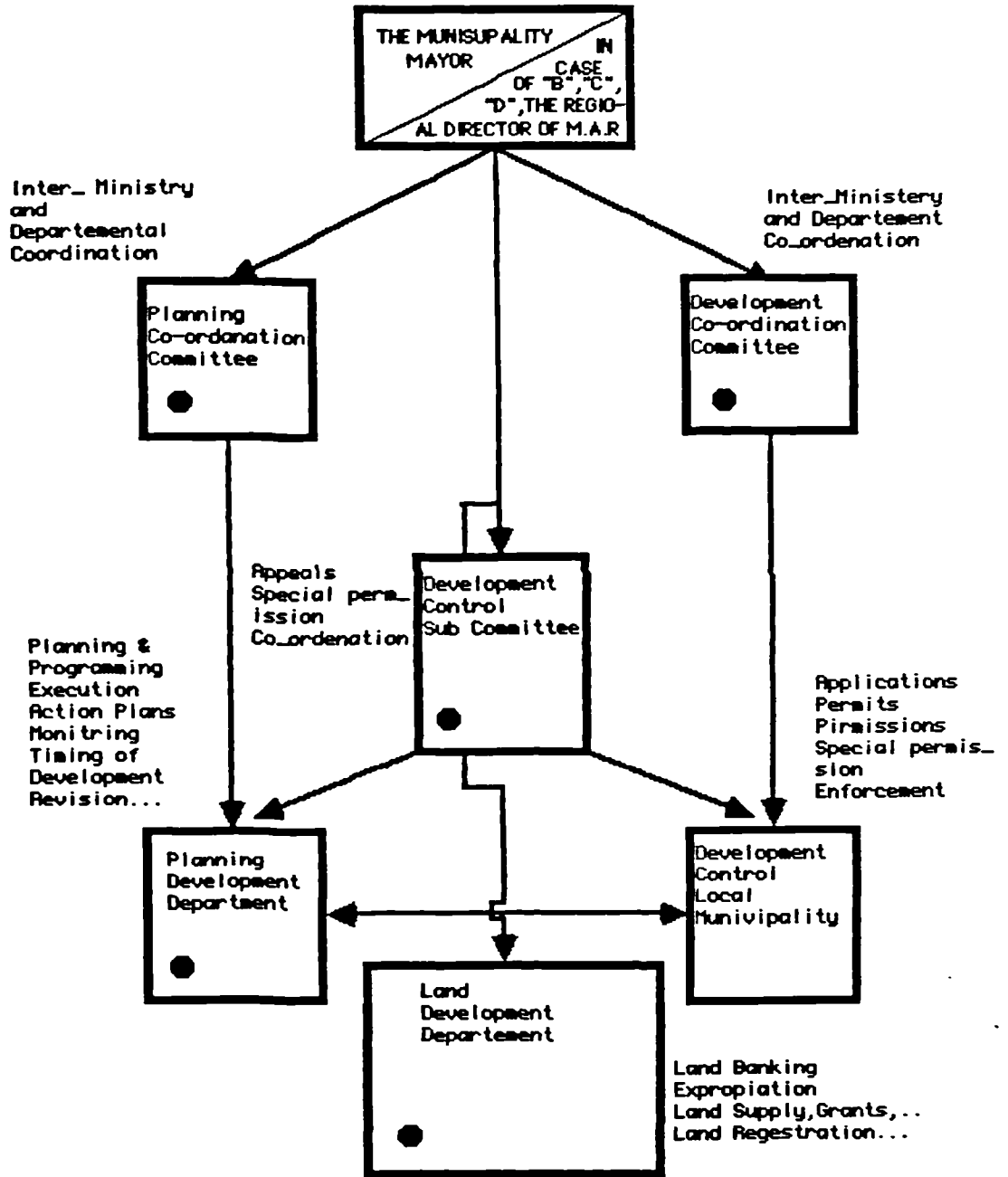
#### Land Development Department

The existing administrative system at the Municipal or regional level (in the case of grade B and C Municipalities) for providing land for development is distributed among various authorities with no coordination or integration. To control development and to provide both the public and private sectors with their land requirements, and to assemble land under one authority that undertakes coordination with other ministries and local authorities for the redistribution of land according to specific programmes, it is necessary to establish an institution for land supply and land market control. Section 9.4.1.3 proposed a land banking approach to facilitate the availability of land in the market for both public and private development.

Under the current system, there are two departments in the municipality which are in charge of administering land transactions and the associated Financial and Control Works Department of Land and Compensation, responsible for processing acquisition and compensation for all land needed for municipality programmes, e.g. roads, parks, parking. The Department of Town Planning is responsible for implementing the state land grants to private and public developer, and preparing the required expropriation plans (see Chapter 6). Neither the two departments have the to participate in the land market by purchasing or redistribution of municipal land, nor the obligatory authority to limit land acquisition authority within the municipality. Finally, neither have the authority to implement. In summary, the two departments are limited to (there are many other functions in the Department of Town Planning, e.g. physical planning, urban design, etc.):

- a) Registration and Claim Section: which deals with those cases of Title Deeds involving arbitration.

Figure 9.5 ADMINISTRATIVE STRUCTURAL PROPOSAL FOR CO-ORDINATION



● In the case of B,C,D municipalities this function must be at regional level (because of skill manpower).

b) State and Donation Section: which supervises the sale of the Municipality's land as well as the allotment of land donated or gifted by the Royal Decree.

c) Title Deed Section: which deals with the finalization of Title Deeds and establishing Rights of Ownership after detailed scrutiny and examination.

d) Low-income Section: which receives applications from low-income people who wish to own residential plots or houses in low-income subdivision housing projects.

e) Estate Section: which receives complaints about encroachment and unauthorised construction on private or public land and takes action for clearance of such violations.

In order to facilitate land for public programmes and other public needs, to provide land for private development, to intervene in the land market to control prices and supply and to provide land reserves for future need, measures such as land banking and other forms of controlling totally or partially the right of individual owned land are necessary. The proposed land banking approach, mentioned before, requires an administrative system that can facilitate the implementation.

It is necessary, therefore, to establish an institution or a bank for public land. Its function will be to acquire land by the aforementioned methods in order to provide the land required for public projects and to feed the market according to the phased development programme. The

proper timing and programming of the disposition of this land is of vital importance so as to achieve the goals sought.

The following are the functions of the Land Bank:

a) Preparation and maintenance of a current inventory of all publicly held property in the area, derived from whatever source (purchase, exercise of eminent domain, gift, dedication, urban renewal operations, etc.), with detailed information as to the characteristics of each piece of property.

b) Detailed planning of the land needs of public agencies in the area (at all levels of government), over a given period, perhaps 20 years, with liberal allowances for unexpected development.

c) Careful screening of any land proposed for disposition to ascertain suitability for meeting any of the listed needs.

d) Communicate with the agencies in charge of development control such as the subdivision plan approval agency and the urban renewal agency to determine their land requirements.

e) Identification, in so far as possible, of specific properties which might be available for future acquisition to meet particular needs so that they can be acquired prior to development.

f) Establishment of revolving funds for the systematic acquisition of properties to meet future needs at times when particular circumstances make such acquisition desirable.

g) Management and maintenance of existing property, lease or rental of temporarily surplus property, and allocation of space among various agencies in publicly held properties.

#### Development Controls Procedure

Zoning, building regulations and subdivision (Development Control) are methods to control land development by two complementary approaches: the technical regulations and the administrative procedure for implementation and enforcement. Thus any proposed policies in the above context are backed by statute and consist of dealing with applications and plans and issuance of permissions and permits. These are exercised by the competent authority (Development Control Agency or Zoning Commission) through the application and enforcement of planning by-laws.

#### Administrative Divisions And General Functions Of Local Municipality

The existing system of development control distinguishes between grade A and B and C and D municipalities. For C and D, the responsibility of subdivision approvals, zoning changes and appeals are shifted to the regional authority, where for A and B the whole procedure is within the authority of the local municipality (see Chapter Five). The following distinguishes the Sub-committee which in the case of grade A will be under the local municipality (figure 9.5). In order to discharge functions related to development control each local municipality, as competent authority, shall be responsible in respect of the aspects below:



a) Interpretation of Planning Byelaws: The Development Control Subcommittee interprets the planning byelaws to the individuals and agencies.

b) Subdivision Permit: Based on the land use plans, the Development Control unit issues a permit for the subdivision of land, provided the requirements specified in respect of use regulations and zoning regulations have been satisfied and that the proposed subdivision is in conformity with any specific regulations laid down for the zone in which the proposed subdivision is located.

c) Planning Permit: A Planning Permit must be obtained from the DCU before any development occurs. It is a description of the proposed development and other requirements considering title, expected users, etc...

d) Building Permits: The DCU issues a permit for the erection of a building on a plot provided the plan is in conformity with the zoning regulations specified for the zone .

e) Discretion in Respect of Special Permit: Where a specific proposal does not conform to the use regulations and zoning regulations, the competent authority at its discretion may issue a special permit (on limited time period or on a trial basis) for land subdivisions or building erection or alteration, provided such an operation is in the public interest and that such a proposal is not directed at individual gains or public nuisance.

f) Permit for Repairs, Alterations and Additions: The DCU shall issue a permit for major structural repairs and/or amendments, additions, alterations or re-erections of a building provided the proposed repairs, amendments, additions, alterations or re-erections are in conformity with the use regulations and zoning regulations, and relevant building codes.

g) Removal of Non-Conforming Uses: The DCU will remove non-conforming uses. The competent authority will notify the non-conforming uses suitably and adequately in accordance with requirements of Non-Conforming Uses.

h) Interim Planning Permission: The competent authority may accord planning permissions and permits in the areas not having approved phasing programmes, execution and action area plans, provided it is in the public interest.

i) Co-ordination with Other Agencies: The competent authority shall co-ordinate with the Jeddah Planning and Development Department in all technical, administrative and organizational matters.

j) The competent authority shall refer special projects/subdivisions and cases of change in land use to Development Control Sub-Committee/Jeddah Planning Development and Department.

k) The competent authority may refer cases of appeal to the Development Control Sub-Committee and/or the Jeddah Planning and Development Department.

l) Revalidation of Permits: The DCU fixes the period of validity of any permit which may be revalidated after the expiry of this period.

m) Petitions and Appeals: The DCU entertain petitions of aggrieved persons within the overall purview of the planning byelaws, and refers such cases to the Development Control Sub-Committee and the Jeddah Planning and Development for technical processing and advice.

n) Penalties: The DCU penalises owners of plots and/or buildings for any violation in the construction and use of building and building/land which are not in conformity with the approved plans.

o) Inspection: The DCU has a right to inspect with or without notice any site or building at any time of the period of construction.

p) Cancellation of Permits: The DCU shall have the power to acquire any property should such an action be in the public interest. For this purpose, the owner will be adequately compensated according to the prevalent laws.

q) Fee: The DCU may charge a fee for the processing and issuance of subdivision and building permits and completion certificates.

r) Completion Certificate: The DCU issues completion certificates in respect of buildings after the necessary formalities have been complied with.

#### Planning Permission

Planning permission may be an outline permission or full permission. Outline permission is approval in principle, and saves the applicant the time and expense of firming up detailed plans at an early stage. Also, it gives the local authority an early knowledge of the kind of potential development.

Planning permission is required for any of the following cases of development which involve:

- 1) a significant change of use of land or structure or re-establishment of a use which is not permitted in accordance with use regulations.
- 2) a significant change in the intensity of use of land or a structure.

#### Procedure

Application for planning permission shall be received by the Development Control Sub-Committee. This Sub-Committee backed by technical advice from the Planning and Development Department must review cases in respect of:

- 1) use regulations, so as to establish whether the proposed development would alter the character of the area or introduce significant change into an homogenous area.
- 2) environmental hazards like fumes, noise, vibrations, smoke, discharge of solid, liquid or gases which may have detrimental effects on the surrounding developments.

3) social hazards which may be detrimental to the Islamic or traditional life style and which may impinge on privacy of individuals and families.

4) increase in land values in the surrounding developments.

5) any other location specific hazard.

6) programmes and proposals of the Jeddah Planning and Development Department including land acquisition for public purposes.

After making its assessments, the Development Control Sub-Committee shall make its recommendations which shall be executed by the competent authority. The recommendations may comprise any of the following:

1) the competent authority may be advised to give planning permission with or without conditions.

2) the competent authority may be advised to refuse planning permission.

#### Appeals

The existing appeals system is not affected as we mentioned before, because the aggrieved applicant under the existing system appeals to the same board of authority which rejected his application in the beginning; the only difference is that in his appeal procedure he submitted it to the Deputy Mayor directly. Therefore, I see that it is necessary and just to provide more independent authorities to evaluate

the appeal. Thus, perhaps a tribunal is necessary to hear appeals from potential developers who believe their plans have been delayed or rejected without adequate cause. Such a tribunal would need to be expert, local and prompt in reaching decisions. Although, it is impossible to be precise about the composition of a tribunal of this nature, it is expected that it should be comprised of, for example, a senior member of MRA, representative of the local municipality, member of DCSS and a local notable...(see figure 9.7).

Appeals may be made on one or more of the following grounds:

- a) errors in interpreting the regulations,
  
- b) gross inequities in the plan resulting in intolerable personal hardship,
  
- c) failure by local municipality to determine a submission within the prescribed period.

### Enforcement

Many of the existing problems result from the failure to enforce land development policies. Therefore, a system of enforcement is necessary to control undesirable development and it is a duty of the Building Codes Administration to identify illegal development. Construction work undertaken without a prominently displayed permit may be reported to the Building Codes Administration, who shall investigate a complaint. A field check shall be made by a member of the Building Codes Administration. The complainant (if any) shall be advised of the result of the investigation.

**Figure 9.6: Building Permit Procedure**

Applicant obtains information on regulations

Applicant submits plan to Competent authority

Competent Authority checks on completeness of application and plans and accepts plans for processing

Competent authority checks the site with respect to timing and phasing for utilities

Competent authority processes the plan and checks overall conformity with regulation

Competent Authority gives permission and issues building permit

Competent authority issues occupancy certificate after all formalities have been completed

Occupant applies for occupancy certificate

Applicant applies for utilities connections

Competent authority gives completion certificate

No  
Planning Permit  
Refus

No

Applicant Modifies Plans

Applicant starts execution and inform competent authority

Competent authority checks on execution and building lines

Applicant modifies Match the lines with the approval plans

On completion of plinth level applicant informs authority.

competent authority checks general conformity of structure with plans

On completion of first floor applicant informs competent authority.

yes

yes

Competent authority takes action/imposes penalty for violation.

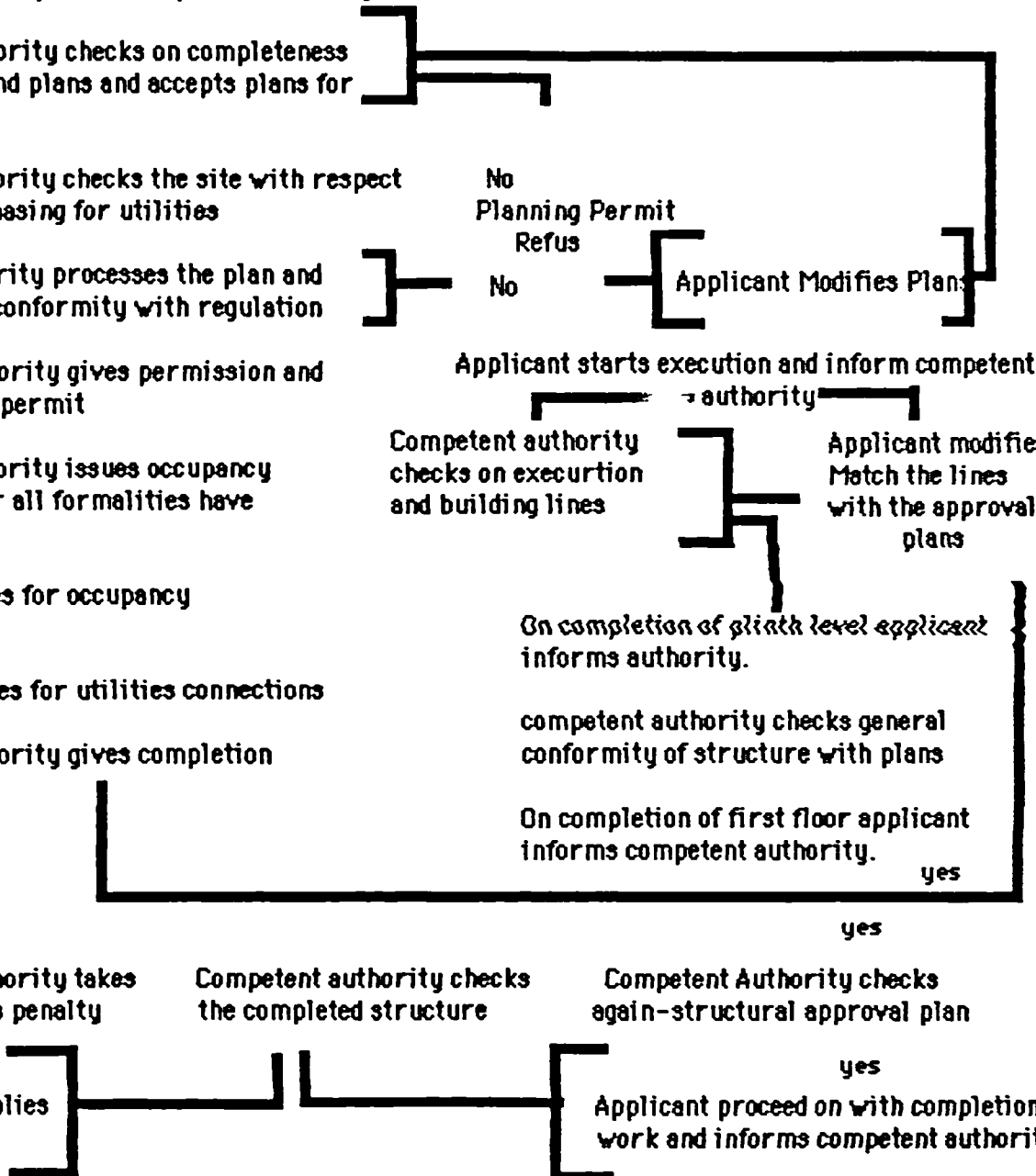
Applicant complies

Competent authority checks the completed structure

Competent Authority checks again-structural approval plan

yes

Applicant proceed on with completion work and informs competent authority



If it appears to the Building Codes Administration that construction work had been carried out without a Planning Permit or Building Permit or both, the BCA shall issue a Stop Notice prohibiting the developer on whom it is served from carrying out or continuing a specified operation. This notice may be served on any person having an interest in the land and/or who is concerned with the carrying out of the operation. The Building Codes Administration may also issue a Stop Notice if a material change of use has occurred without permission. The only grounds for appeal against a Stop Notice are that the developer has already obtained the necessary Planning and Building Permits. If such permits have already been obtained and the Stop Notice is served, then the developer is entitled to compensation according to the length of the stoppage involved. This compensation will be determined by the Planning Appeals Tribunal.

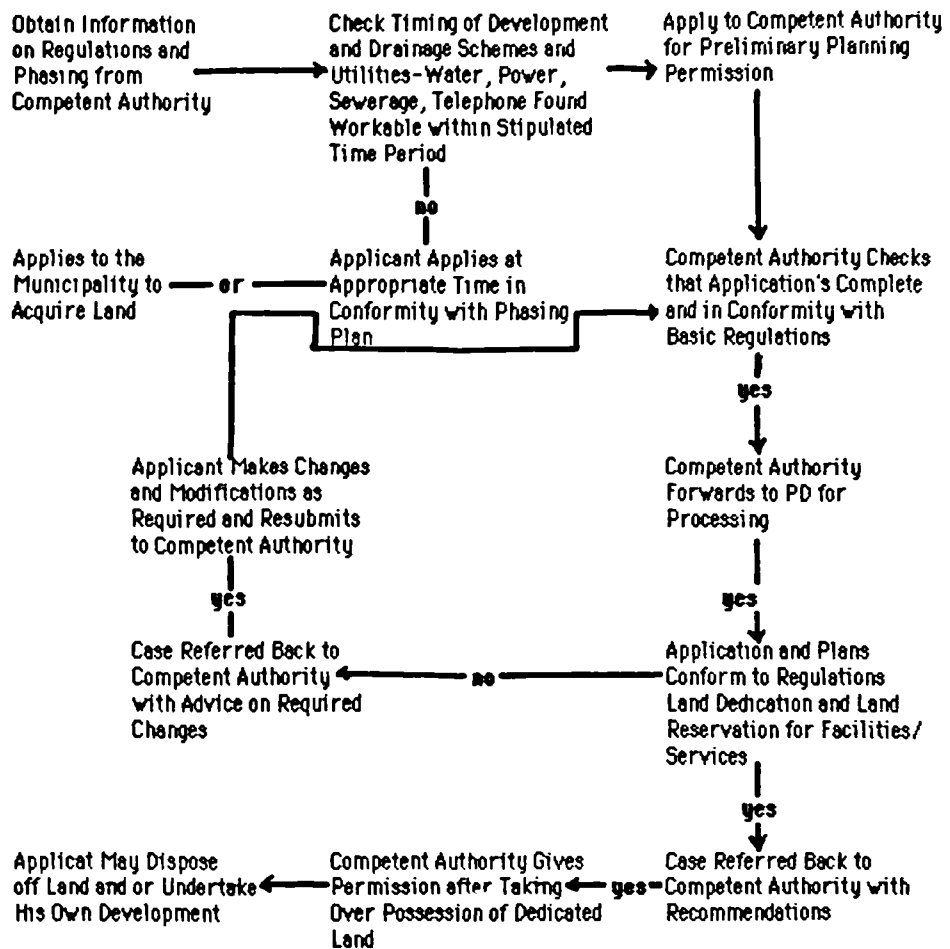
#### System Of Examination Of Subdivision Plans And Issue Of Subdivision Permits

The DCSC shall permit subdivision of a parcel of land or plot provided the proposed subdivision is in conformity with the subdivision regulations, in conjunction with use regulations and building regulations specified for the district in which the proposed subdivision is located ( Figure 9.6 ).

#### Procedure for Application for a Subdivision



**Figure 9.6 : Application Process For Subdivisions.**



The applicant must submit a preliminary scheme of the proposed subdivision showing:

a) Key Map showing relation of the site with the city to a reasonable scale showing location of all utility lines and roads around the site.

b) Site Plan giving dimensions and area of the site to a reasonable scale and existing topographic and land use features.

c) Preliminary subdivision layout with dimensions showing:

1) roads and parking areas

2) parks and open spaces

3) facilities and services

4) land use.

d) Land use break down giving the extent and percentage of area under:

1) facilities and services

2) public roads and parking

3) other proposed land use.

e) Broad zoning with respect to permissible use, height, and floor area ratio.

f) An authenticated copy of the land deed.

### System Of Examination Of Design Details

#### Submission of Plans

The procedural requirements for a building permit are given in Figure 9.7.

An applicant intending to erect a building on a physically identified plot, shall submit in triplicate the following to the DCU:

1) Key map of the site showing general layout in relation to the city or district or part of the area where the site exists at an appropriate scale.

2) Site plan giving dimensions, width of road or roads abutting the property to a reasonable scale (1:200 for plots larger than 400 square meters and 1:50 for plots up to 400 square meters). This plan should also indicate the entry and exit points, parking and where applicable loading and unloading details.

3) a) Drawings to include plans of all floors including basements and mezzanine floors to a reasonable scale.

b) Drawings showing elevations to a reasonable scale.

c) Drawings showing sections at appropriate levels to a reasonable scale.

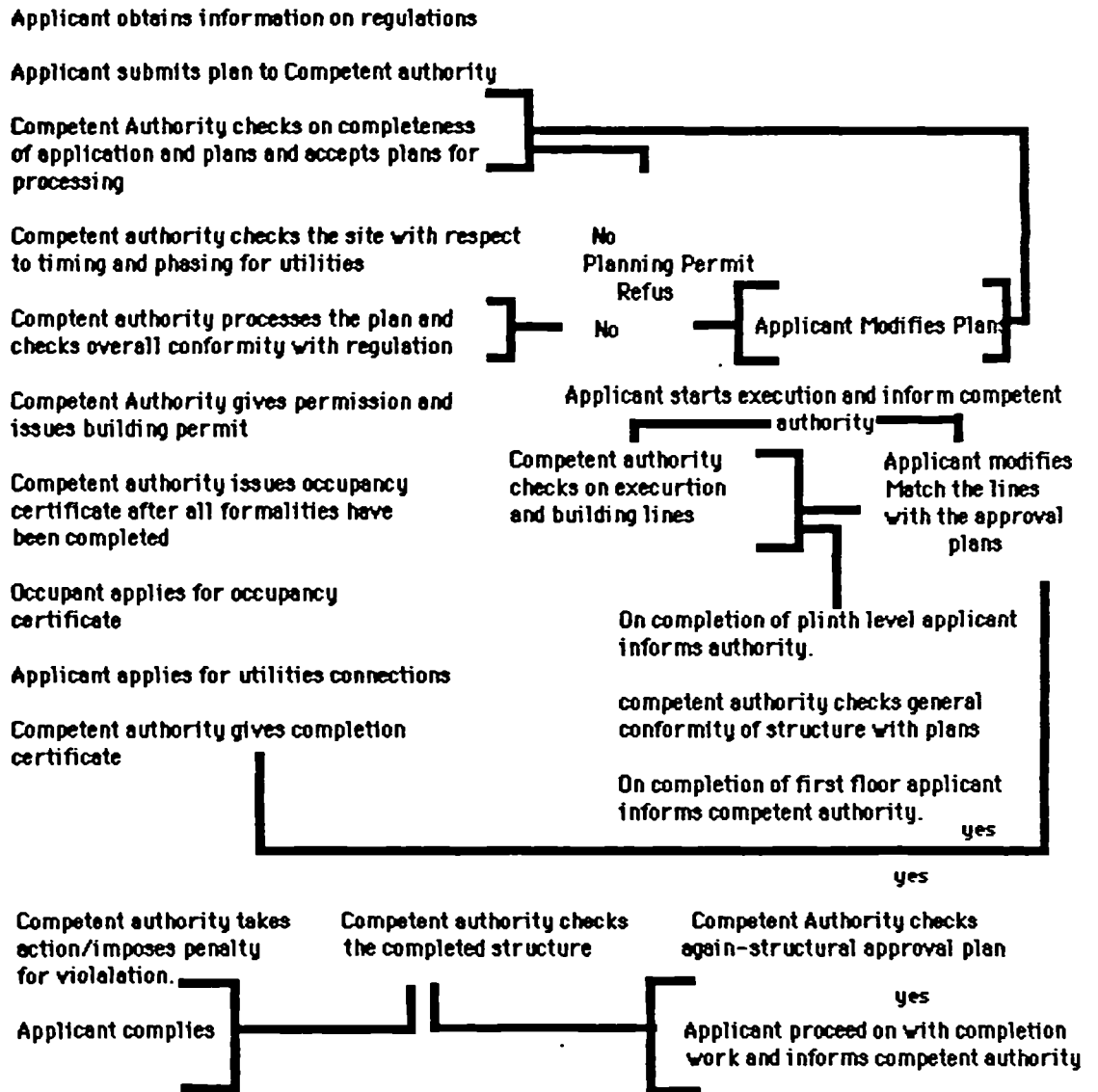
d) Structural drawings to a reasonable scale.

4) a) Utility plans to a reasonable scale, showing water, sewage, power, telephone and wherever applicable telex lines.

b) Landscape plan to a reasonable scale showing details of surface treatment.

5) Authenticated copy of the land deed.

**Figure 9.7 : Building Permit Procedure**



### Obligations of the Applicant

The applicant, or his agent engaged in construction activities on the basis of a permit, shall fulfil the following obligations:

- 1) The applicant shall abide by the 'land use' 'zoning' and other regulations and the approved plans.
  
- 2) The applicant shall inform the competent authority of the date of commencement of excavation operations for necessary inspection.
  
- 3) The applicant shall inform the competent authority regarding completion of plinth level and first floor roof levels for necessary inspection.

### 9.7 IMPLEMENTATION ISSUES

A proposal has little value unless it provides a basis for action. In this final part such a basis is established by drawing together in summary form all those recommendations that appear elsewhere in this chapter and require action of various kinds. The previous recommendations can be classified into three groups based on the motives behind them; these groups are: (1) to facilitate the availability of land for individual developments as well as public programmes; (2) to control land use in a manner consistent with cultural and environmental factors; (3) to co-ordinate intergovernmental administrative systems and improve development control procedures.

In order to achieve sufficient control over land development and improve capability in modifying and/or formulating policies, initial action should be aimed at developing the existing government structure, and its personnel. It should be staffed by administrators, who will enforce for example zoning, subdivision and building code regulations fully and fairly and have the ability to experiment with new ideas and/or modify an old one, and that, finally and most importantly, the system should be able to integrate these controls and techniques into a coordinated and dynamic planning process. For these reasons, prior to any action of adopting a policy or a technique, the upgrading of the existing system comes first.

In the case of grade "A" municipalities, the administrative proposal does not include any structural changes and the only requirement is limited to changes in powers and responsibilities. These changes include:

1. All committees must have compulsory roles rather than the existing advisory role .
2. To transfer the authority for implementation of land grants from the Ministry of Finance to the Department of Land Development. In addition, the proposed Land Banking must be handled by the same department.
3. The existing Real Estate Development Fund, currently, under the authority of the Ministry of Finance, should be modified to ensure that the approval of application for housing

loans must be carried out jointly between the REDF and the local municipality, to ensure more control on the re-direction of growth.

4. Public programmes, e.g. housing, schools, mosques, which are not under the authority of a local municipality in terms of location, timing or implementation, together with the general external features of the structure, must be approved by the local municipality to ensure their compatibility with the physical pattern.

5. The Municipality Mayor must head the administrative structure of the proposed co-ordination hierarchy, since the Mayor in the case of this *grade of municipality holds a rank of "Minister"* which provides him with wide ranging authority in policy making as well as implementation.

Once the above five points are established, the administrative structure will be better able to respond to the proposed policies framework. The proposed policy framework approach consists of four complementary fields:

- \* controlling the grant mechanism.
- \* providing a compulsory authority to acquire land from the market.
- \* direct involvement by local authorities in the land market through land banking.
- \* penalizing the withholding of vacant but serviced land.

All the above measures must be within the authority of the Land Development Department.

The first impact of such changes would be on urban sprawl. In the case of Jeddah, the area which has been covered by the field interview shows that speculators, generally, hold on to land for between one to two years before selling (this has been confirmed by real estate agents). Over this period the speculative gain is typically in the range of 30%-50%. Consequently, a penalty tax on holding vacant land (say 5% of its value) and sharing a percentage of the value added, will significantly reduce delay in development and the huge profit which exists at the current time. The second feature of the proposal relate to timing and physical measures. The use of facilities and other public services will stop the activities of premature development of land. Many of the interviewees responded to questions about their developments which took place at distant areas, by referring to lack of access to public services and utilities; the high prices of land prevented them from obtaining land at metered sites. Therefore, along with land penalising, timing and limiting the number of transactions of grant land; land banking by the public sector through the facility which allows it to intervene in market will bring the prices down.

I believe that, within two years, such action could virtually end the existing situation of urban sprawl because:

\*Most land owners hold land for one to two years , and



sometimes less, in response to the rapid rate of change in the land market.

- \* Land prices experience their highest rate of increase within two years of the sale.
- \* The policy of withdrawing land grants from grantees if they fail to develop within three years will bring an end to speculation by grantees.

The second problem facing urban land development is failure of implementing public services because of failure to obtain land at the right time and at the right prices. Along with the above policies, the availability of a public reserve of land (land bank) as well as the pre-emption device will help to facilitate development. An administrative structure which provides strong intergovernmental co-ordination will ensure improved location and timing of service provision.

The third problem is associated with the existing system and techniques of land-use control. The proposed policy concerning this issue consists of two complementary actions:

(1) modifying existing techniques: (2) improve development control procedure.

To change, completely, the method of land use control is not feasible, therefore, the proposed policies recommend a change within the existing policies.

The first main aim of modification is to bring greater social balance to the developing pattern by introducing more flexible regulations while keeping the overall parameters of the existing zoning regulation; also by reducing land prices, low and middle income groups are effectively given greater choice over their location and development decisions.

The second aim is to improve the compatibility of the urban pattern in terms of privacy. Obviously, in already built up areas some of the proposed policies cannot be implemented or are only gradual in their effect e.g. setback regulations, high rise buildings in single family areas. However, the situation can be fully controlled in newer and undeveloped areas. Also invasion of privacy as a result of nonconforming use can be corrected, over time, through the operation of procedural controls, e.g. building permit and use permit.

For the same reason it is almost impossible to implant the environmental parameters (Chapter Four) in an existing built up area. However, in undeveloped areas, the proposed modifications to existing land zoning regulations, to accommodate the environmental parameters and guidelines, can be implemented.

We have seen that in detailed procedure for development control, however, three main conditions must be established prior to any attempt to adopt the proposed procedure.

1. Foreign consultants cannot undertake the role of enforcement, hence, the only alternative is to train Saudis in the administration of development control (see Manpower Development).
2. The Development Control system should be able to evaluate permits, each one based on its merits, to allow methods such as conditional zoning and special permits can be implemented.
3. The proposed procedural system includes an appeal procedure, but the system for appeal must include an independent party who is a planner(s) skilled in the area of land development control.

Once the administrative system established, the recommended methods and techniques must be adopted. However, essential to the proposal is a requirement for trained manpower in the area of planning. The following paragraphs look at this issue.

#### 9.7.2 Manpower Development

The problem of skilled manpower to run the process of policy formulation and implementation consists of two types of problems: shortage in the quantity of trained manpower; and shortage in the skill qualities of that manpower.

The higher educational system in Saudi Arabia has solved the first manpower problem (i.e. quantity). The solution has been in the form of

five undergraduate urban and regional planning departments distributed around the country which are producing a generation of Saudi planners who will eventually fill the gap in the planning system of the country.

Almost all Saudi planners currently practicing in the various ministries and governmental agencies were trained outside Saudi Arabia, and/or in Saudi Arabia through programmes adopted from other countries, particularly in the West. As we saw previously, Western views on planning are often inconsistent with the cultural, social, and religious needs of Saudi society for whom they plan and design. In order to eliminate this problem, existing urban and regional planning programmes should aim at producing scholars and planners whose intellectual training and emotional development are geared toward achieving a synthesis of Islamic values and modern scientific and technological progress, all within the framework of Saudi development needs.

Saudi Arabia is undergoing dramatic social, economic, and cultural changes, due to rapid development, urbanization and the adoption of modern technological innovation. To cope with these changes it is not merely important, but essential, that Saudi Arabia develop a programme through which students are not only expected to demonstrate competencies in planning, but also to understand the rapid dynamic changes produced by modernization and technology. These students must also be able to adapt continuously to new situations and to the emerging problems of the society in the framework of tradition and Islamic values. From this point of view the significance and importance of developing an urban and regional planning programme to

supplement deficiencies in existing programmes, is increased and more evident.

Universities should include undergraduate and graduate programmes which would create a generation of Saudi planners who would be qualified to work in municipalities, governmental agencies, ministries, semi-governmental organizations, planning departments, national planning, and housing and planning consulting firms, with competence, and knowledge of the institutional framework and planning system of Saudi Arabia. The involvement of this kind of generation of planners as urban planning consultants in the public, as well as private sectors in Saudi Arabia, will contribute to the development and advancement of land development.

The existing undergraduate programmes of physical planning, economic planning, social planning...not only lack the knowledge of existing situations in Saudi Arabia but also lack the content necessary to solve the complex, emerging problems of the society, problems which usually require an inter-disciplinary education. Developing an urban and regional programme must include a multi-disciplinary structure which will enable the student to understand the society's problems.

## RECOMMENDATION SUMMARY

### To provide community facilities e.g mosque

#### EXISTING POLICIES

- \* Location Identified in the Land-Use Plan, by local municipality or regional office - Ministry of Municipalities
- \* Ministry of Pilgrimage and Endowments informed
  - Through the local advisory committees; or
  - Through central government.
- \* Site Allocation, M.P.I. according to its implementation plan - phasing - tries to obtain the site.
- \* The following action and results could take place:
  - The implementation plan of the relevant authority may not conforming with the Master Plan.
  - If yes; the rapid change in land prices may stop the implementation or push the location to another site which may not conform with location criteria.
  - If affordable, but owner refuses to sell, the authority lacks compulsory rights; or
  - maybe the land had been sold which implies time to find the new owner; or
  - If found, due to all the above obstacles and the lengthy centralized compensation system, the community remain for a considerable time without the facility; or
  - Because of the failure to control density the facility may fall short the need; or
  - Because of the failure to control uses the location could become e.g hazardous to the user.

#### RECOMMENDED POLICIES

- \* No change
- \* No change
- Obligatory committees
- adopting regional offices and provide them with necessary obligatory authorities.
- Land Development Department the only government agencies has the authority to obtain land.
- the coordination at the local or regional level through Planning and Development committees .
- The intervention in the market by government through land banking, land taxation.... will reduce the rate of change.
- local authority has compulsory rights
- Pre-emption
- compensation procedure done at local level.
- The planning permit, building permit, and other enforcement procedure will provide more control on density.
- As above.

To maintain cultural and environmental aspects  
to urban development pattern

EXISTING POLICIES

RECOMMENDED POLICIES

\* Responde to cultural:

Existing policies containe standards,  
regulations, methods, most of which  
cntradict with cultural.

- Privacy: set backs, non-conform uses, mixed hights...all of which shows the inconcestancy with privacxy.
- Equality: the different in density, and standerds,....
- The mosque, the locational prblems, .....

Policies must respon to  
respond to the cultural  
criteria, include

- Mosque
- Unity
- Privacy
- Equality

\* Responds to enviroment:

Existing policies containe standards,  
regulations, methods, most of which  
cntradict with enviroment conditions.

- Solar gain: set backs, the open space standerds,....
- orientation: the road pattern.
- etc.

Policies must respond  
to climate, soil,...through:

- +Combactness
- +Orientation
- +Building Form

To prevent nonconforming uses - uncontrolled density, violation of privacy, hazardous...

#### EXISTING POLICIES

- \* Once the buildings are built, municipalities have no control on the owner in terms of the use of the structure. e.g. the owner could obtain a commercial or a business permit, without consideration to the location and other building and zoning regulations, from the Ministry of Commerce.

existing policies do not include procedure and method or...to coordinate between government agencies, and

policies do not include method and procedures to control the use of the structure once built.

- \* Municipalities lack the authority and system to coordinate government projects.

#### RECOMMENDED POLICIES

The planning and building permit conditions and penalties to insure the kind of use later.

The administrative structure provides coordination committees to insure conformity at the stage of planning as well as implementation.

The recommended policies provide local municipalities with an obligatory authority.



## To Provide Land For Urban Development-Individuals

### EXISTING POLICIES

\*Individuals obtain land through the Direct Process or the Indirect Process.

- Direct Process: Provides land for individuals by unconditional grants in terms of time of development and the right to sell, which in return encourages land speculation; and, most of the time grants located at sites that lacks public services. Together they result in the needy individual looking for their land on the outskirts of urban areas, resulting in urban sprawl.
- Indirect Process: Provides land for individuals through the land market which lack land price, location, and transactions controls policies. Nevertheless, the only original supplier of land for the land market are those who obtain state grants in large estates- dignataries-these grants lack the same controls of the Direct Process.

\*The existing policy for providing land for individual needs results not only in urban sprawl but also in housing and open spaces shortages

### RECOMMENDED POLICIES

\*No Changes

- The rights to sell and to develop lands controlled to prevent speculation, by limiting the number of transaction and the time that the granted land can remain vacant.
- Various measures to facilitate governmental intervention in land market has been recommended, such as land banking, compensation procedure, readjustment schemes, etc. Also the rights of the grantee in terms of selling the grant or the time of developing it has been controlled.

## CHAPTER X: CONCLUSION

The main concerns of this study are the land policies in Saudi Arabia, their performance, their compatibility with Sharia values and teachings and their consistency with the physical conditions of the country. Two hypotheses have been examined and investigated. The two hypotheses are: (1) under rapid economic growth and, consequently, rapid urbanization, existing urban land policies are inadequate to meet the pressures of market forces and to facilitate land improvement; (2) existing policies have failed to produce an urban pattern compatible with cultural and environmental conditions.

However, the two hypotheses imply two issues: (1) the issue of land policies as measures, techniques, statements and directives; (2) urbanization as a process which includes physical and social changes, and the cultural and environmental conditions within which the first and second issues have taken place. The first hypotheses linked the performance of the existing policies to the pressures of the urbanization process; whereas, the second hypothesis specified the implications of the inadequacies of the policies by hypothesising that the policies have failed to produce a type of development which is consistent with the physical and cultural aspects of the country. The nine chapters have been designed, within the above argument.

The thesis can be divided into three parts. The aim of the first part, which includes Chapters 2, 3, and 4, is to explain the urbanization process as a phenomenon that influences land policies, to define the term "land policies" and finally to establish the criteria against which land development and land policies are measured. We have seen the urbanization process and its impact on urban land, and how the nature of the process could influence growth and the kind of policies required to control growth. Using the Saudi Arabian experience, we have seen that the case of Saudi urbanization is not exceptional as it follows a similar model to that experienced by the developed world during the 1950's and 1960's, with one difference, the high speed of the process. In Chapter 4 we saw the kind of physical environment which existing land policies have accommodated, and the Islamic issues which are the main source for cultural, social and legal conditions. The first part concluded that the process of urbanization, in the context of this study, should be seen as a main influence on land policies because it generates demand and brings change to land and that as Saudi Arabia is not exempted from this impact, consequently, land policies must be developed to control and bring order to these demands and changes; however, in the case of Saudi Arabia two factors must be considered mandatory: Islam as a cultural and legal framework; and hot arid conditions as an environmental constraint/opportunity.

The second part - Chapter 5 - contains three case studies, which explain in detail the phenomenal urban growth in Saudi Arabia, as well as facilitating an examination of urban

patterns, in relation to the adopted criteria. We have seen how the physical pattern has changed and how this pattern conflicts with the cultural and physical criteria, and has failed to contain and to perform in a manner consistent with the first criteria, planning objectives.

The third part of the study concerns the evaluation of land policies, in relation to the conclusions on policy criteria from part one. This part looks at the national and local context of physical planning and then evaluates the land policies; two issues came out of this part: the first is the outcome of the evaluation of land policies, which concludes that land policies have failed to consider the physical and cultural aspects of Saudi Arabia as well as failing to manage land development in a manner consistent with the planning objectives.

However, land policies cannot be seen as being isolated from the general process of physical planning on its two levels, the national and local, merely because land policies, in the context of this study, are the measures which aim to implement the physical plans. In other words they are the policy measures which result from the comprehensive planning process at its two levels. The second issue, as we have seen in Chapter 6, concludes that the existing system of physical planning shows two areas of weakness: lack of integration between its horizontal levels and lack of co-ordination between its vertical sectors. In other words, the existing system of physical planning shows some weaknesses in considering social -

economic planning, and in incorporating the implications of national planning at the level of local physical planning.

However, within the subject of this study and for the sake of the analysis, the second issue is left at this stage, to be taken up and completed by future research into physical development and physical planning in Saudi Arabia.

The issue and scope of land policies have been defined differently, by those who have attempted it. They have been defined in economic, legal, or physical terms, or a combination of these, while their scope has covered different scales; in some cases their scope has been restricted to a minimum whereas the legitimate concerns of land-use controls extend goes beyond that to issues of housing projects, regional development policies, urban planning control, urban government finance, and urban government and central government relations. Because of the lack of existing data, information and most importantly, lack of previous research in the area, this study has taken a more general approach to cover as much as possible on the topic and to raise more questions than to answer. The study, by doing this, establishes a base for future, more specific research in the area of land policies.

The study has raised three main issues to be investigated. The first, the Sharia as a source of legislation for land policies. If the intention is to control and regulate land in a manner consistent with Islamic legal parameters, future research should look at the Sharia in terms of the contemporary issues

of land policies. The second, land policies, are a part of a comprehensive process to develop urban land in a manner consistent with national objectives. Therefore, without understanding, or explaining the theory of physical planning in Saudi Arabia, the attempt to examine land policies will remain short handed. Thirdly, urbanization, is a process by which various kinds of changes - technological, social, economical, etc. have been brought to the urban areas, the Islamic-Arab urban areas, and together have generated pressures on the traditional theory of the physical patterns of Muslim-Arab cities. The need to understand, analyze and assess these changes is critical to the issue of land policy. Without a normative theory, that is, without knowing how, the pattern, the form, and the structure of the urban areas should be, land policies cannot be assessed. This study has tried to understand this issue in Chapter 4. However, this area requires more research to assess the impact of urbanization on traditional patterns.

The attempt to deal in this thesis with the issue of land policies as a subject in the field of urban and regional planning, has encountered several methodological problems.

The first set of problems are related to data availability, whether from its primary or secondary sources. Information conditions are, in general, improving in Saudi Arabia; however, the opportunities for accessibility to data differ and are sometimes impossible. Also, socio-economic as well as physical data about land markets are limited and not always

accurately reported even when the process of data collection has been accurate. There are also problems in the antipathetic behaviour of the Saudis towards interviews and questionnaires. This condition influenced the course of action taken to facilitate the analysis.

The second problem is an old one, related to social science research, the difficulties of quantifying some of the aspects of policies and social and cultural issues, which inturn influence the course of some issues of this thesis.

"Land is an important issue anywhere in the world at any time in the history, but it acquires an even keener relevance in today's developing world context. At this very moment, the way humanity has organized itself on earth is undergoing one of the most profound transformations in history. The population on earth, which throughout history has been overwhelmingly rural, will be by a large majority urban by the year 2000." (Enrique Penaiosa, 1980, World Congress on Land Policy).

Saudi Arabia and the Gulf countries are not an exception, and even though this study has concentrated on Saudi Arabia, the rest of the countries in the area are undergoing the same course of change and face similar problems of physical development that is unplanned and uncoordinated, retarding functional activities, creating bottlenecks, and investments which may be partly or totally wasted. Therefore efforts must come together for more and better understanding of urban growth and urban change, so that land policies become more

effective and more related to cultural, environmental and economic conditions.



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## APPENDIX A

### THE SAUDI URBAN SOCIETY

I explain the Muslim urban society. The Saudi urban society by all means is similar to that in a modern context. Previously I mentioned that Islam defines relations between the individual and the community. Such Islamic concepts as neighbourliness, collective ownerships of certain resources, right of way and the concern for safety, provide a foundation for definitions of the boundaries between collective and private space. These can be contemporary and evolving.

It is safe to divide the social pattern of Saudi Arabia into four major urban social regions. The western region (Hijaz) with the higher urban population. The central region (Najd), comes second in the size of population and contains the capital of the country. The eastern region (Al Hassa and Al Qatif), where the oil industry and the higher Saudi labour population. Finally, the southern region (Asser) with the least urban population. This division is based on the cultural differences among the various regions, which was brought to the region by its physical environment and geographical location. However, this difference, gradually are diluting because of the process of modernization, which eliminates the above element. Any way, the differences by no means include major cultural and social

habits. There are, mainly, in relation to the differences in making a living.

The Hijaz region is historically very different in temperament. Owing to the thousands (now millions) of Muslim pilgrims to the annual Hajj, the Hijaz has long been one of the most cosmopolitan places on the earth. Pilgrims come from all over the Muslim world and in earlier times many stayed on, ultimately to be absorbed by the local population.

Before the discovery of oil, the Hajj was Saudi Arabia's major source of income. A great merchant class grew up in the major Hijaz cities of Jeddah and Makkah, as well as in Al-Medina and Taif. Even after the discovery of oil, Jeddah remained the country's principle commercial center. For all these reasons the urban society has a longer existence in the western regions. Where the other three regions followed the path of urbanization and the creation of the urban society starting with early growth of oil revenues in 1960's. With modern communication facilities and other economic ties the differences are demolishing and coming closer to the western urban society. Therefore, the following description of the urban society, is based on the western region. As previously mentioned, the intention is to refer only to those cultural aspects which may have had an impact on the urban land use pattern and urban form of the Saudi urban areas.

### The Family Concept

Islam is deeply rooted in the Saudies and it shapes every aspect of their life, whether in their urban setting or rural life. This reality is reflected in turn in family life. The urban community follows the traditional extended family pattern, inherited from Arab tradition and strengthened by Islam. The members of the family are loyal to each other and to the community as well, which accounts for the strong unity within the Arab-Muslim society. According to doctrines of Islam, respect by children toward their parents from one generation to another is also one of the most significant factors in the extended family. It is not unusual among the Saudies that members of three to four generations live in one house; there is a continuous relationship from gandsons to grandfathers.

The extended family, provided the primary and fundamental constituent in the structure of the larger community, acting as a nucleus in the promotion and the maintenance of strong social ties. The traditional family in Saudi Arabia urban areas was large, moulded by Islam and Arab heritage, and living usually in one great house. Every house in the traditional urban neighbourhood bore the name of the family occupying and owning it, a custom still practiced in present-day. In such a consolidated arrangement, the head of the family was the ultimate authority in the house, followed by his wife and his oldest son. In case of death of the patriach, the oldest son becomes responsible for managing the family business and its public affairs, while his widow is assumed the final authority inside the house, assisted frequently by the oldest son and the oldest daughter.



Thus, community cohesion and a sense of belonging were established first of all at the primary unit, the extended family. Such an atmosphere permitted the residential quarters, forming thus a kind of larger unit of the traditional family.

### The Quarter Concept

A large number of the family-houses, usually between two and eight hundred, constituted a residential quarter (harah). There were, however, no clear physical separations between the quarters. Boundaries between quarters are becoming now fuzzy, known only to older men and no more of the younger generations. The division of the town into quarters merely served the purpose of easier administration and orientation within the town. Each quarter had its own leader (Shaikh or Umdah) who administered its internal affairs by public consensus. Unlike some other Islamic regions, the quarters of the Saudi town and cities do not represent any type of social class segregation or ethnic groups. Also, they were not protected by walls and gates which could be locked at night. Because the residential quarter was composed mainly of family housers, privacy and security were highly respected.

Symbolic but very important social gestures of sympathy assisted in maintaining strong ties among the family houses on one residential quarter, or even among the various quarters. Any celebration of happiness of one family house (such as weddings, birth, homecoming

from a long journey, etc.) as well as its crises (death, sickness, etc.) were collectively shared by the houses of the various families to exchange presents and home cooked food.

This was the atmosphere in which the urban settler was born and raised, an atmosphere that prevailed in Saudi Arabia until only two decades ago. The then prevailing social life took thus the form of a family life, governed by obligations, friendships and esteem for social relationships. Disputes in the old town were solved within this intimate family atmosphere.

#### Social Organization

The various residential quarters of towns represented nothing more than parts of still larger family concept, the urban as a whole was organized and administered according to the Sharia. The acceptance of the Sharia law into such a heterogeneous cosmopolitan community as that of Saudi towns was an effective vital step towards establishing an overall social unity. Thus, like other Islamic cities, cultural traditional evolved mainly from Islam. Where towns experienced mixed population, with a large non-Arab Muslims, all adopted Arabic as its common language. By sharing a common religion and language the non-indigenous population was integrated harmoniously and without social discard (Jeddah, Mekkah, Medina).

Broadly speaking, the traditional urban pattern of Saudi Arabia was to a large extent similar to those of other Islamic and medieval cities,

yet there were various distinctive urban features which did not conform exactly to the urban pattern models of the Islamic or Near Eastern city as suggested by various scholars. Unlike most of the medieval cities, the central space in western towns of Arabia was not allocated to governmental and religious institutions, but rather to the equal family houses, the residential quarter and the market area, the suq. This might be attributed to the principal reason to their existence, for instance as in Jeddah, with its proximity to the Holy City of Mekkah.

The status of the mosque in most urban areas was a case in point. In most Islamic cities, the public life of the traditional and religious society of the towns revolved around the mosque, in addition to the suq. Nevertheless, the proximity to the Holy City of Mekkah and Medina, for most of the western cities and towns, and where the principle mosques of Islam are located, affected the status of the mosque in those areas.

Similar to other early Islamic societies, such as the Abbasid capital of Baghdad, Jeddah, Mekkah, Medina, Taif and Dammam populations were cosmopolitan, diversified and with heterogeneous ethnic backgrounds, yet these populations have never been organized into tight parochial communities. The wealthier and more well-to-do families resided near the center of the town, while the poorer and less influential people occupied the fringes of the urban space. The gap between the poor and wealthy is often partly bridged by kin ties or marriage or friendship relations; the latter then assumes the role of

protective patronage. Various families up and down the social scale tend to be identified with particular occupations, and the hereditary character of many skills makes it natural for the individual to accept his allocated place in the economic scheme.

Within the towns' residential quarters, there was a relative absence of craft and professional organizations and spatial grouping by occupation. In addition, social segregation concept was not practiced in the urban community. Ethnic groupings (Yamani, Hadrami, Indian, Malaysian, Persians, etc. ) was more social than physical, in that strong communal bonds existed among the members of each ethnic group though they did not necessarily live in close proximity to one another. Normally, each ethnic group had its own firmly established resident chieftain, who had entirely assimilated himself into the indigenous community.

The previous ethnic group issues, almost, does not exist in the Central and Northern regions, where town and cities are much younger in age from those in the Western region, has more ties that villages and have no interest for migration from outside due to the harsh life in these areas at that time. Considerable difference is apparent between the social organization of those towns and cities in the West region that have been affected for a longer time by modernization and migration. The social organization in Central and Northern cities and towns shows a general resemblance to that of the villages and, to a lesser extent, of the nomadic tribes where kinship ties and control are dominant. The pattern of life, in these towns is characterized by

paternal descent and authority, family loyalty, intralineage cooperation, and residence of the extended family in a particular area within the town. In those towns and cities in these regions, newly arrived tribesmen, foreigners, and non-Saudi Arabs show little social cohesion and group loyalty.

All these factors have deeply influenced the organization of the urban system of the town. It would be unreasonable to attempt to point out a single criterion or principle for Saudi urban formation, the allocation of space, and the positioning of the various urban elements. The same can be said about the towns' architectural development which had been influenced by numerous foreign architectural traditions, yet culminating in a mature identity.

Saudi urban societies, diverse as they were, faced by multiple choices and decisions. In creating their urban environment, they drew on a treasure house of solutions, derived from a multiplicity of system, cultural, religious, social and economic traditions.

The resulting urban structure, as well as the architectural tradition was hence as varied and flexible as the cultural tradition. As one would expect, the physical and ethnic qualities of the urban areas in Saudi Arabia were inevitably shaped by the traditional social organization, by the historical circumstances, by the cultural preferences, by the available technical know-how, by the climatical and environmental conditions and above all by Islam.

## APPENDIX B

### Economic Considerations

Saudi Arabia owes a great deal of its substantial and rapid economic growth to its richness to one natural resource, oil. Since its discovery in 1938, oil has become the dominant source of economic growth. The Saudi economy has been and continues to be described as a one-commodity economy, to indicate its heavy reliance on oil. As Table 1 shows, the dominance of the oil sector can not only be seen by its relative share in GDP, but also in its dominant share of government revenues and foreign exchange earnings.

The GDP, at constant prices of 1969/70 increased from SR 13,336 million in 1966/67 to SR 41,641 million in 1977/78. After twelve years, the annual growth was calculated, and found to be standard. Real GDP per capita has also grown substantially. In the 1960's, specifically between 1964 and 1969, the average annual growth rate was 5.8 per cent. This rate more than doubled between 1970 and 1976, where the average growth rate was 12.1 per cent. This rate more than doubled between 1970 and 1976, where the average growth rate was 12.1 per cent annually.

The enormous increase in the price of oil during 1973/74 has the greatest impact on this country on as the world's major oil exporter. It transformed the parameters of economic planning for the country, rendered obsolete all prior projections, and gave the government the

problem of converting monetary wealth into improved living standards for the people, on a scale, hitherto, unprecedented.

What was true for the country as a whole is true to a greater or lesser extent for the regions and major cities within the country. As the country's major port and trading center, the impact of Saudi Arabia's oil-related boom is being, and will be felt in Jeddah as much as anywhere else in the Kingdom. In this appendix we intend to make some assessment of the changes that have been taken into account in the economic well-being of the city of Jeddah, and to indicate where possible how these changes might have an impact on some of the subject areas discussed in detail in subsequent sections. The consequences of reassessment will flow over to the detailed physical planning aspects of the evaluation of pre-existing conditions. However, one should bear in mind that the lack of recent, comprehensive economic data makes it difficult not only to assess the previous economic climate with any precision, but also to deal with the existing and future trends. The following subsection focuses on the period before the adoption of the Master Plan of 1973 and the beginning of the implementation of the Master Directive Plan of 1979.

### Economic Growth

The most common measure of economic growth is change in the level of gross domestic product (GDP). This represents the value of all the output produced in the economy in a given period - usually one year - or, conversely, all the expenditures made to purchase that output. In Saudi Arabia, because of the over-whelming size of the

oil sector, this measure is not a good indicator of change in the level of economic welfare.

In the attempt to expand the rate of economic growth so quickly, the Saudi economy generated an extremely high rate of inflation. Measures of inflation are difficult to define in non-technical terms and harder to calibrate, but prices as found in the shops and as quoted by business are generally agreed to have risen by the order of 40-50 per cent in fiscal 1975/76. In the following year this rate had declined to around 17 per cent and remain constant at 17 % until 1980.

The main cause of inflation is an increase in the money supply in the domestic economy. To channel the vast oil revenues into the home market, the government has been pursuing ambitious plans for increasing its budgeted expenditure in all areas. Thus substantial construction had been commissioned for housing, schools, hospitals, etc. as well as large scale engineering projects like roads, airports, docks, and desalination plants. Much of the material and all of the plant required for this construction had to be imported, via port facilities which, at that time, were inadequate for the unexpectedly large demands being made upon them. This led to a shortage of supply in many commodities, with the inevitable inflationary consequences.

The effects of inflation of this magnitude on the economy are largely undesirable; money itself becomes a commodity which it is unwise to hold as its value is being steadily eroded. A better strategy is to convert money into tangible commodities with an intrinsic value of their own. Thus, the enormous investment in housing and offices and



buildings of all kinds that had taken place in Jeddah, between 1973 and 1977 is partly a consequence of this inflation. The fact that so much of this building remains unoccupied or unfinished (during the same period 1974-1977) can also be explained in the same terms. The motive for construction was the conversion of one kind of asset - money, into another - blocks and mortar, without undue importance being given to obtaining a return on the latter, since no return was forgone on the former.

From the physical planning point of view, this inflation-hedging construction boom has meant that the physical limits of the city have been expanding at a rate previously unthought of. The problem of controlling such development, the main issue of the thesis hypothesis, are vast because the policies (mechanism) for screening proposed new development does not seem to be able to cope with the enormous momentum behind its construction. (See Chapter 5)

There are other consequences of inflation which tend to distort the domestic economy. The impact falls generally on the poorer sections of the society who have no property and few assets and who find their real incomes continually squeezed by the relentless progress of prices. In general, inflation of the size recently experienced throughout the Kingdom is considered undesirable both because of its adverse social effects and for the economic distortion it creates which is patently harmful to the economy. In attempting to bring inflation under control, the government has adopted a two-prong attack; it has greatly increased the supply of goods - thus reducing, and in many cases ending, the shortage of all kinds that previously existed. On the other hand it has attempted to dampen

demand by keeping its own budgeted expenditure steady for three consecutive years. The supply of goods has been expanded by a substantial investment in port handling facilities, which has had a special impact on Jeddah.

Because Saudi Arabia produces so little of its own requirements of goods and services, virtually everything needed has to be imported. The rise in the amount of imports has been staggering. Rapidly rising personal incomes combined with rising international prices contributed to an increase of about SR 21.2 billion in imports in 1976. In absolute terms, the value of imports has trebled over the two-year period 1974-1976. To put this in perspective, the 1976 increase in the value of imports was itself nearly 150 per cent of the aggregate level of imports in 1974. For the private sector, imports have expanded fourfold over these two years. This rapid increase in imports took place over a period of severe port congestion. Now this congestion and its associated delays have been eradicated so that there is no physical constraint on imports maintaining their recent meteoric rate of increase. Although no complete commodity breakdown of the import total is available for recent years, such a breakdown is available for imports financed by commercial banks. These account for about half of all imports and their share of the total in 1975 and 1976.

To put these figures in perspective, it is worth noting that the 1976 import bill represents the equivalent of between SR 3,000 and SR 4,000 for every man, woman, and child living in the Kingdom, or a rough guess of about SR 20,000 for each household.

Jeddah is the Kingdom's major port, handling over 50 per cent of all the imports brought in. No recent complete figures exist, but approximately 85 per cent of all foodstuffs brought in arrive through Jeddah Port, and about 40 per cent of all construction materials. Since the establishment of the autonomous Port's Authority, the great increase in the capacity of Jeddah Port has eliminated the bottlenecks and associated congestion which were such a notable feature of the port's operation just two years ago. It is a significant achievement that this increase in capacity took place at a time when the tonnage being handled was rising quickly.

All the material brought through the port has to be moved to the point of final delivery. This is the distribution system and in this industry Jeddah has an enormous comparative advantage.

Transport and distribution is already a large industry in Jeddah, and it will continue to grow: it is also labor-intensive and therefore will provide substantial job opportunities, covering clerical, agency work, unskilled warehousing labour, and semi-skilled workers, mostly drivers and mechanics. Traditionally this industry develops large-scale distribution centers where goods are stored, and inventories maintained, prior to their disposal to retail outlets or consumers. Until 1982, in Jeddah, there was little systematic warehousing or no custom built distribution center. However, they were bound to come in sooner or later and physical plans were needed to take account of their demands of land, access roads, etc. By their very nature they will generate a considerable amount of heavy traffic, and the effects of siting them in residential areas need to be carefully considered by the planners.

## Economic Development

The process of economic growth brings fundamental changes in the economic structures of society. Where growth is slow, these changes are usually predictable and easily assimilated, conversely, when the growth is rapid, the changes occur sporadically, often unpredictably. The system, in short, is always desperately striving to adapt itself to the demands of a level of affluence that has already been surpassed." This makes economic prediction difficult, as noted above, and physical planning even more so, which in return, the pressure on land development controls and various policy measures become greater.

There are, however, certain propositions about economic development which experience suggests, have general validity. As incomes, personal and corporate, rise the pattern of expenditure changes in ways which are suprisingly consistent from one country to another, and appear to be independent of the actual rate of growth. For example, beyond a certain level of affluence, preference for expenditure on increased quality of housing grows faster than income. The same is true of vehicle ownership and repair. At higher levels of affluence the preference for leisure increases, and the demand for leisure facilities grows considerably faster than income: similarly, consumer durable, and specialist high-cost products face rapidly increasing demand and retail structure which provides them, itself takes on some of the characteristics of the leisure industry, i.e. the surroundings in which the goods come are "services" for which the affluent customer is prepared to pay a high price. Finally, as the

economy becomes more diverse and sophisticated, the financial institutions develop into an important industry, serving both the corporate and household sectors. Each of these examples is applicable to Jeddah, and important for the planning of the city.

### Construction

Construction is the fastest growing industry of any size in the Kingdom. The figure in Table 5 indicates the speed with which this industry has progressed. Of course, price rises do distort these figures, but even in real terms construction output grew by 30 per cent in the first year of the Second Development Plan of 1975/76, which was twice the planned rate of growth. Much of this was infrastructure investments, e.g. roads, schools, etc., but a considerable proportion was private sector buildings of houses, apartments, and offices. The construction industry is one of the most effective outlets for the government's petro-dollars: because the industry is such a substantial employer of labor, the money spent on construction quickly moves on to the people in wages and payments for services. For this reason, it is crucially important for any economy, such as that of Jeddah, for which it provides the driving force. Any substantial slowdown in the construction industry would have a depressing effect locally, unless it was offset by increased government expenditure elsewhere.

As already discussed above, these are strong incentives to invest in dwellings at times of substantial inflation. This has been made easier by the establishment of the Real Estate Development Fund (REDF) in 1974. In its first full year of operation the REDF disbursed

SR 7,469 million in loans on very advantageous terms, all of it to the private sector. These funds have provided the means to invest in construction and gave impetus to the motive. The result, however, in Jeddah, is substantial areas of empty or unfinished dwellings, which do nothing to relieve the housing shortage, because either the rents required are beyond the means of all but employees of expatriate companies or in areas they occur, which lack utilities services. Because these buildings are seen primarily as an asset in their own right, their over-supply on the housing market has not, in Jeddah, had the depressing effect on rents that would be expected elsewhere. Some of this extensive development is owner-occupied housing, reflecting the growing demand for better and more spacious living conditions which is a natural corollary of economic growth. But owner-occupied housing still accounts for less than half of the new dwelling in Jeddah.

VALUE OF CONSTRUCTION : (MILLIONS OF SR)

1973	1974	1975	1976
=====			
4,706	6,214	11,505	27,060

Because of the overheating of the speculative land market caused by the building boom, the REDF ceased lending in 1977. It recommenced business in February 1978, and in the next four months it approved 8,350 special loans for 12,000 units of housing. Since late 1975, the average loan given has been SR 270,000 or about 177,000 per housing unit. If these loans reflect average construction costs, then

the economic rent on dwelling units must be a minimum of SR 20,000 per annum, and in many cases much higher. It is clear from this that, for the mass of unskilled and foreign labour living in the city, such developments are irrelevant to their housing needs. This accounts for the apparent paradox which exists in present-day Jeddah whereby a chronic housing shortage coexists with a clear oversupply of dwelling units. It also indicates why the government is building low-cost housing at a rapid rate, of which the "rush" housing scheme on Shara Sitten in Jeddah is an example. For comparison, this scheme will produce rather less than 2,000 dwelling units; of the 12,000 housing units to have been founded by REDF in that year, 1,500 will be in Jeddah.

Consequent upon the statements in the above paragraph, there are two quite separate housing markets in Jeddah. The one, low-cost rented accommodation is and will continue to be provided by the government directly; while the other, suburban villas and apartments will be built either by middle-income Saudi's for owner-occupation or as speculative development to be rented to expatrites as dwellings, offices, or to remain idle if no customer is forthcoming at the asking price. As the coming analysis will show, this situation, without development controls is likely to result in larger areas of the suburban becoming "ghost towns" while the overcrowding and substandard housing of the most populated areas of the city will not be relieved for want of suitable development land.

Vehicles

It is apparent that since the Master Plan was written, the number of vehicles on the roads of Jeddah has increased much faster than anyone anticipated. As in Europe and America, people in the middle and upper income brackets have a strong linking for mobility, the same is true for the Saudi's. Despite the enormous number of cars imported in the last few years, car ownership rates were fairly low during 1973 to 1978, these rates have risen very rapidly since then.

From the economic viewpoint, the significance of this development is that it creates a whole new service industry based on cars. From glossy new garages to grubby back-street workshops, the steady growth of the automobile service industry is already observable. It is very labour-intensive and it will produce many job opportunities over the coming years. It is also a very localized industry, which means that most of the jobs, including the garages and workshops, will be outside the central business district, spreading throughout the suburbs.

Taken together, vehicle assembly, maintenance and repair, the provision of spare-parts, and possibly their local manufacture, will be a major industry in Jeddah. In planning terms, the significance of this development will be that it is a localized industry. It is typified by small units spread throughout the suburbs: small workshops require relatively little capital investment and have a habit of springing up in the most unlikely of places. The desirability or otherwise of this kind of development needs to be considered by land development policies. Finally, as expected, used car lots have developed in Jeddah and are heavy users of land and need to be taken



into account in land-use planning as well as wider road and parking facilities.

### Financial Services

The important position that Jeddah occupies as the major trading center for the country has led to its developing the ancillary activities of professional and financial services. Today Jeddah is the financial center for the Western Region, and the most significant center of the Kingdom, although not the only one, as for example Frankfurth is for West Germany. Banking has developed only slowly in Saudi Arabia, which remains predominantly a cash economy. However, this situation is changing rapidly as the banking and financial services, which are indispensable to a modern economy, are being increasingly provided.

Although Dammam accounted for the greatest number of cheques in 1975, Jeddah accounts for the bulk of the value. In 1975/76, 64 per cent, by value of all the cheques cleared in the country, went through Jeddah banks. This indicates that Jeddah, as the traditional entrepot, continues to be the nucleus of the country's commercial activity.

In common with most developing countries where the banking system is not yet fully developed, currency in circulation represents a relatively high proportion of the money supply. In 1975/76 currency in circulation accounted for 44 per cent, and demand deposits 56 per cent of the money supply. Quasi money, i.e. time, savings, and other deposits which are not a liability on demand of the commercial banks,

amounted to only about 25 per cent of the value of the money supply. While the relative weight of quasi money is not significant in Saudi Arabia, it has shown a rapid growth. The level of deposits of all kinds has been increasing faster than currency in circulation, so that the latter, as a proportion of total money and quasi money combined has declined from 49 per cent in 1969/70 to 35 per cent 1975/76.

Thus, it seems, banking is spreading rapidly in the Kingdom and that there is plenty of scope for expansion. The significance of this in the present context is that banking will provide substantial employment opportunities, and if other financial services are considered with banking, e.g. insurance, then this is one of the faster-growing industries in Jeddah. From the planning standpoint it is important to decide where in the city these new facilities will develop.

The central business district will clearly attract a lot, but suburban banks will also develop. As people increasingly use bank accounts, then the facilities have to be provided where the customers can use them with ease.

This clearly rules out the central business district because the congestion there makes it an inconvenient venue for frequent, small-scale transactions. Instead the main banks will continue to operate their corporate business downtown, while putting branches in suburbs to cater for personal and small business accounts. The establishment of such branches will generate its own business by virtue of the convenience it affords. The siting of those branches, however, needs to be a consideration in the planning process, because of the additional traffic generated and the demand for land. This

development was not foreseen in the Master Plan, so no proposals were made about the spread of banking. It is therefore a topic which needs to be considered in the reviewing process to decide whether banking can be fitted into recommendations concerning retailing areas, or whether it should be allowed to develop in predominantly residential areas, as seems to be happening now.

### Retailing and Leisure

Both the quantity and the quality of retail and leisure facilities demanded by the increasingly affluent population of Jeddah were underestimated in the Master Plan. In revising that plan it will need to be remembered that the pace of change in these areas makes it almost impossible to establish rigid guidelines for development with any success. In the particular area of retailing it is to be expected that the demand will continue to develop for large-scale, car-orientated, comfortable shopping centers, catering for the entire range of needs. In the absence of development controls, these would appear in the outer suburbs wherever they are needed, without thought for the overall planning concept. Another example is that of the specialist, up-market outlets, which can be located anywhere along a major road. It would be a mistake to think, as the Master Plan did, that the downtown area can continue to function as the single, all-purpose shopping district. It has neither the access nor the space to perform this function, and the developments over the past few years in the suburbs indicate the most realistic assumptions about the future.

## APPENDIX C

### The Development Policy of Jeddah' Master Directive Plan

Neighbourhood Structure: emphasize the need to recognize the social habits and culture, especially for those who came from rural areas. "It is difficult for the individual to appreciate a sense of community, the feeling of belonging to family or neighbourhood that he otherwise might experience in a village of 5,000 or in as small a town of 30,000".

The lower income groups of both Saudi and non-Saudi communities are often pressured into the same congested and overcrowded housing conditions, in areas without adequate facilities for education, health or recreational open space. A number of recent housing studies have underlined the problem in various low income communities, as indicated by the socio-economic survey of Jeddah in 1978 by SII.

The Master Directive Plan has an important contribution to make in terms of proposals for land use planning (particularly at the local level), housing strategies, community facilities and infrastructures, and in the components and design of neighborhood centers.

Most importantly, in intergrating various income levels, the MDP stated "equal access to the public provision of services, in terms of education, health, open space, utilities, transport, etc. ; and equal enjoyment of a minimum standard urban environment, in terms of space, planting, freedom from dangeous traffic, street cleaning, etc. At the same time it is particularly important that the mosque provides social focus and spiritual direction to the local community."

Number and Type of Dwellings: Total for 1978

Type of Dwelling	Number	Percentage
cottage/shanty	5290	3.0
Arabic Tradition	50968	29.0
Village/Palaces	13409	7.0
Apartments	93978	54.2
Other	9844	5.7
-----		
Total	173489	100

Source: Jeddah Master Directive Plan - 1978 - p.

Housing: the condition of housing in 1978, as the socio-economic survey stated, a total of 173,459 dwellings. These dwellings were classified by type as recorded in Table 1.

The socio-economic survey recorded that 48% of dwellings were in good condition, 32% in fair condition, 20% in poor condition. In order to provide good housing for Saudi families a total of 37,720 dwellings, 54% of total Saudi dwellings in Jeddah, require renovation or replacement (i.e. 23,874 fair condition dwellings plus 13,846 poor condition). In the case of non-Saudi dwellings in Jeddah require renovation or replacement (i.e. 31,717 fair condition dwellings plus 20,838 poor condition dwellings).

The demand for dwelling units of the Saudi and non-Saudi moderate to higher income groups has been accommodated adequately by the private housing sector, and it is anticipated that future demand will be similarly catered for. The objectives of housing development is to enable every household to have a decent, safe and sanitary dwelling of a standard, consistent with its level of income.

A second fundamental objective without which none of the others can be achieved is to develop the institutional capability and financial and legal structures needed to implement and support a continuing effort of housing development.

Commercial: in 1979 commercial activities, comprising principally shopping and offices, occupied 163.13 hectares of land area and

1,407,900 sq. meters floor area in Jeddah in a ratio of 1:0.86. This distribution is reflected in their respective employment total of 18,600 and 57,000 respectively.

Due to a number of factors, such as access, land values, changes in mobility and distribution of population, certain functions of central area shopping have declined, particularly in terms of groceries and consumables. In order to overcome problems of limited accessibility and at the same time locate nearer to the changing pattern of population distribution, central area shops have extended along the major radiating roads, such as Medina Road and to a lesser extent Makkah Road.

The 1973 Master Plan proposed that this new growth be controlled and located in two secondary centers. This has not been implemented, and in the absence of any clear policy direction the problem of accessibility to the central area is aggravated by congestion arising from the pressure from shoppers parking along the spinal extensions, as for example, along the Medina Road, south and north of Palestine Square.

Present shopping patterns are strongly related to the availability of a car. Since only a quarter of the population may drive or have access to a vehicle, it is important that every effort be made to ensure a balanced hierarchy of shopping facilities, in order to maximise their availability to non-car users.

The Directive Master Plan proposed, the following shopping hierarchy:

- Traditional Central Areas: this will tend to change in function, retailing less consumable goods, retaining certain specialist functions, but adopting itself to the changing function of the central business district;
- Extended Central Areas: this will be reinforced and extended to form the linear spinal corridors. More effective control of development will be imposed, particularly with respect to access and parking.
- District Centers: these should be located with supporting services to serve catchments of the order of 60,000 in locations which do not compromise land use or road hierarchy;
- Local Centers: these should be located with supporting services to serve catchments of 10,000;
- Corner Shops: these may be allowed within residential areas at the rate of one shop per thousand population;
- Speciality Centers: Friday markets for example, may be allowed for every 60-100,000 after examination of site and other implications.

Office development has maintained two main trends; the development of office activities in suburban locations using residential units, instead of purpose-built accommodation, and the development of office blocks, beyond the central area. In both, the problem of congestion in the central area, make suburban locations desirable. Another major problem is the mixed use of buildings, which violate



one of the basic cultural principals, privacy. "Office located in residential buildings have the effect of causing environmental nuisance in terms of parking of cars, noise, cleanliness/maintenance of buildings and area. They also artificially inflate the value of residential property, and disrupts investment in that market. They additionally reduce the availability of a significant proportion of good quality housing stock, which otherwise might have been available for middle and lower incomes. Therefore, every encouragement should be given to reducing the incidence of offices located in converted, residential property."

However, the DMP office policy stated that, 0.4 million sq. meter will be located in the central area. Thus, office space will be provided in purpose-built office buildings, very often as part of mixed commercial residential buildings, but restricted to substantial plot sites not less than 900 sq. meters. On-site car parking will be mandatory at a standard of 1 car space per 50 sq.meters of office ground floor area.

Small suites of offices will be encouraged as part of District Center Development. It is anticipated that this will comprise some 0.4 million sq. meters, spread over local and district centers.

The existing office floor space of 419,200 sq. meters in residential buildings should be reduced gradually by development of purpose-built office blocks in the commercial areas.

Community Facilities: the DMP analysed the existing situation of community facilities (religious activities, health and education) and suggested that in the case of mosques; there will be a need for 320 mosques by 1991. However, it mentioned that the main existing problem is the mosque locations. Most of the existing mosques are located out of the communities walking distance. In the case of Friday Mosques, the DMP mentioned that they are overcrowded in both areas, low and high density. It is proposed that the location and the size of mosques should be determined before the onset of any development and it should be provided in any site before actual development took place.

In the case of the community facilities, the DMP mentioned the lack of community facilities as a general observation, in newly developed areas; and the inadequacy in old ones. Schools, in general, are located out of walking distances and in some cases they are overcrowded. The general observation of schools are that most of them are behind the standard, in terms of the size and facilities (play grounds, etc.); due to land un-availability. In some cases they are occupying rented buildings, which were not designed for educational purposes (villas, apart building, etc.). The Plan proposes land acquisition programs in the already developed areas, to provide for such facilities, as well as proposing that any subdivisions should provide site for community facilities, as a condition for approval.

Health facilities, generally, have no problems. However, due to the lack of sites, some neighborhoods lack proper community health

clinics. The Plan proposes land acquisition programs for community clinic sites.

Recreation and Open Spaces: at present the provision of both open space and recreational facilities is critically inadequate, being less than 1.5 sq. meter per person.

An analysis of approved subdivisions also reveals that very often, particularly in the smaller subdivisions, future committed development will be deficient in open space provision.

In terms of recreational facilities the current situation is equally critical. While there are no facilities such as sports fields, air-conditioned gymnasia, sports halls or swimming pools available at a more local level for popular use.

Adequate locally based open space provision, is particularly important in an extensive city area such as Jeddah, which otherwise tends to:

- prevent the majority of the population from enjoying any day-to-day contact with the surrounding natural environment and landscape
- make pedestrian crossing of primary roads more perilous particularly for children, women or elderly people without access to a car.

The Plan proposed to following:

- Active recreation: up to district level
- toddlers require small play areas within about 100 meters of their home
- kindergarten and school age children require playgrounds and informal 'kickabout' areas, that can be safely reached within five minutes walking distance of their home
- teenage children and active adults require more organized games facilities such as may be found in a sports complex (to include air-conditioned gymnasias, indoor ball courts and swimming as well as externally-located football pitches). This should be provided for every district of 60,000 people.
- passive recreation: up to district level
- all age groups require local park facilities within five minutes or so walking distance of the home, either as parents accompanying children to a local playground, or as individuals or families wishing to stroll, relax, be sociable.
- all adults benefit from sociable visits to a favourite shaded square, planted promenade or outdoor cafe 'rendezvous', which should be easy and convenient to reach within the district.

As well, more specialized needs of individuals can probably only be met outside the district. For example, in terms of:

- active recreation:
  - teenagers and adults may wish to take part in activities such as club football, basketball, ball games, sailing, diving, fishing, horse riding, etc.
  
- passive recreation: up to metropolitan level
  - teenagers and adults will no doubt wish to make leisure visits by car to the croniches, major urban and greenbelt parks also to major leisure facilities e.g. aquaria, zoos, etc.

More extensive areas of land should be reserved for regional recreation outside the metropolitan boundaries for both passive and active recreation, for example enjoyment of the Hejaz escarpment for picnicing, rambling, rock climbing, etc.

The higher density areas of the city are generally the most critically deficient in any kind of open space. Therefore, priority for open space provision at the district and neighborhood level needs to be given to the older urban areas, and to parts of the city away from the coast at the metropolitan and regional levels, and consideration needs to be given to opportunities which lie outside the normal planning boundaries of the city, for example:

- The concept of a Red Sea National Park extending along the length of the Tihama from Yanbu south to Jizan to both conserve the littoral and coral reef, and to provide controlled public access.
- The concept of a northern extension to the Hejaz Escarpment Regional Park, to both conserve the natural environment and provide recreational facilities for the Tiaf-Makkah-Jeddah sub-region.

Utilities: the major utilities are provided for the convenience of the public and to safeguard public health. In order to fulfill the first condition, it is desirable that these utilities be extended to supply all residents within the metropolitan area, and that adequate supplies be available to satisfy demand. For the second condition to be met, it is essential that the utility be comprehensively designed, and installed to the highest standards and specifications, and professionally operated and maintained.

Various factors influence the application of the above solutions, in terms of both the amount and rate of application. These factors include the availability of finance, the extent of dispersal to development in the outer areas, the backlog of older areas within the city which have yet to be serviced, the availability of sources of supply, and the possible use of utility provision of services in developing areas may provide further constraints.

The DMP prepared the following policies, for servicing Jeddah:

- 1) All dwellings within the existing developed urban area should be connected with the water, sewage and electricity systems, have an efficient refuse collection service, and have telephones available upon request.
- 2) Areas of dispersed development, and areas of new development should be served in accordance with a staged development plan, in order to inhibit dispersed development and to facilitate early servicing of planned development.
- 3) Subdivision approvals should not be granted until the developer has shown that the land concerned can be served by all the utilities, and that provision has been made for flood protection. Approval should include the date before which the land may not be developed.
- 4) Funds for each utility should be allocated separately to the servicing of existing and of new development, funds for servicing existing development should be used immediately as they become available. Funds for servicing new development should be released in phase with the staged development plan.

## APPENDIX D

### FIELD SURVEY (Interview)

#### Purpose of the Survey

The main purpose of the survey was threefold:

- 1) to understand and explain the behaviour of Saudis in terms of their physical social behaviour.
- 2) To explore the direction in which these patterns might change under the pressure of urbanization and growing wealth.
- 3) To understand and explain the market behaviour.
- 4) To collect some information and data about the urban land administration system (to overcome the existing shortage in the written material on the subject).

#### Survey Method

The survey results are based on the analysis of material from three different sources:

- 1) Selected interviews conducted at the end of January 1984 in Jeddah, Makkah and Yanbu. These interviews were with Saudis and expatriates, and covered range of income and age groups.
- 2) A number of interviews with senior Saudi officials and planners



was also undertaken at the end of January, 1984. These conversations took place in Jeddah and Riyadh and the Industrial Complex at Yanbu.

- 3) Three interviews with real estate agents, conducted at the end of January, 1984 in Jeddah.

The survey has no pretensions to being comprehensive or to having yielded statistically significant results.

Areas of lack of data and information has been defined and based on them the interviewee had been chosen. These areas are:

A) Land Market

1. Land prices changes
2. Main actors in the market
3. Behaviour of the Actors
4. Government actions' influences on the market

B) Local Municipalities Personnel

1. Their qualifications
2. Their understanding to Master Plan'land policies.
3. Authority
4. Numbers

C) Social Physical Behaviour (in terms of location, attitude)

1. Leisure time
2. Business time
3. Religious time

## Appendix E

### Moslem-Arab Towns

The following is an attempt to follow the Arab line of thought on urban in a later period when Arab civilization had developed to the degree which enabled it to form its own measures and theories on urbanization.

### The Residential Unit

For this analysis, the house represents a cell within the urban whole. The Arab world for house is *sakan* or *maskan*; it is related to the work *skainah* meaning peaceful and tranquillity. The inward looking *maskan*, open to the calm of the sky, made cool by the element of water, self-contained and peaceful, the deliberate antithesis of the harsh public world of work, warfare and commerce, is the place where the early Arab family found its *sakinah*. The shape and form of the early Arab house are the outcome of several effective factors; such as Islamic philosophy and tradition, available building materials, family social life, and climate.

Islamic Sharia is fundamentally hostile to luxurious dwellings and to lofty ones, which are symbols of pride and arrogance. Thus, the low-built house is characteristic of early Islamic-Arab settlements.

The organization of the Moslem family required that the house should provide maximum privacy and protect its dweller from the eyes of the outsider. These requirements led to the development of a 'double circulation' system or the division of the house into salamlik and haramlik. Under this system, male friends of the dweller were to be received in the salamlik leaving the haramlik as a private family sanctuary.

To achieve the 'double circulation', several solutions were adopted in the house design. In some houses with a single court, the haramlik was generally raised a few steps above the rest of the house. Some other houses were planned with two courts, one for men a salamlik, and the other for women, a haramlik on the yupper floor. The court in this house form was entered from the outside by a passage with one or two turnings to prevent the passerby in the street from seeing in (fig. 1). The complex of the constituent buildings were arranged so as to secure the maximum privacy required. This oriented the house away from the street, receiving its light from the inner court. The windows and roof were constructed in such a way as to prevent anyone intruding unseen into the intimacy of his neighbour's life. Whenever windows were opened from the outside walls, trellises or mashrabiyyahs were projected on them. These mashrabiyyahs served to satisfy the curiosity of those who were indoors and could not be penetrated by the indiscretion of those who were outside.

To deal with the regions' climatic problems, different measures were developed. Correct orientation was observed, whereby rooms of the house were opened into the patio or court facing the direction of the cool breeze. The court itself with a fountain in the middle and sometimes a tree, offered a tranquil and cool atmosphere that contrasted sharply with the hot burning street outside. Various parts of the house were to suit the different times of the day and year. Semi-open spaces were for coolness and breeze, and closed rooms with no external walls for shelter from the noon-day sun. Good shading is also shown in the grouping of houses, in which the least possible wall area was exposed to the sun. Cool air circulation was well developed, good examples being the malqaf (trap of air), and the salsabil (a system for dropping water in a pool in the house's court through a corrugated surface to cool the air). Correct illumination without gloom or glare was pleasantly provided by the mashrabiyyah.

A significant trait of the early house form which affected the urban scene is its very simple street facade and bare walls with minimum decoration, except for the lattice-work mashrabiyyah in houses of later period. In this regard, the simple facade of the house contrasted with its interior richness and comfort, which in one way signifies the dweller's appreciation of comfort in preference to a care for the external appearance.

The Residential Quarter Of Harah

The composition of residential quarters on an ethnic basis appeared in cities of pre-Islamic origin. In the cases of newly-founded Islamic cities the Arabs settled by tribe, each having its own quarter, which introduced early nomadic Arab social values into urban life. Thus, the development of the quarter as a social, political and physical phenomenon was consummated under the Moslem domination.

In the later middle ages, the quarter phenomenon was fully developed, where Islamic-Arab cities became divided into districts called *harahs*, *mahallahs*, or *khittahs*. Many of these quarters maintained a solidarity and were closely-knit and homogeneous communities. Each district retained a special character.

The solidarity of some districts was based on religious identity. Each of the Christian, Jewish, Armenian and Maronite peoples had their own quarter. Among the Moslems, different ethnic or social groups lived apart. There were quarters for Turkmans, Persians, Kurds, and Bedouin in process of sedentarization. For the dominant Arab-Moslem population, common village origin unified some urban districts. The solidarity of some other Moslem quarters depended on sectarian religious affiliations. In this case, there had been no prior unity of race, origin, or family, but unity had grown out of the eventual association of the whole quarter with the school or madrasah and under the leadership of the sheikh.

There was also an economic basis for the homogeneity of particular quarters. Some were named after a market or craft. A common

occupation often gave these quarters their special character. Mills, lime works, brick kilns, dye works, and tanneries drew workers into separate districts. There is no evidence, however, of any radical separation of economic classes. Quarters were communities of both rich and poor.

The solidarity of the quarter was reinforced by the important social and administrative responsibilities which developed upon it. Administrative responsibilities extended to police functions as well. Social and administrative cohesiveness naturally extended to communal defense. In insecure times, when thieves, bandits, civil war, or invasion threatened, the quarters barricaded themselves behind great doors, closed off the thoroughfares to the rest of the city, and hid themselves from attack. But, however cohesive within, the quarters were not isolated ghettos, but adjacent streets and districts within the cities. Only in times of trouble, not in their daily life, did they impose a quasi-physical isolation sealing themselves off from each other.

Each quarter, being a small fortified self-sufficient neighbourhood, was able to live independently when necessary (fig. 2). It contained its own mosque or church or school (madrasah), public bath (hammam), small local market (suweqah or small suq), and perhaps workshops, especially for weaving. Characteristically, these elements were physically isolated from the bustle of the main central city markets (the great suq or bazar) and their services were limited to their own quarter.

However, it was not a rule that every quarter was a real unit of social organization, or had an identical economic base, or was physically bordered. In some cases, a large area containing more than one quarter was the unit of effective social action, or presented an economical function, or had a physical identity. Therefore, quarters or harahs were neighbourhoods within the urban whole, but their size varied.

### Religious Institutions

In medieval Islam, religion, law, education and government were so integrated that an orthodox Moslem would hardly try to distinguish them as separate entities. Therefore, the classic jami mosque was to function as a religious entity, a court of justice, and an intellectual and educational center. It was also a place of secular activity, such as eating and drinking, as well as providing recreation for many people.

The jami mosque being the hub of the city, was in general appropriately placed at a rectangular crossing of two main thoroughfares, where the plan of the city permitted. its integration with the rest of the city and the narrowness of the streets surrounding it, determined its form.

The jami mosque did not have any obvious elevation except for the entrance portal. But it has other identifying signs which characterize



its form. These are the minaret and the dome. The minaret was the tallest structure in the city. It marked the skyline of the early urban scene.

As the cities expanded and the need for public services multiplied accordingly, most of the jami mosque's functions were transferred to other departmentalized buildings converted to such usages, but always in close proximity to the mosque.

### Learning Institutions

Learning and the manifestation of piety were inseparable in Islam. Institutions of Islamic learning started to function in the early days of Islam. Ribats were originally places where defenders of the faith gathered, but they also had an educational mission. Khanqahs were particularly for the Sufis. Zawiyahs were places for religious people to live in. By the time of the early Mamluks, there was no great differences between one and the other, and the application of the term monasteries for the three kinds is justified.

Monasteries were occupied by Sufis and ascetics. Many were strangers, mainly from other Islamic regions. Some were independent ascetics, others were members of one tariqah (order) or another. Such tariqahs were numerous in the Moslem world, and by the 13th A.D./7th A.H. century they had become well organized. There were also special convents for womes. The monastery developed into an institution of learning and merged into the school or madrasah (fig.3).

The Ayyubids and Mamluks had both educational and political special interests and they built as many schools as they could, and encouraged others to build them all over the Islamic cities.

#### Commercial Institutions

Markets, bazars or suqs are the arena of urban economic life. Each medieval Arab city had its markets; the larger the city, the bigger the markets. Larger cities, such as Cairo, Damascus, and Aleppo had to provide goods not only for their populations, but for the countryside as well. The amount of trade in such cities permitted the existence of different suqs of different sizes in the same city. Besides the main suqs, other secondary small ones, or suweqahs, were to serve the local needs of different residential quarters or harahs.

Urban markets appeared in different forms; among these are the spontaneously developed suq (fig. 4), the architecturally designed qaysariyyah and khan, and the open market place or maydan.