ABSTRACT

This thesis discusses the problems brought about by the proliferation of vacant lands within cities of Saudi Arabia. It explores solutions and provides recommendations to solve these problems, particularly through the urban infill process. It presents an array of short and long-term instruments adopted by various countries to address urban land development issues and considers a number of these instruments for possible application in the Kingdom.

The rapid urbanization in the Kingdom during the last two decades generated tremendous pressures on urban land. Rising land values resulted in dispersed urban settlements and further extension of land outside the urban boundaries. Thus, in turn created economic, social, environmental and security problems.

Traditional land policies in the Kingdom, such as the land grant where the state has no control over the development of the land after it has been awarded to the individual, have contributed to the pressures brought about by urbanization. Further, ad hoc planning regulations have not helped in alleviating this urban land problem.

Realizing the multitude of problems created by vacant lands and the need to control future urban land development, the government of Saudi Arabia conducted an urban boundary studies in 1987. The urban boundary studies delineated geographic areas and identified those areas within these boundaries which have an excess supply of vacant lands and underutilized infrastructure and service facilities.

The urban infill process builds on the results of the urban boundary studies. The process involves the classification of land at various stages/level and the selection of appropriate instruments to address specific land issues. It identifies the areas that need further development or infilling and those that require a redirection of development to other areas.
# CONTENTS

CONTENTS ................................................................. I
ACRONYMS USED ............................................................. IV
ACKNOWLEDGEMENTS ....................................................... V

Chapter 1.0 : STUDY BACKGROUND ..................................... 1
  1.1 : Introduction ....................................................... 1
  1.2 : Study Problems and Research ................................... 3
  1.3 : Objectives and Scope of the Study ............................ 7
  1.4 : Methodology of the Study ....................................... 7
  1.5 : Development of the Argument ................................... 8

Chapter 2.0 : URBAN GROWTH AND URBANIZATION IN SAUDI ARABIA .................................................... 11
  2.1 : Introduction ....................................................... 11
  2.2 : Factors of Urban Growth and Urbanization .................. 12
  2.3 : Eras of Urban Growth and Urbanization Pattern ........... 20
  2.4 : Summary ............................................................ 31

Chapter 3.0 : REVIEW OF LAND DEVELOPMENT POLICIES AND PROCEDURES ............................................................ 34
  3.1 : Land development process ........................................ 34
  3.2 : Evolution of urban planning in the Kingdom ............... 41
  3.3 : Current land development policies in the Kingdom ....... 52
  3.4 : Summary ............................................................ 64

Chapter 4.0 : WORLD URBAN GROWTH AND URBANIZATION RATIONALIZATION INSTRUMENTS ............................................. 67
  4.1 : World Urban Land and Urbanization Problems ............... 67
  4.2 : Instrument of Rationalize Urban Growth .................... 69
  4.3 : Description of the Instruments ................................ 71
  4.4 : Summary ............................................................ 93

Chapter 5.0 : ACCELERATING THE URBAN INFILL PROCESS .......... 94
  5.1 : Introduction ....................................................... 94
  5.2 : Review of the existing policy for urban infill in the Kingdom .................................................. 95
  5.3 : Extent of under utilization of land in the majorcities .... 108

Chapter 6.0 : URBAN INFILL PROCESS .................................. 123
  6.1 : Introduction ....................................................... 123
  6.2 : Objectives of Urban Infill ...................................... 124
  6.3 : Urban Infill Process ............................................. 125
6.4 : Alternative Instruments ....................... 128
6.5 : Selection of Instruments ..................... 147

Chapter 7.0 : CONCLUSION AND RECOMMENDATIONS ............ 149
7.1 : Introduction ................................... 149
7.2 : Recommendations .............................. 150
7.3 : Conclusion .................................... 156

Notes ............................................. 161
BIBLIOGRAPHY ...................................... 165
APPENDIX I ........................................ 172

TABLES

Table 2.1 Saudi Arabia Population Growth (1958-1987) ....... 13
Table 2.2 Population Growth in Some Selected Cities in Saudi Arabia (1940's-1987) ......................... 15
Table 2.3 Annual Rates of Urban Growth in The Gulf and Other Arab Countries (1965-73 and 1973-83) .... 15
Table 2.4 Source and Number of Foreign Work Force in Saudi Arabia (1980) ................................... 19
Table 2.5 Land Devoted to Industrial Use in Major Cities (millions) ........................................ 21
Table 2.6 Saudi Arabia: Level of Urbanization (1950-1985) .. 23
Table 2.7 Saudi Arabia: Migrants in Selected Cities (1970) .................. 25
Table 2.8 Funds Allocated for the Provision of Municipal Services in Some Selected Towns (1975-1988) in million SR ........................................ 28
Table 3.1 REDF Private Housing Loans during the Period 1975/76 - 1987/88 ................................ 63
Table 5.1 Projected Increases of Population and Households, 1987-1995, Cities of More than 30,000 inh. in 1987 ............... 114
Table 5.2 Possibility of Providing Dwelling Units on Vacant Lands within the Urban Structure, Cities of More than 30,000 inh. in 1987 ......... 116
Table 5.3 Cities with Capacity being Less than Demands upto 1995, in High and Medium Density Zones........ 119

Table 5.4 Cities with Capacity being Less than Demands Upto 1995, in High and Medium Density Zones........ 120

FIGURES

Figure 2.1 Saudi Arabia: Transport Network....................... 13
Figure 2.2 Saudi Arabia: Urban Center 30,000 & Over(1987)... 16
Figure 2.3 Saudi Arabia: Urban Population Change(1974-87)... 17
Figure 6.1 Urban Infill Process...................................... 126
Figure 6.2 Selected of Instruments.................................. 148
ACRONYMS USED
ACRONYMS USED

MOMRA : Ministry of Municipalities and Rural Affairs.
DMTP : Deputy Ministry for Town Planning.
MOP : Ministry of Planning.
MOFNC : Ministry of Finance and National Economy.
UN : United Nations
ARAMCO : The Arabian American Oil Company.
REDF : Real Estate Development Fund.
CBD : Central Business Districts.
ACKNOWLEDGEMENTS
ACKNOWLEDGEMENT

To Allah, the all knowledgeable and the exalted in might, for guiding and giving me the strength to accomplish this work.

I would like to take this opportunity to express my thanks to the Ministry of Municipalities and Rural Affairs (MOMRA), my sponsor, which provided financial support that made it possible to do this work.

To Dr. Saleh Al-Hathloul, the Deputy Minister for Town Planning, whom I greatly admire and hold in high esteem, my deepest gratitude and affection for his continuous help, assistance and support.

Special thanks and appreciation go to all my friends and colleagues, especially to Dr. Omer Mashabi, Dr. Mohammed Abdul-Rhman and Dr. Naraynan Edadan in the DMTP for their help and support during my stay in the U.S.

Professor Ralph Gakenheimer, my thesis supervisor and academic advisor, who provided me with constant encouragement, and academic and professional insights throughout the process of preparing this thesis. My appreciation is also extended to Professor Lawrence Vale, my thesis reader for taking time out of his demanding schedule, and Professor William Doebele at Harvard
University. Special thanks to Marsha Orent for her great spirit and Mary Grenham for her academic advice. I am particularly grateful to Lourdes N. Pagaran for her inspiring discussions and most of all her contributions in editing the thesis.

I am most thankful to my friend, Ahmed Al-Saif and will forever appreciate the time he spent with me in discussing ideas and problems.

Additional hugs go out to the Ruthkiewicz, my foster family, especially Susan and Judy, for their friendship and support during my stay with them.

Finally, I would like to thank my mother and father, who throughout my life, whether at home or away, have always given me the strength, confidence and emotional support. Last, but not least, Huda, my wife, who has been extremely supportive. Without her encouragement and love, I would never have been able to finish this thesis.
CHAPTER ONE

STUDY BACKGROUND

The high percentage of vacant lands within the Saudi Arabia Cities.

CHAPTER ONE:

BACKGROUND

1.1 INTRODUCTION

During the last two decades, the Kingdom of Saudi Arabia embarked on a massive physical and social infrastructure development program which resulted in a very rapid urban expansion. Cities had been transformed into attractive areas, drawing increased population as well as productive and commercial activities. Several economic and social factors have speeded up the urban growth process in Saudi Arabia, namely, increasing national wealth, population size and growth, technological changes, industrial and infrastructure development.

Available data indicate that although the annual rate of population growth in the Kingdom during the period 1974-87 did not exceed 3.21 percent, considered to be the natural population growth rate common to many Mediterranean countries, the increase in total urban population was more than double during the same period. The total urban population jumped from 3.2 million inhabitants to 7.3 million, representing an annual growth rate of 6.2 percent. Such a rapid increase in the percentage of urban
population relative to total population could be attributed to the following:

1. Massive rural-urban migration stimulated by readily available well-paid job opportunities, provision of better services and facilities, and concentration of industrial activities in urban areas;

2. Steady increase of foreign labor to help execute the Kingdom's successive development projects and the concentration of this labor force in urban sectors; and

3. Natural population increase.

These circumstances led to higher demand for land to meet the needs of an increasing population together with corresponding service and utility requirements. The rise in land prices within the urban centers resulted in the following:

1. Dispersal of physical growth and sprawl of residential zones necessitating costly investments in infrastructure in which the government took the sole responsibility for their provision and maintenance;

2. Conversion of agricultural lands adjacent to cities for residential and other purposes; and
3. Rise in land values in areas surrounding the cities causing consecutive extensions in subdivided lands and in turn resulting in overcrowding in the main cities.

1.2 STUDY PROBLEMS AND RESEARCH CONCERNS

1.2.1 Study Problems

There are many problems that result from the proliferation of vacant lands within cities. These problems adversely affect the country's urban structure, socio-economic conditions, environment and security. These are summarized as follows:

1.2.1.1 Urban Problems

a) The dispersed urban settlements encourage random horizontal extension of urban centers resulting in substandard delivery of basic services.

b) The randomness of urban settlements has made enforcement of planning standards difficult.

c) The rise in land values within the city leads to search for lands of less cost that can be found only outside the cities, in turn causing consecutive extensions outside the cities.
1.2.1.2. **Economic Problems**

a) Public utilities (water, electricity, telephone, sewage, drainage and roads) provided by the government on vacant lands are underutilized but the cost of maintaining these facilities is increasing. Thus, the return on capital in these widely dispersed areas decreases and economic efficiency is not achieved.

b) Rapid urban growth has created serious bottlenecks, such as traffic congestion, in the central business districts (CBDs) of cities, which can affect productivity and efficiency.

c) Rapid physical expansion and population growth in urban areas result in increased need for infrastructure development.

1.2.1.3  **Environmental Problem**

a) Vacant lands expose the urban environment to hard climactic factors such as sun and summer winds. In an environment with vast desert lands, the desert sand could easily filter into the human settlements without much shield.
1.2.1.4 **Social and Security Problems**

a) While there is need to provide populated areas with social and security services, it is very costly to provide these services to areas of low population density.

b) People living outside the urban boundaries could experience social dysfunction because of the physical distance and barriers.

1.2.2 **Research Concerns**

Urban land prices have risen practically all over the Kingdom and the increase has been much more than that warranted by the increase in general price levels. The sky rocketing of urban land values unrelated to any perceivable economic factors is partly explained by speculation in land. In the absence of adequate investment opportunities in the productive sectors, finance capital earned and unearned, finds real estate a lucrative business. Exorbitant land values have become a serious obstacle to economic development projects.

As the vast majority of urban dwellers, particularly the fresh in-migrants, cannot afford to pay the prevailing market prices, they move towards the urban fringes, increasing the demand for land there, too. An overwhelming low density sprawl is caused and perpetuated by a free market in land. It is
evident that the structure of urban land values must be rationalized, otherwise high land values will thwart attempts at economic and urban development.

The seriousness of the urban situation and its intimate connection with the land problem emphasizes the need for urban land infill planning. Urban infill planning could increase the supply of land in the urban centers and consequently, reduce its price. It could ensure that the utilization and conservation of land is economical, functionally efficient and aesthetically pleasing. It could also balance the need to utilize land in the present and conserve it for the future. For the previously stated reasons, the government has to come up with planning regulations to limit the expansion of cities as well as direct the development of policies to cope with public needs and requirements. Therefore, the Council of Ministers directed the Ministry of Municipal and Rural Affairs (MOMRA) to undertake and define urban growth boundaries for cities over the next 20 years and phase growth in conjunction with national development plans. The Council of Ministers order included the formation of a Committee presided by H.R.H. Minister of Interior, and membership of the Ministers of Finance and National Economy, Justice, MOMRA and Planning to study the conditions of vacant lands, both subdivided and unsubdivided, located within the cities; and propose suitable solutions for the development of
these lands, and then submit these proposals to the Council of Ministers.

1.3 OBJECTIVE and SCOPE OF THE STUDY

The objective of this study is to review the existing urban land use regulations in the Kingdom, and assess their effectiveness in managing urban growth. Subsequently, the study will seek to identify land regulations most suitable to the conditions of the Kingdom. Emphasis will be made on methods to improve urban management and the planning mechanisms. These are expected to be the most viable long-term solutions to urban sprawl and underutilization of resources.

1.4 METHODOLOGY OF THE STUDY

The study will be divided into three main sections. The first section will trace land ownership process in the Kingdom. It will analyze major factors that influenced the physical expansion of urban centers beyond what is necessary for their functions. Emphasis will be made on examining government land grants within the context of Islamic "sharia" (law), which represent the basis for legal considerations.

The second section will place great emphasis on approaches used by other countries to manage urban land and determine to what extent these approaches can be applicable to the conditions of the Kingdom. Furthermore, the study will analyze and assess
the validity of the recent Saudi experience to enhance the process of urban infill. In this section, the study will also highlight the extent to which redirecting urban growth toward urban infill can reduce future government expenditures and improve efficiency in the use of resources.

The third section, which is the empirical section of the study, will estimate areas of vacant land within existing urban boundaries of five major cities in the Kingdom: Dammam, Jeddah, Riyadh, Makkah and Medina. In this respect, the study will rely on most recent information made available by the Urban Boundaries Studies that were executed and approved by the Council of Ministers for all Saudi cities. The main purpose is to draw conclusions on factors that influenced various urban densities.

The findings of this study are expected to benefit the MOMRA, the Deputy Ministry of Town Planning (DMTP), the Ministry Of Planning (MOP), and countries experiencing the same urban problems as Saudi Arabia, especially nearby countries within the Gulf Cooperation Council\(^1\) (GCC).

1.5 DEVELOPMENT OF THE ARGUMENT

The paper consists of seven chapters. The contents of each chapter are briefly described in the succeeding paragraphs.

Chapter 1 identifies and analyzes the problems of vacant land within the urban areas in the Kingdom, and the need for an
urban infill policy. Also, it presents the objectives, scope of the study, and the methodology of the thesis.

Chapter 2 analyzes urban growth and urbanization patterns and processes in the Kingdom. It divides the urbanization process into three eras: urbanization prior to early 1960s; accelerated urbanization, 1960s to early 1970s; and the era of relative stability, 1970s to the present.

Chapter 3 reviews the land development process and the current land development policies in the Kingdom. It gives an evaluation of these instruments in terms of their efficiency in achieving the objectives of future land policies.

Chapter 4 describes and analyzes the various urban land instruments used by other countries for different purposes, and determines the extent to which these instruments can be applicable to the conditions of the Kingdom.

Chapter 5 has two sections. The first part discusses the delineation of urban boundaries of cities and the prioritization of physical development to accelerate the process of utilizing vacant lands within existing boundaries to enhance infill. The second part of this chapter analyzes the extent of underutilization of land within existing city boundaries. The
cities of more than 30,000 inhabitants in 1987 were used for the analysis.

Chapter 6 analyzes the policy instruments suggested for urban infill with emphasis on the importance of these instruments, their objectives and the means to achieve these objectives.

Chapter 7 contains the conclusion, preliminary recommendations, and specific regulations to enhance the process of urban infill policy applicable to all the municipalities. This section also provides recommendations for the need to adopt a new concept of land ownership patterns and land grants in the Kingdom.
CHAPTER TWO

URBAN GROWTH AND URBANIZATION IN SAUDI ARABIA
CHAPTER TWO:

URBAN GROWTH AND URBANIZATION IN SAUDI ARABIA

2.1 INTRODUCTION

The process of urbanization has gained considerable momentum in Saudi Arabia during the past two decades, particularly during the years of the economic boom in the early 1970s. Towns and cities have grown rapidly from small settlements housing a few thousand inhabitants to large centers of different sizes and even metropolitan functions. For instance, the cities of Riyadh and Jeddah each grew from the small size of 30,000 inhabitants in the 1940s to more than one million in 1985 (Barth and Quiel, 1987). The past few decades did not only witness the rapid growth of some of the old established towns, but also the building of brand-new cities to cope with the tremendous pace of socio-economic development.

Between 1950 and 1985, the proportion of urban population in Saudi Arabia grew from 10 percent to over 70 percent increasing sevenfold during the 35-year period (World Bank, 1986). One significant transformation has been the rapid decline in the proportion of nomadic population. Nomadic groups which constituted 60 percent of the population in 1932 dropped to less than 5 percent in 1985 indicating that the majority of people
are now living in sedentary habitations in rural and urban areas.

2.2 FACTORS OF URBAN GROWTH AND URBANIZATION PATTERN

There are several factors that are believed to have direct impact on urban growth and urbanization in Saudi Arabia. These are: population size and growth, increasing national wealth, technological changes, industrialization and infrastructure development, particularly, the building of an efficient transportation network

(2.1).

2.2.1 Population Size, Growth and Distribution

The spatial distribution of population in Saudi Arabia is influenced by the interplay of two factors, namely, the large size of the country in terms of area, and the small population size, which promote concentration. The recent increase in the country’s wealth and per capita income also encourage concentration, as reflected in the rapid rural-urban migration, especially in the 70s.

The growth of the urban population is known to have started in the late 1950s and early 1960s, and accelerated in 1973 resulting from massive internal and international migration. The rapid upsurge in population was also attributed to the tremendous improvements in the provision of medical services, eradication of diseases, and better nutritional standards of the inhabitants

(Table 2.1).
Table 2.1: Saudi Arabia: Population Growth (1958-85)

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
<th>% Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>1958</td>
<td>4,649,100</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>5,362,284</td>
<td>13.3</td>
</tr>
<tr>
<td>1970</td>
<td>6,199,174</td>
<td>13.5</td>
</tr>
<tr>
<td>1975</td>
<td>7,216,009</td>
<td>14.5</td>
</tr>
<tr>
<td>1985*</td>
<td>11,100,000</td>
<td>53.8</td>
</tr>
</tbody>
</table>

*World Bank (1986), p.125
Source: Al-Ruwaithy (1979), p.35
Based on the 1974 census, the Saudi population was increasing at more than 3 percent per annum (Ministry of Finance, 1974), a rate which is considered high by world standards. While total population in Saudi Arabia has been growing at a fast rate, the growth of urban population has been explosive (Table 2.2), the reason being that urban centers gain in population both from natural increase and migration. Although both processes operate simultaneously in Saudi urban centers, population increase due to migration is by far larger. This has been particularly so since the 1970s when oil prices reached their highest level in international markets thereby making it possible for the authorities to allocate huge funds for industrial development and for the provision of social services in major urban centers. Labor migration to these principal cities have been both from internal and external sources leading to the phenomenal growth of urban population (Tables 2.2 and 2.3) and (Figs. 2.2 and 2.3) (Muawad, 1987).
Table 2.2: Population Growth 1/ in Some Selected Cities in Saudi Arabia (1940s, 1974 and 1985)

<table>
<thead>
<tr>
<th>City</th>
<th>1940s</th>
<th>1974 2/</th>
<th>1986 3/</th>
<th>%Increase 1974-86</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>30,000</td>
<td>672,382</td>
<td>1,310,624</td>
<td>95</td>
</tr>
<tr>
<td>Jeddah</td>
<td>30,000</td>
<td>568,046</td>
<td>1,032,855</td>
<td>82</td>
</tr>
<tr>
<td>Makkah</td>
<td>80,000</td>
<td>366,801</td>
<td>666,940</td>
<td>82</td>
</tr>
<tr>
<td>Taif</td>
<td>5,000</td>
<td>282,913</td>
<td>514,410</td>
<td>82</td>
</tr>
<tr>
<td>Hofouf</td>
<td>30,000</td>
<td>237,993</td>
<td>345,610</td>
<td>45</td>
</tr>
<tr>
<td>Madinah</td>
<td>20,000</td>
<td>198,186</td>
<td>360,353</td>
<td>82</td>
</tr>
<tr>
<td>Dammam</td>
<td>-</td>
<td>127,844</td>
<td>260,048</td>
<td>103</td>
</tr>
<tr>
<td>Al-Qatif</td>
<td>n.a. 4/</td>
<td>88,648</td>
<td>180,319</td>
<td>103</td>
</tr>
<tr>
<td>Buraydah</td>
<td>20,000</td>
<td>76,442</td>
<td>208,152</td>
<td>172</td>
</tr>
<tr>
<td>Tabuk</td>
<td>10,000</td>
<td>74,825</td>
<td>139,275</td>
<td>86</td>
</tr>
<tr>
<td>Al-Khamis</td>
<td>n.a.</td>
<td>71,653</td>
<td>310,624</td>
<td>95</td>
</tr>
<tr>
<td>Abha</td>
<td>n.a.</td>
<td>61,359</td>
<td>160,290</td>
<td>161</td>
</tr>
<tr>
<td>Hail</td>
<td>10,000</td>
<td>59,676</td>
<td>110,901</td>
<td>86</td>
</tr>
<tr>
<td>Al-Khubar</td>
<td>-</td>
<td>48,817</td>
<td>99,298</td>
<td>103</td>
</tr>
<tr>
<td>Al-Jubail</td>
<td>3,000</td>
<td>7,441</td>
<td>66,000</td>
<td>787</td>
</tr>
</tbody>
</table>

Derived From
(1) Barth and Quiel, 1987
(2) Ministry of Finance, 1974
(3) MOMRA, 1987
(4) Information is not available

Table 2.3: Annual Rates of Urban Growth in Gulf and Other Arab Countries (1965-73 and 1973-83)

<table>
<thead>
<tr>
<th>Countries</th>
<th>Annual Rate of Growth 1965-73</th>
<th>1973-83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Saudi Arabia</td>
<td>8.4</td>
<td>7.4</td>
</tr>
<tr>
<td>Kuwait</td>
<td>9.3</td>
<td>7.8</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>16.7</td>
<td>11.2</td>
</tr>
<tr>
<td>Oman</td>
<td>10.8</td>
<td>17.7</td>
</tr>
<tr>
<td>Iraq</td>
<td>5.7</td>
<td>5.3</td>
</tr>
<tr>
<td>Gulf Countries</td>
<td>8.9</td>
<td>7.9</td>
</tr>
<tr>
<td>Other Arab Countries</td>
<td>5.1</td>
<td>4.1</td>
</tr>
</tbody>
</table>

Source: Muawad (1987), p.191
2.2.2 Industrial Development

Modern manufacturing industry in Saudi Arabia is of recent development going back to the early 1950s. However, accelerated industrial development began with the launching of the First Five-Year Development Plan (1970-1975) and, by the end of 1984, investment in this sector stood at about US$ 35 billion. Most of this investment went into hydrocarbon-based industries and building materials (El-Gammal and El-Bushra, 1986). Industrialization is viewed as a means to foster
diversification of the economic system in order to reduce the country's overwhelming dependence on the export of crude oil. The special attention given by the government to the role of the industrial sector in the national economy, particularly the petrochemicals, has had great impact on urban growth and urbanization in Saudi Arabia.

The implementation of the ambitious national industrialization programs during the past decade necessitated the building and development of industrial cities in Jubail and
Yanbu. Jubail, on the coast of the Persian Gulf and the larger of the two industrial cities, is connected with Yanbu on the Red Sea littoral through Petroline (1160 km), the trans-Arabian twin pipeline for crude oil and natural gas. In this way, oil and gas which are being produced in the Eastern Province of Saudi Arabia have an alternative outlet via the Red Sea corridor.

The development of highly sophisticated hydrocarbon-based industries in the two cities attracted manpower from both internal and external sources so that the population of the industrial towns grew rapidly during the past decade. In 1987, the population of Jubail had reached 38,000 and that of industrial Yanbu 22,000. The two industrial cities are provided with all the needed infrastructures in both factory and residential areas. The projection for the year 2010 indicates a population of 280,000 for Jubail and 130,000 for Yanbu, (Ministry of Information, 1983).

In conjunction with the government’s effort to promote industrialization, so-called industrial cities within cities have also been established. Industrial cities are industrial complexes located within existing urban centers and are provided with the needed infrastructures. It was estimated in 1985 that 96 percent of the industrial units in Saudi Arabia were located in the nine largest cities which accommodated 31 percent of the entire population of the Kingdom (Grill, 1984).
The scale of industrial development in major urban centers may be appreciated by considering the increase in the areas devoted to industrial use (Table 2.4).

Table 2.4: Land Devoted to Industrial Use in Major Cities (million m²)

<table>
<thead>
<tr>
<th>City</th>
<th>1974/75</th>
<th>1980/81</th>
<th>1984/85</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>0.45</td>
<td>4.95</td>
<td>12.39</td>
</tr>
<tr>
<td>Jeddah</td>
<td>1.04</td>
<td>4.04</td>
<td>7.86</td>
</tr>
<tr>
<td>Dammam</td>
<td>1.00</td>
<td>3.60</td>
<td>9.40</td>
</tr>
<tr>
<td>Hofouf</td>
<td>-</td>
<td>0.50</td>
<td>1.04</td>
</tr>
</tbody>
</table>


2.2.3 Development of Transportation

The development of the transportation network is considered to be crucial to the whole process of modernization and development, particularly in a large sparsely populated country like Saudi Arabia. National development and integration would not be achieved without increasing the connectivity and efficiency of the regional, national and international transportation networks. The development of the transportation system has greatly increased the mobility of the population and emphasized the growth of major urban centers at the regional level.

The improvement of the transportation network and the increased accessibility in Saudi Arabia is shown in terms of the colossal expansion in both air and road transport (Fig. 2.2).
increased from 12,000 km in 1975 to 80,000 in 1985 recording an increase of 566 percent during the ten year period (El-Gammal and El-Busha, 1986; Abdo, 1986). At present, there are 22 modern airports in Saudi Arabia, four of them are of international standing, namely, Riyadh, Jeddah, Dhahran and Madinah. These air hubs have increased the accessibility of previously isolated regions of Saudi Arabia as well as putting the country in direct contact with the rest of the world. As such the development of the transportation network has greatly enhanced national integration. The development of major urban centers as nodes in the transportation network has facilitated the flow of people, goods and services between cities and their surrounding countrysides. In this way, the process of urban-rural interaction is developed still further leading to a more integrated urban system.

2.3 ERAS OF URBAN GROWTH AND URBANIZATION

The patterns and processes of urban growth and urbanization in Saudi Arabia can be traced and explained through three eras of development. These eras of development can be identified as follows: (1) Urbanization prior to 1960s; (2) Accelerated Urbanization, 1960s to early 1970s; and (3) Era of Relative Stability, 1970s and beyond. 

20
2.3.1 Urbanization Prior to Early 1960s

Generally, this period of urbanization was characterized by limited economic resources. Economic life was entirely dominated by traditional agriculture and nomadic pastoralism both of which did not encourage urban growth and urbanization. Most of the early urban centers were modest in size, structure, and functional characteristics (Table 2.2). The limited needs and wants of the population were satisfied locally in small towns and villages so that by 1950 the proportion of urban population to total population in Saudi Arabia was only 10 percent (Table 2.5).

Table 2.5: Saudi Arabia: Level of Urbanization (1950-1980)

<table>
<thead>
<tr>
<th>Year</th>
<th>% Share of Urban Population to Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950</td>
<td>10</td>
</tr>
<tr>
<td>1963</td>
<td>15</td>
</tr>
<tr>
<td>1974</td>
<td>45</td>
</tr>
<tr>
<td>1985</td>
<td>75</td>
</tr>
</tbody>
</table>


The urbanization process during this period was influenced by government programs to resettle the nomadic tribes, which began in 1912 with the first planned settlement established at Artawiyah (300 km. north of Riyadh), and continued up to the 1930s. Huge government investments in both urban and rural sectors were made, and major economic and social projects
executed leading to great improvements in environmental conditions and quality of life.

The settlement of nomadic groups took three forms, namely, those who settled in the rural areas in agricultural villages, those who chose to settle in the "hijar" which were especially reserved for nomads, and those who opted to settle in the "hilal" on the outskirts of major urban centers. Later, some of the settled bedouins began to migrate to urban centers looking for better jobs. In 1972, for example, over 36 percent of the population of "hijar" in Al-Qassim district left their settlements for various urban centers in Al-Qassim and in other areas. The movement was particularly to the major metropolitan centers of Riyadh, Jeddah, Makkah, Madinah and Dammam (Shamekh, 1975).

2.3.2 The Era of Accelerated Urbanization, 1960s-Early 1970s

This period was characterized by accelerated urbanization (Knauerhase, 1975). Urban population between 1963 and 1974 increased almost three times: it grew from 15 percent in 1963 to 45 percent in 1974 (Al-Ankary, 1985). Using official census figures, the growth of population in cities of more than 10,000 inhabitants increased from 0.98 to 3.1 million, implying a 10.5 percent annual growth over that period. In particular, population of cities with 100,000 and more population,
quadrupled: it increased from half a million in 1963 to 2.2 million in 1974 (Al Ibrahimm, 1982).

This was also a period of concentration. The capital city's population (Riyadh) increased from 168,256 in 1962 to 672,382 in 1974, and that of the second city (Jeddah) from 147,847 to 586,044 over the same period. An increase of almost one million, half of the increment in urban population in that period, occurred in these two cities.

Growth of urban population in the 1960s and early 1970s, especially in larger urban centers, was basically a result of internal and international migration (Table 2.6).

Table 2.6: Saudi Arabia: Migrants in Selected Cities (1970)

<table>
<thead>
<tr>
<th>City</th>
<th>Percent of Migrants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dammam</td>
<td>92.2</td>
</tr>
<tr>
<td>Jeddah</td>
<td>88.2</td>
</tr>
<tr>
<td>Madinah</td>
<td>64.2</td>
</tr>
<tr>
<td>Makkah</td>
<td>58.6</td>
</tr>
<tr>
<td>Yanbu</td>
<td>27.3</td>
</tr>
<tr>
<td>Qatif</td>
<td>13.9</td>
</tr>
</tbody>
</table>

Source: Grill (1984), p.25

The dichotomy of a more developed urban core and a less developed peripheral rural sector has generated 'push' and 'pull' forces which in turn have greatly accelerated the process of rural-urban migration. The push forces have been operative in the less-developed rural areas where job opportunities and social services are inadequate. The pull forces, on the other
hand, have been exerted particularly by major urban centers which have come to develop a strong economic and infrastructure base.

The expansion of employment opportunities in large urban centers was largely a result of the disproportionate allocation of central government funds to these centers. For example, municipal funds channeled to Riyadh, Jeddah, Makkah, Dammam and Madinah accounted for 63 percent of total municipal allocations between 1963 and 1973 (Al-Rawab, 1982). In the early 70s, these urban centers have become major pull centers or important centers of attraction to internal migrants. In 1972, it was estimated that 85 percent of the household heads in Riyadh were immigrants (internal and international) and 70 percent of the annual growth of the city was due to migration (Grill, 1984). In Dammam an Al-Khubbar for the same period, 80 percent of the population was born outside the city, and one-third of the annual growth was due to migration (Grill, 1984).

Urban population growth in Saudi Arabia can also be attributed to international migration, which during this period, was far stronger than domestic migration. The accumulation of revenues from sales of oil and the implementation of ambitious plans and projects both in urban and rural areas increased the demand for foreign labor to execute these projects. The flow of foreign labor into Saudi Arabia has been facilitated by easy access and the fact that all labor exporting countries suffer
from adverse economic conditions and low wages. The two main sources of foreign labor in Saudi Arabia are neighboring Arab countries and countries of high population densities in Southeast Asia. In 1980, most of the foreign work force came from North Yemen (40 percent) and Egypt (20 percent)—between them these two countries supplied 60 percent of the labor force coming from Arab countries (Table 2.7).

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
<th>% of Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yemen Arab Republic</td>
<td>500,000</td>
<td>40.21</td>
</tr>
<tr>
<td>Arab Republic of Egypt</td>
<td>250,000</td>
<td>20.11</td>
</tr>
<tr>
<td>Jordan and Palestine</td>
<td>140,000</td>
<td>11.26</td>
</tr>
<tr>
<td>South Yemen</td>
<td>65,000</td>
<td>5.23</td>
</tr>
<tr>
<td>Sudan</td>
<td>55,600</td>
<td>4.47</td>
</tr>
<tr>
<td>Lebanon</td>
<td>33,200</td>
<td>2.67</td>
</tr>
<tr>
<td>Syria</td>
<td>24,600</td>
<td>1.98</td>
</tr>
<tr>
<td>Oman</td>
<td>10,000</td>
<td>0.80</td>
</tr>
<tr>
<td>Somalia</td>
<td>8,300</td>
<td>0.67</td>
</tr>
<tr>
<td>Iraq</td>
<td>3,200</td>
<td>0.26</td>
</tr>
<tr>
<td>Maghreb (Morocco, Algeria and Tunisia)</td>
<td>500</td>
<td>0.04</td>
</tr>
</tbody>
</table>

Total from Arab countries 1,090,450 87.70
Total from Asian countries 153,000 12.30
Grand Total 1,243,450 100.00

Derived from: Muawad (1987), p.194

2.3.3 The Era of Relative Stability, 1970s-Present

The 1970s and after can be characterized as an era of central planning at the national, regional and city levels. City planning was first introduced for Riyadh in 1973, and subsequent
plans for other cities followed. After the oil boom in 1973, the government was capable of responding to explosive growth of population much faster than before as increasing oil revenues eased the financial constraints needed to solve urban bottlenecks. The government, in addition to increasing expenditures on urban infrastructures, established the Real Estate Fund, which introduced a 25 year interest-free housing loans that eased the shortage of housing.

The main sources of urban population growth during this period can be disaggregated into two main components, namely, natural growth and internal migration. International migration which has been relatively strong in the 1970s significantly declined in the 1980s in view of the slackening of the country's economy.

Internal migration of endogenous population had continued in the rest of the 1970s. The forces that induced rural-urban migration in the preceding period not only remained the same, they have become stronger. Economic forces are the predominant factors in rural-urban migration: "a combination of wide differentials in the levels of income and wage" (Al-Ibrahim, 1982, p.235). Moreover, the demand for workers in the formal sector was concentrated in the five largest cities (Knauerhare, 1975, p.14). As a result of unabated rural-urban migration, rural population as a percentage of total population continued
to decline: this share went down to 40 percent in 1987 from 46 percent in 1980.

It has been suggested elsewhere (Kluck, 1984) that the slowdown of economic growth in the 1980s has reversed the population drift to large centers. It was alluded that small and medium-sized cities were able to attract people from both their immediate rural periphery and outside their administrative boundaries. The Third Development Plan (1980-85) in particular, had adopted a program of developing regional and local centers that were perceived to have been successful in attracting some of the rural migrants. According to the Fourth Development Plan (1985-90) "... many medium-sized and smaller urban centers in traditionally remote regions are experiencing a swift population expansion, by attracting people from both their immediate rural areas and from outside the Amirate (Administrative area)" (p.424). The Plan attributed this trend to improved municipal expenditure and social facilities, and increasing employment prospects, which reduced the propensity to migrate to large urban centers.

Other evidence supports the growth of per capita municipal services in 1987 compared with 1974 levels (Al-Hathloul and Narayanan, 1989b). The extension and improvement of municipal services and public utilities have increased significantly not only in small urban but also in rural areas (Table 2.8).
Table 2.8: Ends Allocated for the Provision of Municipal Services in Some Selected Towns, 1975-88, (in million SR)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh (Amana)</td>
<td>2,630.0</td>
<td>1,400.5</td>
<td>1,737.0</td>
<td>1,700.4</td>
<td>1,144.5</td>
<td>2,404.1</td>
<td>3,455.0</td>
</tr>
<tr>
<td>Jeddah (Amana)</td>
<td>1,295.6</td>
<td>936.2</td>
<td>1,102.1</td>
<td>688.4</td>
<td>660.2</td>
<td>764.6</td>
<td>1,953.5</td>
</tr>
<tr>
<td>Makkah (Amana)</td>
<td>1,866.4</td>
<td>1,504.3</td>
<td>1,349.8</td>
<td>1,001.4</td>
<td>606.1</td>
<td>1,346.3</td>
<td>1,273.6</td>
</tr>
<tr>
<td>Madinah (Amana)</td>
<td>555.1</td>
<td>620.5</td>
<td>560.5</td>
<td>333.4</td>
<td>320.9</td>
<td>615.4</td>
<td>988.8</td>
</tr>
<tr>
<td>Dammam (Amana)</td>
<td>221.1</td>
<td>176.5</td>
<td>594.0</td>
<td>117.1</td>
<td>113.2</td>
<td>93.1</td>
<td>1,898.5</td>
</tr>
<tr>
<td>Taif</td>
<td>213.2</td>
<td>150.1</td>
<td>121.1</td>
<td>117.9</td>
<td>202.6</td>
<td>177.6</td>
<td>338.1</td>
</tr>
<tr>
<td>Buraydah</td>
<td>190.8</td>
<td>107.9</td>
<td>203.4</td>
<td>119.2</td>
<td>146.1</td>
<td>322.3</td>
<td>1,259.1</td>
</tr>
<tr>
<td>Jizan</td>
<td>87.2</td>
<td>80.8</td>
<td>70.7</td>
<td>59.2</td>
<td>41.9</td>
<td>117.6</td>
<td>119.1</td>
</tr>
<tr>
<td>Abha</td>
<td>179.4</td>
<td>117.3</td>
<td>117.5</td>
<td>166.7</td>
<td>44.2</td>
<td>33.0</td>
<td>47.2</td>
</tr>
<tr>
<td>Hail</td>
<td>168.5</td>
<td>86.9</td>
<td>102.6</td>
<td>77.9</td>
<td>54.1</td>
<td>44.1</td>
<td>242.3</td>
</tr>
<tr>
<td>Tabuk</td>
<td>325.4</td>
<td>198.2</td>
<td>175.4</td>
<td>136.5</td>
<td>110.5</td>
<td>133.4</td>
<td>353.6</td>
</tr>
<tr>
<td>Nuayriyah</td>
<td>25.5</td>
<td>31.1</td>
<td>23.9</td>
<td>17.5</td>
<td>16.4</td>
<td>18.5</td>
<td>30.8</td>
</tr>
<tr>
<td>Taima</td>
<td>34.4</td>
<td>32.6</td>
<td>23.5</td>
<td>17.4</td>
<td>15.1</td>
<td>19.6</td>
<td>34.1</td>
</tr>
<tr>
<td>Sudayr</td>
<td>34.3</td>
<td>38.6</td>
<td>36.6</td>
<td>26.8</td>
<td>17.8</td>
<td>18.5</td>
<td>21.2</td>
</tr>
<tr>
<td>Afif</td>
<td>43.9</td>
<td>29.7</td>
<td>29.7</td>
<td>27.6</td>
<td>17.3</td>
<td>17.7</td>
<td>19.8</td>
</tr>
<tr>
<td>Fayfa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jubbah</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baqaia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh (Amana)</td>
<td>3,375.0</td>
<td>1,929.0</td>
<td>1,907.2</td>
<td>1,397.3</td>
<td>869.7</td>
<td>914.2</td>
<td>688.3</td>
</tr>
<tr>
<td>Jeddah (Amana)</td>
<td>1,900.6</td>
<td>1,900.1</td>
<td>1,286.3</td>
<td>421.7</td>
<td>153.6</td>
<td>123.5</td>
<td>89.8</td>
</tr>
<tr>
<td>Makkah (Amana)</td>
<td>1,261.6</td>
<td>858.6</td>
<td>1,607.3</td>
<td>439.1</td>
<td>200.5</td>
<td>162.6</td>
<td>70.8</td>
</tr>
<tr>
<td>Madinah (Amana)</td>
<td>776.7</td>
<td>648.0</td>
<td>697.5</td>
<td>306.0</td>
<td>287.7</td>
<td>522.0</td>
<td>395.7</td>
</tr>
<tr>
<td>Dammam (Amana)</td>
<td>1,562.5</td>
<td>628.6</td>
<td>433.7</td>
<td>321.7</td>
<td>182.5</td>
<td>221.0</td>
<td>174.1</td>
</tr>
<tr>
<td>Taif</td>
<td>428.2</td>
<td>266.9</td>
<td>161.7</td>
<td>133.1</td>
<td>71.5</td>
<td>66.4</td>
<td>50.3</td>
</tr>
<tr>
<td>Buraydah</td>
<td>479.4</td>
<td>390.7</td>
<td>209.2</td>
<td>154.9</td>
<td>120.9</td>
<td>102.0</td>
<td>62.8</td>
</tr>
<tr>
<td>Jizan</td>
<td>101.7</td>
<td>46.5</td>
<td>79.9</td>
<td>69.9</td>
<td>37.4</td>
<td>35.1</td>
<td>23.1</td>
</tr>
<tr>
<td>Abha</td>
<td>155.4</td>
<td>141.3</td>
<td>141.9</td>
<td>65.4</td>
<td>37.8</td>
<td>34.0</td>
<td>13.8</td>
</tr>
<tr>
<td>Hail</td>
<td>260.8</td>
<td>273.5</td>
<td>312.5</td>
<td>97.1</td>
<td>71.6</td>
<td>70.6</td>
<td>37.4</td>
</tr>
<tr>
<td>Tabuk</td>
<td>329.8</td>
<td>163.0</td>
<td>461.2</td>
<td>117.4</td>
<td>78.0</td>
<td>68.8</td>
<td>40.5</td>
</tr>
<tr>
<td>Nuayriyah</td>
<td>33.9</td>
<td>21.5</td>
<td>36.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taima</td>
<td>42.5</td>
<td>35.3</td>
<td>25.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sudayr</td>
<td>31.2</td>
<td>33.7</td>
<td>33.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Afif</td>
<td>22.7</td>
<td>42.2</td>
<td>46.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fayfa</td>
<td>13.6</td>
<td>12.5</td>
<td>10.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jubbah</td>
<td>3.0</td>
<td>3.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baqaia</td>
<td>16.9</td>
<td>12.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: MOMRA (1975-88)  * US$1=SR3.75

*Amana is a super-municipality*
The question is, if that has an impact on the migration trends as the Fourth Development Plan alluded. The answer naturally depends on the size of the municipal and other expenditures and its regional multiplier.

The previously mentioned study (covering the period 1975-88) concluded that the correlation is very weak ($R^2 = .10$) between the growth of urban population in small towns and that of municipal expenditure. The assertion of the Fourth Plan of a positive causality between municipal outlays and the growth of "small and medium size" urban centers can therefore be downplayed. This leads to the conclusion that the multiplier effects of municipal outlays were insufficient to significantly reduce migration from small and medium sized urban cities to large urban centers. It is also likely that there is a delay between public investment and the creation of economic opportunities.

The growth in secondary and services activities that was generated by increased government expenditures could have increased the population of small urban areas initially. This growth, however, was associated with the construction period, after which the multiplier should have diminished. In other words, there is still a net outmigration from small urban centers.
The other source of growth in small urban settlements noted by the Fourth Plan is the expansion of employment prospects in small urban areas. The figures of the Central Department of Statistics on labor force indicated a decline for "other urban" between 1981 and 1987. This decline, it needs to be emphasized, was not very large in absolute numbers (7.7 thousand workers). The decline basically came from the construction sector and the expansion of all other sectors was not strong enough to show a net positive gain in employment in small rural areas. All that can be tentatively concluded from the change in urban and rural population shares and the previous discussion is that rural-urban migration is still large and that migration is predominantly to large urban areas, despite improvements in small urban areas share of population. There are no grounds, then, for suggesting that the pace of the rural-urban migration in Saudi Arabia has abated.

The suggestion that rural-urban migration has shifted to small and medium-sized rather than to large urban areas, assumes that employment prospects in small urban areas are expanding, which enable them not only to retain their population but also to attract rural migrants from their administrative areas (Fourth Development Plan, 1985-90). The gain of small urban areas in population (only one percent between 1980 and 1987) does not confirm that suggestion in a strong manner. The reason lies in the fact that economic contraction in the 1980s is more
likely to have negatively affected employment growth prospects in rural and small urban more than in large urban areas since small and medium-sized urban areas are less diversified. Improvement in municipal expenditure is not likely to be a significant factor in creating employment in small urban areas. Evidence of insignificant or small correlation between municipal expenditure and population growth in small urban areas confirms this assertion.

2.4 SUMMARY

In less than four decades, Saudi Arabia has been transformed from a predominantly rural country to a highly urbanized state. Towns and cities have grown rapidly from small settlements housing a few thousand inhabitants to large centers of different sizes and even metropolitan functions. This phenomenal growth, particularly during the years of the economic boom in the early 1970s, has been mainly attributed to internal and international migration. Between 1950 and 1985, the proportion of urban population in Saudi Arabia grew from 10 percent to over 75 percent, increasing sevenfold during the 35 year period.

Several factors are believed to have direct impact on urban growth and urbanization in Saudi Arabia, namely, population size and growth, increasing national wealth, technological changes, industrialization and infrastructure development.
The patterns and processes of urban growth and urbanization in the Kingdom can be traced and explained through three eras of development. The first era, covering the period prior to the early 1960s, was characterized by limited economic resources, and economic life was entirely dominated by traditional agriculture and nomadic pastoralism, both of which did not encourage urban growth and urbanization. The urbanization process during this period was influenced by government programs to resettle nomadic tribes, beginning in 1912, with the first planned settlement established at Artawiyah. Nomadic groups which constituted 60 percent of the population in 1932 dropped to less than 5 percent in 1985.

The second era, spanning the 1960s to early 1970s, was a period of accelerated urbanization. Between 1963 and 1974, urban population increased almost three times: from 15 percent in 1963 to 45 percent in 1974. Population of cities with 100,000 and more population quadrupled: increasing from half a million in 1963 to 2.2 million in 1974. The second era was also a period of concentration. An increase of almost one million, half of the increment in urban population in that period occurred in two cities: Riyadh and Jeddah.

The growth of the urban population during the second era was basically a result of both internal and international migration caused by expanding employment opportunities in large urban centers. The primarily city-oriented expenditures by the central government, as indicated by the share of large urban
centers in municipal fund allocation (63 percent between 1963 and 1973), induced a rapid rate of rural migration. Urban centers offer greater chances of employment, higher incomes, and wider and greater access to social facilities than the rural areas, thus, exerting a considerable pull on the rural people. On the other hand, the implementation of ambitious plans and projects in urban centers increased the demand for foreign labor to execute these projects. The flow of foreign labor has been facilitated by easy access and the fact that all labor exporting countries suffer from adverse economic conditions and low wages.

The pace of rural to urban migration remained unabated during the third era, which covered the late 1970s and beyond. The economic forces that induced the population drift to large urban centers have become stronger as a result of the weakening in economic growth in the 1980s. While municipal expenditures and social services seemed to have improved in the small and medium-sized urban areas, they proved to be insufficient to hold people from moving to large urban centers. In fact, it was more likely that the economic contraction in the 1980s has negatively affected the employment prospects in small urban areas than large centers because the economy of the former is less diversified. On the other hand, international migration which has been relatively strong in the 1970s significantly declined in the 1980s in view of the slowdown of the country’s economy.
CHAPTER THREE
REVIEW OF LAND DEVELOPMENT POLICIES AND PROCESS
CHAPTER THREE:

REVIEW OF LAND DEVELOPMENT PROCESS AND POLICIES IN SAUDI ARABIA

3.1 LAND DEVELOPMENT PROCESS

3.1.1 Ownership Pattern

Traditionally, no formal property rights were attached to the land and these were shared among various bedouin tribes. In 1924, however, King Abdul Aziz abolished all traditional tribal rights of land, and consequently, all land came under the direct jurisdiction of the King. This practice is common among Moslem countries, such as the mivi land in Syria, and land belonging to the Bey in Tunisia, etc.

3.1.2 Processes of Providing Land

Currently, there are two ways whereby land comes into the market. The earlier, most common and direct process is that the state grants land (a large parcel or a small plot) to an individual. This process, which has been practiced for the last 60 years started as a means to reward public servants. But recently, these grants can be made on application by any Saudi citizen who has no property. Furthermore, a needy person with limited income and responsible for a large family can also apply to the Royal Cabinet for land grant.
It should be mentioned that in the granting of land, there is a difference between the free hold grant and the grant to a low-income family. In the first case, the property title is issued upon execution of the grant and is not conditional on the rehabilitation of the granted land. It does not require that the grantee be a resident of the city where the land is located nor does it stipulate that the grantee should not own another dwelling in this particular city. Lastly, it does not consider the real need of the grantee. However, under the second type of grant for needy families with low-income, the grantee must be a resident of the city where the land is located, and should not own another dwelling. If the grantee owns another house which he/she does not declare, the land awarded can be confiscated. The size of the land grant is determined by the applicant's need, mainly the size of his family. The plot area granted may range from 625 to 10,000 sq.m.

The municipality plays a major role in this process since it is responsible for managing the land grants provided by the Royal Cabinet—subdividing and improving this land, and distributing the plots according to royal orders.

The procedure for land grant for commercial or industrial use 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.

In the second type of land grant which is the indirect process, a number of steps occur between the King's grant and the final acquisition of the plot by an individual.

Most of the currently urbanized land was developed through an indirect process, which includes several phases:

- the royal Cabinet grants a large, undeveloped area to an individual;
- sale of this undeveloped land, or of a portion of it, to a real estate agent or joint stock company; and
- subdivision of the land, and sale to the public.

Practically all large estates not devoted to public use were granted in the past to a high official, often a prince.

When the grantee decides to sell the estate or a portion of it, he usually contacts a real estate agent (although the law does not prohibit direct sell to an individual) registered with the Chamber of Commerce. A real estate agent can buy the land directly from the grantee, but if the price of the estate exceeds the agent's financial capacity, he may initiate the creation of a joint-stock company (`musahama`).
The organization of the joint-stock 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 generated, 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 total shares is collected by the agent. Each share sold corresponds to a standard number of square meters of the estate.

Once the land is acquired, the agent is responsible for submitting the subdivision application to the Town Planning office, and for requesting from relevant public agencies the provision of necessary infrastructures such as streets, water, electricity, sewerage and telephone.

The sale of 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 field. As a matter of fact, the sale often takes place before the infrastructures are in place; frequently the only improvement on the day of the sale is the asphalting of the main street.

The sale of the land is advertised in the newspaper, indicating the date of the sale and the location of the subdivision. The sale usually takes place on the land. The sale
price is not 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 company's share, which he obtains as the title deed is registered with the competent court called "Kitabat al Adal".

3.1.3 Operators Involved in the Indirect Process

The original grantee plays a principal role as the amount of land put on the market for development depends on him. 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 later sale. In many cases, land sold by the grantee for between SR 2-5 per sq.m. increase up to SR 650 per sq.m. a few years later (US$ 1 to US$ 170). 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 are its main beneficiaries. In addition to their fees, agents have use of the proceeds of the sale for several months, frequently large amounts of money. They were thus able to purchase on their own accounts large areas on which they could make additional profits. The real estate business thus becomes very profitable, particularly for the most important agents,
since the commercial services to be provided are largely dependent on personal credit.

In comparison, shareholders only received their share of the profit when all the land is sold. The shareholders of the joint-stock companies are of two types: those who do not plan to keep the land for their own use, but consider the purchase of shares as a safe and highly profitable investment and those who need land to build a house. These two types of shareholders have conflicting interests: the first want to sell at the highest possible price and are willing to wait, while the second want the land to be sold as soon as possible so that they can start the construction of their houses.

The government also plays a major role in the land market. Most of the land currently under subdivision were originally donated by the King to distinguished citizens/persons in 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, and the participation of the public sector in land subdivision and construction of buildings are all manifestations of government involvement in the land market.

The participation of the government in the land market is expected to increase as a result of its increasing involvement
in land development activities especially in land subdivision and building construction. This role is expected to increase during the implementation of the urban land infill.

3.1.4 Registration of Land and Real Estate

The transfer of property ownership occurs with the registration of title deed at the "Kitabat al Adal". The registration procedure covers 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 registry for verification and authentication.

c) The process of documentation takes place once the document is found to be in order.

d) In registering buildings constructed after the land title deed has been registered, a site investigation is made by an engineer on behalf of the court. The court holds a session and in the presence of two witnesses, the property is registered.

e) Until 1978, the Islamic principle of land registration was adopted whereby the owner would submit an
ownership deed to the Shariia court. The competent authorities would send letters to various government agencies to find out whether this land belongs to them, or is part of an approved subdivision or it is within the framework of a future plan. If no answer or claim is received within two months, the land is officially registered in the name of the applicant.

If (on rare occasions) there is more than one title deed for the same plot, the earliest date is accepted and all others are void.

Non-Saudis are normally not permitted to own properties or land in Saudi Arabia, with the exception of foreign embassies.

3.2 THE EVOLUTION OF URBAN PLANNING IN SAUDI ARABIA

The emergence and evolution of urban and regional planning in Saudi Arabia may be broadly divided into two eras. The first era, which began in late 1930s, mainly emphasized the physical aspects of planning, culminating with Doxiadis' Master Plan of Riyadh in early 1970s. The second era, which started in early 1970s and continues up to the present day, adopted a comprehensive urban and regional planning approach with an interdisciplinary emphasis.
3.2.1 The First Era: Town Planning With Physical Emphasis

During this period, planning was undertaken in response to day-to-day needs and problems of urban areas. Sets of measures were undertaken to cope with specific situations existing in urban centers, and which were later on institutionalized and applied throughout the Kingdom by circulars, directives and decrees.

3.2.1.1 Municipal Statutes

The statute of the Makkah municipality and municipalities, issued under royal order #8723 dated Rajab 1357/1937 was perhaps the first seminal step which formally prompted the emergence of urban planning in the country. The statute specified the duties of municipalities, providing an extensive list of responsibilities which include supervision of the town's organizations, the town's beautification and the designation of places for selling, among others. Through time, municipalities developed regulations and codes, though on a fragmented and case by case basis.

In 1941, another law was passed entitled "Roads and Building Statute." The statute concerns itself mainly with three issues, namely, planning procedures, building codes, zoning and the right of way. It was through this concept, that the notion of setback was introduced for the first time in Saudi Arabia,
with the sole objective of meeting the demand for future street widening. This statute indicates the authorities' concept of town planning at that time which was essentially the need for physical development especially in Makkah, the country's religious capital and administrative center in the 1930s and 1940s.

3.2.1.1 The Gridiron Pattern

In 1947, a system of blocks and gridiron pattern was first introduced to the Eastern Province in the cities of Dammam and Al-Khobar. The Arabian-American Oil Company (ARAMCO), which appeared to have used such a system in 1938, was requested by the governor of the Eastern province to assist in laying out a gridiron pattern in limited areas of the two cities.

In 1952, with the transfer of the provincial capital from Hofuf to Dammam, ARAMCO again assisted the city of Dammam to develop a major thoroughfare plan for the city. ARAMCO also helped in the land subdivision plan of Al-Khobar following the gridiron pattern.

As a new community, Al-Khobar stands out in the history of urbanism in Saudi Arabia. It was the first community to be wholly planned and have an overall gridiron plan. It was in this city that street name signs and numbered avenues were first introduced instead of the traditional use of persons' names.
Khobar has been a model for many years in physical planning, though it demonstrably set precedents in disturbing the traditional pattern of physical development and initiated the demolition process of old parts of the city.

3.2.1.3 The square lot, village type and setbacks

The ARAMCO Home Ownership Plan in 1951 and the Al-Malaz Housing Project in Riyadh in 1953 introduced the large lot and the villa as a dwelling type with setbacks on all sides. They established the taste and style for a modern neighborhood. These two projects also reinforced conformity to the standards set by the Roads and Building Statute.

The ARAMCO Home Ownership Plan in 1951 resettled its employees in surrounding communities instead of housing them in camps. The plan provided for land grants from the government or lands purchased at nominal prices. Housing loans were extended at 20 percent discount rate, 5 percent service charge and zero interest. In order to qualify for the loan, the employee had to submit a design for the house and the approved design had to be implemented without any alteration. In the 1950s there were few architects in the country, and the Saudis had to rely on the company's architects and engineers who were not familiar with the culture and tradition of the area. Not surprisingly, they produced the typical suburban detached house closer to the "international Mediterranean" rather than to a local house. The
program, as a result, had a considerable impact on the ARAMCO communities in the eastern coastal belt, especially in Dammam and Al-Khobar. It affected the physical growth of the two cities by accelerating housing construction and changing their physical character.

In 1953, the government decided to move its headquarters to Riyadh. In order to provide housing to transferred employees, the Ministry of Finance initiated the Al-Malaz housing project. The physical pattern of Al-Malaz followed the gridiron plan with a hierarchy of streets, rectangular blocks and large lots which in most cases take a square shape. Compared with the traditional pattern of Al-Dirah, Riyadh's oldest neighborhood, one can see the following differences: the new pattern has very low density, one-fifth that of the traditional; large areas are assigned to streets, three times of the traditional; only half of the area is reserved for private plots compared to more than 75 percent in the traditional pattern. In addition, no provision was made for semi-private space, an essential element in traditional environments. The impact of the Al-Malaz housing project, which was sometimes called the new Riyadh, can later be felt on the pattern of physical development in Riyadh as well as all over the country.
3.2.1.4 Apartment Buildings

The development of apartment buildings in Saudi Arabia began in Riyadh in the 1950s. Apartment buildings were introduced in the Al-Malaz housing project and gained acceptance as appropriate residence for Saudis. They were also built for foreign migrant workers who preferred an apartment building to a traditional house. As a result, the pattern was established and the process of erecting apartment buildings prospered.

3.2.1.5 The Master Plan

Riyadh in the late 1960s was the fastest growing city in the country and, being the capital city of Saudi Arabia, was considered the most important from the point of view of the government. The government therefore felt the need to control and direct its growth. In 1968, the task of planning the capital was assigned to Doxiadis Associates of Athens, Greece. The Doxiadis Plan can be termed as a milestone in the history of urban planning in Saudi Arabia as it was the first formal attempt toward the study and analysis of existing conditions of the city of Riyadh, emphasizing planned development as a whole. The final Master Plan for Riyadh was submitted in 1971 and approved and sanctioned by the Council of Ministers in 1973.

The Doxiadis Master Plan of Riyadh introduced the supergrid and used the grid pattern in its proposal for the Action Area Studies. The plan institutionalized the grid as the most desired
pattern for Riyadh as well as in other cities of the country. It preserved the trend for large lot sizes and further developed the setback requirements introduced in Al-Malaz. The plan also institutionalized the villa as the most desirable dwelling type. In the overall, the plan established a new physical environment for Riyadh which was different from the traditional in terms of density, scale and pattern.

3.2.2 The Second Era: Comprehensive Urban and Regional Planning

Compared to the rather ad hoc and incremental approach adopted during the first era, the second era pursued a holistic approach in planning wherein national socioeconomic objectives and policies were interfaced with those at the regional and local levels, resulting in a hierarchy of development plans. During this period, a series of plans were successively formulated, starting from the Five Year National Plans to Regional and Master Development Plans for urban and rural areas. In addition, certain other related activities and processes such as enabling legislation, plan implementation, creation of urban and regional planning institutions and on the job training programs necessary for institutionalizing the planning process, were also initiated.10

3.2.2.1 The First Generation of Regional Physical Plans

The unprecedented economic growth of Saudi Arabia due to the oil boom in the early 70s gave rise to a phenomenal
development of cities and towns creating various problems with respect to the entire range of urban services and facilities. To cope with this problem, the government embarked on an ambitious program of formulating comprehensive urban, regional and national plans. As a consequence, a system of Five Year National Plans was instituted in 1970 and the Kingdom was divided into five planning regions. International consultants were hired to prepare the first generation of regional physical plans for each region, and master plans for a number of principal cities and towns in each of the five regions.

Regional and urban planning studies were first initiated in the western region in 1972 and were followed by studies in the central and northern regions during the same year. Development plans for the eastern and southern regions were prepared in 1973 and 1974, respectively. These plans were formulated in the context of national socioeconomic objectives spelled out in the First Five-Year Development Plan (1970-75) and provided useful inputs for the public and private development programs.

The first generation of urban and regional development plans, although important in their own right, lacked the overall perspective of urbanization at the national level and also failed to institutionalize the physical planning process, per se, in the country.
3.2.2.2 **Action Master Plans**

In 1976/77, the Deputy Ministry of Town Planning launched "Action Master Plans Projects for seven cities" covering Jeddah, Riyadh, Dammam, Al Madina Al Munawara, Taif, Abha and Jizan. These plans may be viewed as the third generation of urban development plans as they succeeded the Doxiadis Riyadh Master Plan and the master plans prepared in the five regions of Saudi Arabia in late 1960s and early 1970s, respectively. These plans, unlike the previous ones, were conceived as a continuous spin-off of the planning process. International consultants appointed for the formulation of these plans were required to establish Planning and Development Departments in the respective cities so that Master Plans could be kept updated on a continuing basis. The consultants were further required to give advice to concerned authorities on matters related to planning and development on an ad-hoc basis during the preparation of Action Master Plans.

To carry out its operational activities and to institutionalize the planning process in the country, the Ministry of Municipal and Rural Affairs, also established the "Physical Planning Project," in collaboration with the United Nations. The project was to assist the government in the following: (i) developing a National Spatial Strategy for Saudi Arabia, (ii) training the professional staff necessary to
sustain the physical planning activities of the Kingdom, and (iii) monitoring the work of international consultants engaged in the preparation of Action master plans for selected cities.

3.2.2.3 The Comprehensive Urban, Rural and Regional Development Plans

Recently, the government has undertaken the preparation of "second generation" of regional development plans in collaboration with the United Nations Regional Development Planning Project. These regional plans are expected to be much more comprehensive and highly development oriented as compared to their previous version. These plans aim at integrated urban and rural development. Presently, only regional development plans (Hail, Tabuk, Makkah, Qassim and Baha) have been launched. These are in various stages of preparation and finalization. In addition, three more (Jazan, Al Qatif and Al Ahsa) are in the pipeline and more are expected to follow. When completed, these regional development plans will serve as coordinating tools at the emirate level where most of the development decisions are taken. Also, as expenditures are budgeted by the respective sectoral ministries at the national level, these plans will provide vital sectoral inputs for capital budget programming.

The set of comprehensive urban, rural and regional plans have also provided a feedback to the zoning and subdivision regulations developed during the 1930-1970 era which is more in keeping with the Islamic traditions and climatic conditions.
prevalent in Saudi Arabia. For instance, according to the newly adopted zoning regulations in Hail regions, it is now possible to have Arab style houses with family oriented courtyards by doing away with rigid requirements of side and rear setbacks, provided the owner complies with certain design criteria that would preserve the privacy of his neighbors. In the rural areas, zoning and subdivision regulations are being proposed which are more in keeping with the rural way of life rather than continuing with the practice of applying urban zoning and subdivision planning regulations to the rural areas.

Because of the unique and dynamic nature of socioeconomic and physical development in Saudi Arabia, the philosophy of the various "generations" of urban and rural development plans, per se, have evolved iteratively by obtaining feedback from their earlier versions successively and also by adjusting to the changing conditions. Although the top down approach adopted during the second era is by far the most comprehensive, often the exigencies of real world situations demand immediate solutions of local problems because development processes cannot be brought to a complete stop until the finalization of the entire hierarchy of development plans. Therefore, the next "generations" of development plans are being oriented to follow both the top down and bottom up approaches according to the exigencies of various situations. For example, the scope of work for the next generation of regional plans currently under
preparation provides for special studies or interim development proposals for the important local centers within the regional framework so as to enable local authorities to deal with their day-to-day and immediate problems, pending the preparation of comprehensive development plans for the respective local centers. On the other end of the continuum, projects of local nature are also being launched and efforts are being made to conceive these plans within the context of inter-regional linkages and regional development strategy.

3.3 CURRENT LAND DEVELOPMENT POLICIES in the KINGDOM

This part gives an overview of the land use and development controls as practised at the national and local government levels. It describes, reviews and analyzes land use and development controls implemented in the Saudi cities. It points out various organizations involved in the planning process, the distribution of responsibilities and the inter-relation between individual planning organizations.

As development in the cities of Saudi Arabia continues to accelerate, it is becoming increasingly likely that the programs, priorities and phasing of the present master plans and their instruments for implementation will be modified or supplemented.
In Saudi Arabia, municipal regulations are based on Royal Decrees issued by the King while implementing directives and administrative rules are issued by ministries.

Behind these decrees, directives and rules is the basic law of Islam, the Sharia, which delegates to the government the necessary authority to rule in the national interest. There is great flexibility in Islamic law to deal with changing circumstances of modern life. Among these circumstances are the continuing growth and increasing congestion of the cities of the Kingdom which these regulations are intended to direct.

The present sources of authority for planning regulations are discussed in succeeding pages and in Appendix I.

3.3.1 The Municipal Statutes

Statutes of the Makkah municipality and municipalities, issued under the Royal Order No. 8723, dated 20/7/1357/1937, specified the duties of municipalities including the supervision of the town organization by the municipalities, their beautification and the work needed to result in their having an enhanced scenic setting; designation of places for selling; supervision of general housing conditions; prevention of projections and encroachment on streets and public open spaces; extension and widening of roads; and creation of public open spaces.
3.3.2 Regulation of Roads and Buildings

A basic set of regulations adopted in 1945 dealt with the following concerns: city plans, land use, building lines, land subdivisions, building permits and building regulations. These set of regulations spelled out who should prepare city plans (a special technical committee to be approved by the municipality and higher authorities); stipulated building setback lines; described how land should be subdivided into streets and lots; and identified who should issue building permits (the municipality).

3.3.3 Municipality and Village Law

The law of the municipalities and villages was promulgated on 2/21/1397H/1977 to govern the establishments of municipalities as local governments concerned with the municipal and rural affairs. The law determines the functions, powers and responsibilities of the municipalities. It also regulates the relationship between the municipal council and the Minister and Rural Affairs by specifying the decisions that should be approved by the Minister.

The municipality performs its functions according to the law in all domains: organization and rearrangement of the town, provision of public health and other services to its constituents, in addition to specific functions related to
physical planning and development undertaken in accordance with an approved Master Plan. These tasks include issuance of building permits, construction of public utilities, establishment of parks and amenity places, filling in the swamps, expropriation measures, acquisition of land for public interest, prevention and demolition of transgressions on private and public property and all other functions which come under the responsibilities of municipalities in general.

3.3.4 Approval of Land Subdivisions

The Ministry of Municipal and Rural Affairs issued on 9/25/1396/1976 a circular to all Municipal and Town Planning Departments embodying the principles and rules to be followed in preparing land subdivisions and the duties of the component agencies in that respect. It explains comprehensively how to apply for a subdivision plan, the duties of municipality towards the application and the duties of the Deputy Minister for Town Planning towards the approval of those plans. It also explains in detail the preparation of cadastral location.

3.3.5 Town Planning Law

The Town Planning Law has its origin in the issuance of decrees by the Minister of Municipal and Rural Affairs for the various municipalities in the Kingdom. The decisions of the Minister are concerned with matters like the establishment of control teams for municipal lands, and procedures for property
confiscation, of installing electric networks, and the distribution of government lands among Saudis in the low income group for residential purposes. Further instructions are given with regard to property confiscation relating to mosques and the removal of mosques due to development work, as well as drinking and irrigation water standards.

As shown by the above samples of decrees, the Town Planning Law is characterized by sporadic issuance of instructions as required by circumstances. This peculiarity gives the law an appearance of ad-hoc planning, which does not prevent the legislation from serving as a vehicle for regulating land development in the Kingdom.

The character of the Town Planning Law is quite similar to that of the Roads and Buildings Regulations, in that there are no stipulations which would suggest that the particular legislation conforms to the master plan.

3.3.6 Orders and Directives Relating to Planning, Building, Subdivision and Related Matters

Various royal decrees, Council of Ministers decrees and ministerial directives and memoranda have been issued from time to time in response to problems brought to the attention of the government. Some of these duplicate or conflict with one another.
but generally can be regarded as supplementary to the more basic authority cited above (See Appendix A).

3.3.7 Rights of Ownership

The fundamental policy as regards the right of ownership is that the owner has the right to legally possess his land and keep it in his family for an indefinite period. However, with the introduction of a system of land use planning and regulations, the right of the owner to use his land has been limited to the use specified in the land use regulations.

In the Second Development Plan (Chapter VII, p. 513) it is stated that:

"All land subdivisions for residential development must meet or exceed town planning regulations concerning plot sizes, setbacks, density ratios and vehicular access".

While this directive deals only with residential subdivisions it is assumed that an unwritten rule would be that all building and construction should meet the appropriate land use regulations.

3.3.8 Disposition of Land Owned by Municipalities

Circular no. 351/5 dated 15.10.1395/1975 issued by the Minister of Municipal and Rural Affairs embodies the conditions and rules of the disposition of land owned by the municipalities. The circular states that one person is not entitled to more than a single parcel at the government price.
Priority is given to the low income people who have no house of their own. The surplus land is sold at auction after the approval of the Ministry.

It is noted that the rules are constantly changing according to the varying circumstances, with one goal in view, which is to enable low income families to have their own house at subsidized rates. The price of land in this case is usually nominal depending on the location of the land. Land is classified as follows:

a) Land within the built-up area is sold by auction.

b) Land adjacent to the built-up area is sold according to a reasonable price fixed by a committee constituted for the purpose.

c) The land which is not adjacent to the built-up area is sold according to a reasonable price fixed by the committee.

While fixing the price, the committee takes into consideration the needs of the citizens and the direction of physical development.
Regulations define the rules for selling land to governmental institutions and to developers who wish to construct projects on this land. The rules also explain how to dispose of the land affected by street alignment whether they are big parcels suitable for constructing an independent building or a small portion unsuitable for constructing such a building. They also determine the methods of determining the price of such land.

3.3.9 Land Grant

As discussed earlier in this chapter, the land grant system in the Kingdom operates whereby the King donates plots of land to individuals—either to distinguished persons who have the option to subdivide and feed the land into the market or to low-income citizens for residential purposes. The state can also grant land for industrial or commercial purposes with certain conditions for development. The number of parcels gifted during the past reached 7,707,696 plots with areas ranging from 400 to 10,000,000 sq.m.

3.3.10 Expropriation

According to the royal decree # M/65 dated 16.11.1392/1972:

"land shall be expropriated for public use and decree of the concerned minister or chief of independent department, provided that the said order is enclosed with a plan of project for
which expropriation is proposed and a statement about the total amount of land to be expropriated, their boundaries and location."

The committee while making its deliberations for the expropriation of such piece of land has to estimate the prevailing rates in the area and thereby has to avail itself of selling and leasing contracts of the properties in the vicinity of the one under discussion. After the committee has completed different steps of expropriation, it issues a decree specifying the plot of land to be expropriated and the price to be paid against each property as compensation. Within 20 days the owner is notified officially of this decision. If the owner has any objection, he has to furnish the same within 30 days of the date he is notified. This objection must be submitted to a committee composed of representatives of the Ministry of Justice with a religious member as chairman of the committee, a technical representative from the beneficiary and a representative of the Ministry of Finance.

The present rules are limited to the expropriation of land for roads, schools and other public facilities. The expropriation of private land in order to assemble large areas for residential or industrial development which is in the general public interest has no precedent yet.
This limitation on the types of purposes for which expropriation may be used could create problems for future development which is being planned by the government or the municipality. For instance, a single landowner with a small parcel of land within a larger area owned by the government, and zoned for commercial or industrial development, may hold up this development by refusing to sell his land in the knowledge that the powers of expropriation cannot be used.

The major obstacle of property expropriation is the financial compensation to be paid to the owners.

3.3.11 Real Estate Development Fund

The royal decree #M/23 dated 11.6.1394/1974 approved the establishment of the Real Estate Development Fund (REDF) and started operation in 1975. The foundation for the REDF is described in the Second Development Plan, 1975-1980 (p. 510) as follows:

"The primary objective for housing development is to enable every household in the Kingdom to have a decent, safe, and sanitary dwelling of a standard consistent with its level of income."

The REDF is a lending institution funded by the Ministry of Finance and National Economy. Its major goal is to help meet the Kingdom's housing need by providing two kinds of loans: private
loans which are for landowners who are citizens and who want to build their own private housing, and investment loans which provide landowner/citizens with funds for commercial housing projects. Private loans have a ceiling of 300,000 SR for large cities; 240,000 SR for medium-sized towns; 200,000 SR for small town and villages, which covers 70 percent of the cost of construction. The loan term is for 25 years and they are issued at zero interest. This last condition was later made even more generous by providing a 20 percent discount for onetime payments and a further 10 percent discount if it is paid in lump sum. Investment loans initially had a term of 5 years and a ceiling of 15 million SR which in 1978 was reduced to 10 million SR. Later on, the term was extended to 10 years and loans were issued at zero interest (REDF, 1983).  

This generosity definitely provided the necessary incentive along with satisfying the need for housing starts. Since its foundation up to the fiscal year 1987-88, 391,858 private loans have been made with a value of 102,829 million SR. Investment loans on the other hand constitute less than 1 percent of the number of loans and approximately 5 percent of the total loan values as shown in Table 3.1 (REDF, 1988).
Table 3.1 REDF Private Housing Loans, 1975/76-1987/88

<table>
<thead>
<tr>
<th>Fiscal Year 1/</th>
<th>No. of Applicants</th>
<th>No. of Loans Approved</th>
<th>No. of Housing Units</th>
<th>Value of Loans (million SR)2/</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975/76</td>
<td>34,189</td>
<td>34,189</td>
<td>41,027</td>
<td>8,197</td>
</tr>
<tr>
<td>1976/77</td>
<td>46,955</td>
<td>46,955</td>
<td>56,346</td>
<td>13,536</td>
</tr>
<tr>
<td>1977/78</td>
<td>30,700</td>
<td>3,832</td>
<td>4,598</td>
<td>955</td>
</tr>
<tr>
<td>1978/79</td>
<td>35,308</td>
<td>34,407</td>
<td>41,288</td>
<td>8,690</td>
</tr>
<tr>
<td>1979/80</td>
<td>37,016</td>
<td>33,190</td>
<td>39,828</td>
<td>8,185</td>
</tr>
<tr>
<td>1980/81</td>
<td>36,815</td>
<td>28,593</td>
<td>34,312</td>
<td>6,956</td>
</tr>
<tr>
<td>1981/82</td>
<td>35,572</td>
<td>31,133</td>
<td>37,360</td>
<td>8,052</td>
</tr>
<tr>
<td>1982/83</td>
<td>41,735</td>
<td>35,359</td>
<td>42,430</td>
<td>9,438</td>
</tr>
<tr>
<td>1983/84</td>
<td>39,541</td>
<td>35,280</td>
<td>35,280</td>
<td>7,917</td>
</tr>
<tr>
<td>1984/85</td>
<td>38,715</td>
<td>30,750</td>
<td>36,612</td>
<td>8,277</td>
</tr>
<tr>
<td>1985/86</td>
<td>39,700</td>
<td>28,600</td>
<td>34,500</td>
<td>7,699</td>
</tr>
<tr>
<td>1986/87</td>
<td>41,619</td>
<td>27,900</td>
<td>31,389</td>
<td>7,511</td>
</tr>
<tr>
<td>1987/88</td>
<td>40,950</td>
<td>27,550</td>
<td>30,450</td>
<td>7,416</td>
</tr>
<tr>
<td>Total</td>
<td>498,895</td>
<td>391,858</td>
<td>465,420</td>
<td>102,829</td>
</tr>
</tbody>
</table>

Derived from Fadaak (1985); REDF (1988).
Notes: (1) Fiscal years reflect the Hijra calendar.
(2) US$1=SR3.75

Income from petroleum sales is the main source of revenue of the government of Saudi Arabia. It does not impose any form of taxation, including land taxes. This means that the government has no way of recouping its investment, completely or partly, for providing services and infrastructure for private building plots. Nor is there a system of planning gain operating within existing policies for land development in the Kingdom. On the other hand, there is now under discussion the possibility of using land banking mechanism to acquire and develop land in the country.
By acquiring land and reselling it at a certain price according to an established time schedule and for a specific use, the government can regulate the land market in a way compatible with development objectives. In Saudi Arabia, the government has not used this method to implement a defined land development policy. On the contrary, the government has retained no control of the land it has granted and conditions have not been imposed on the use of the land.

Sometimes the public sector gets involved directly in large development projects in central areas, secondary service centers in suburban areas, low-cost housing programs, etc., whenever the private sector is unable to initiate because of high risk, low profitability, size of capital needed or lack of expertise. In these cases, the direct involvement of the public sector, either by itself or through joint ventures with the private sector, may provide the best incentive for development. The Saudi government has assumed responsibility for a number of such large scale projects but it has been reluctant to become directly involved in the building development process except for purely public purposes.

3.4 SUMMARY

Beginning in 1924, all land in Saudi Arabia is under the direct jurisdiction of the King.
There are two ways in which land comes into the market. The most common and direct process is through the land grant. This process which has been practiced for the last 60 years as a means to reward public servants can now be granted to any Saudi citizen who has no property or to a needy person with a limited income and responsible for a large family. The state can also grant land for commercial or industrial purposes and is usually made on condition that the projected development must be undertaken within two years.

The second type of land grant is the indirect process whereby an individual recipient of a land grant decides to sell the land or a portion of it to the public.

The evolution of urban and regional planning in the Kingdom may be broadly divided into two eras. The first era, which began in the late 30s and ended in the early 70s, emphasized the physical aspects of planning culminating with the Master Plan of Riyadh. This period was characterized by the ad hoc and incremental approach to planning. Set of measures which were initially designed to cope with day-to-day urban problems were institutionalized and applied throughout the Kingdom. It was during this time that the gridiron pattern, new dwelling types (villa and apartment buildings) and the concept of setbacks were introduced signalling the onset of a new pattern of physical development in Saudi Arabia.
The second era of planning, which started in the early 70s, pursued a holistic approach wherein national socioeconomic objectives and policies were interfaced with those at the regional and local levels resulting in a hierarchy of development plans. During this period, a series of plans were successively formulated starting from the "first generation" of regional physical plans to action master plans and the comprehensive urban, rural and regional development plans. In addition, other related activities and processes such as enabling legislation, plan implementation, and the creation of urban and regional planning institutions were initiated.

In Saudi Arabia, municipal regulations are based on royal decrees issued by the King while implementing directives and administrative rules are issued by ministries. Behind these decrees, directives and rules is the basic law of Islam, the "sharia", which delegates to the government the authority to rule in the national interest. The Islamic law provides great flexibility to the changing circumstances of modern life. The present planning regulations cover or include the following: the statutes of the Makkah municipality, the regulation of roads and buildings, municipality and village law, approval of land subdivisions, town planning law, rights of ownership, disposition of land, land grant, expropriation and real estate development fund, among others.
CHAPTER FOUR

WORLD URBAN GROWTH AND URBANIZATION RATIONALIZATION INSTRUMENTS
CHAPTER FOUR:

WORLD URBAN GROWTH AND URBANIZATION RATIONALIZATION INSTRUMENTS

4.1 WORLD URBAN LAND URBANIZATION PROBLEMS

Problems associated with urban land and physical expansion vary within countries and from one country to another. In developing countries, three interrelated problems affect urban land use policies -- the difficulty of acquiring land for development within urban areas, the inefficient pattern of urban development and land use, and the severe limitation of resources for further urban development.

The severity of these problems varies greatly between cities because of the great diversity of urban patterns around the world; differences in cultures and in the organization of society; in legal and communal tenure of land; in major economic activities and political-economic organization; and in historical patterns of development. All of these factors have influenced, and have in turn been affected by, patterns of land use and land ownership.

In virtually all cities of developing countries there are problems of underutilization of existing serviced land, and of constraints on urban land extension. Underutilization frequently
results in part from historical patterns of development - the types of buildings constructed, the layout of streets, etc., and withholding of land from the market for investment speculation, to which may be added deficiencies in zoning laws and/or their enforcement. Development is restricted by the poverty of the bulk of the population and the paucity of municipal government resources. If a substantial proportion of the land is owned by a small number of large landowners, their monopoly/oligopoly behavior may further retard inner city development and extension of the urban area. High and rising land prices, though partly an inevitable result of rapid urban population and economic growth, are accentuated, perhaps greatly, by such factors. Rising prices encourage speculative withholding of both serviced and unserviced land, which aggravates all three basic problems. Other factors retarding urban land extension are constraints on public sector provision of infrastructural support for private sector development either ex ante or ex post or simple failure of owners to perceive suitable investment returns from urban land development. As a result, substantial areas of unplanned vacant land and low density development are common features, with the percentage of vacant land reportedly ranging as high as 75 percent\textsuperscript{12}.

In some cities, substantial tracts of land are owned by the government and in a few of these (of which Singapore is a notable example) this "opportunity" has been seized with vigor.
and no little imagination. In most cities, however, because such land falls under the control of many ministries or government entities, there is no development program, or for some combination of these and other reasons, the land is not brought into productive use. Many other factors may have an impact on curtailing development or contribute to undesired patterns of development.

4.2 INSTRUMENTS TO RATIONALIZE URBAN GROWTH

Due to the diversified nature of the problems associated with urbanization and physical growth, instruments to control and rationalize urban growth and urbanization process vary greatly among countries. These instruments range from direct public involvement to incentives and indirect policies.\(^{13}\)

Policy objectives to guide and rationalize physical growth include but are not limited to the following list of instruments:

4.2.1 Market Instruments
a) Land Purchase in the Open Market
b) Selling of Land
c) Exchange of Land
d) Leasing of Land
e) Pooling of Land
f) Limitation of Land Acquisition Rights
g) Public Acquisition
h) Regulation of Land Prices
i) Pre-emption Right
j) Land Readjustment Schemes
k) Expropriation
l) Land Division Measure to Support Plan Implementation
m) Proper Valuation of Urban Land
n) Land Bank

4.2.2 Financial Instruments
a) Land Price Conditions for Housing Loans
b) Land Acquisition Loans or Subsidies to Local Authorities
c) Collection of Servicing or Betterment Charges

4.2.3 Taxation Instruments
a) Annual Site Valuation Taxes
b) Taxes on Commercial Sale of Land
c) Taxes on the Increment on Land Value
d) Tax Exemption when Land is Sold to Public Authorities
e) Land Transfer Duties and Taxes
f) Income Taxes on Land
g) Tax on Vacant Land

4.2.4 Administrative and Planning Instruments
a) Official Building Appeal Regarding Unbuilt Lots
b) Physical Development Department

c) Development Prohibitions and Restrictions

d) Municipalization of Urban Land

e) Nationalization of Urban Land

4.3 DESCRIPTION OF THE INSTRUMENTS

In this section, an attempt will be made to describe those instruments listed in 4.2, as distinctly as possible, mentioning the more obvious advantages and/or disadvantages of each instrument. It was necessary to give most of the instruments a rather general description as many of them are differently structured.

4.3.1 Land Purchase in the Open Market

The creation of land reserves by a local authority is a classic instrument of land policy. Land purchase is done either for the realization of actual projects or in pursuit of medium and long-term urban planning goals. A municipality is usually in a better position than other entities in making such purchases because of its liquidity and dependability.

If land has not been nationalized or municipalized and if the compulsory purchase instrument is used in exceptional cases only, voluntary purchase is the most common land acquisition method. Land should be bought well in advance and in
sufficiently large quantities. This is often impossible in practice.

This can be a very effective instrument if a municipality is very active and plans its land purchase well, thus, ensuring that people in need of land can be supplied with it.

By using this instrument, the municipality can have full control over planning and development of urban land, and it can allocate the land at the right time and at the right price if desired. This, however, would imply that the municipality has to invest considerable funds in land to the detriment of other investments.

4.3.2 Selling of Land

Selling of land can take place in voluntary deals, usually in an open market. In practice, local authorities sell land to private builders. The price of the land is subject to market conditions rather than the cost which the local authority has incurred in developing the sites.

As soon as land is sold, local authorities can recapture the capital invested in the land so that the financing problems can be solved. The downside to this is that in selling the land, local authorities (sometime after having purchased the
land through very difficult means) lose their executive power over the use of the land.

4.3.3 Exchange of Land

Exchange of land can take place both in voluntary deals, concerning whole real estate properties or parts of such properties, and in a compulsory way as part of a land parcelling action. Voluntary exchange can facilitate the implementation of a city plan. Likewise, a public authority can have an interest in exchanging a piece of land which it already possesses for another piece which it needs. This manner of land acquisition can be recommended strongly as it also provides an instrument for keeping prices in check.

4.3.4 Leasing Land

Leasehold can be desired as the right to enjoy the exclusive possession of real estate owned by another person for a limited or unlimited time, in return for periodic payments of ground rents, thus, creating the relationship of landlord (owner) and tenant (leaseholder).

The main difference between leasehold and other forms of giving real property in use is that the leasehold interest is a proprietary right of long duration, alienable and mortgageable, whereas in most countries rental contracts are personal rights for shorter periods or terminable.
The contract period (term) can differ individually, within countries, and from country to country. There exists also the difference between temporary and perpetual leasehold. The leaseholder retains the buildings and has the right to a new contract.

The advantages of this instrument is that the municipality has much better control over the use of the land, and any increases in land value can be plowed back to the community. This process, however, requires enormous investments in order to have a sufficient supply of land, and could create an unwieldy administrative procedure.

4.3.5 Land Pooling

Land pooling is a technique for consolidating private landholdings so that they can be planned, serviced and subdivided as a whole, with the cost spread over all the holdings and recovered from the overall increase in land values. The pooling technique is a variation of the technique of compulsory land acquisition by the local government.

A pooling project can be viewed as a compulsory partnership between landowners, or between a local authority and landowners, for the servicing and subdivision of their holdings as one unified estate. The local authority is the land subdivider and the planning scheme prepared to define and regulate the project.
can be viewed as a partnership agreement between the local authorities and the landowners for the project.

This instrument provides the possibility of assembling land for fairly large-scale urban development, thereby making it possible for both local authorities and individual landowners to achieve some of the benefits connected with such development.

It allows the local authority control of ownership, planning and development of the land thus achieving efficient and economic land development. It also enables the local authority to recover the increase in land values and to use them to recoup the cost of land development works which generated the increase in land values. Likewise, the local authority can recover its outlays within a short period and share the cost and the land value increases equitably between the landowners. To be able to realize these benefits, it is important to have a very efficient and perhaps expensive administrative structure. This process, though, may also take a long time.

4.3.6 Limited Land Acquisition Rights

This means that land can be purchased subject to certain conditions. In addition to nationality restrictions, land acquisition can be based on trade or profession, the type and quantity of land involved, the branch of economy in which a company is engaged, etc.¹⁴.
This instrument can help limit or prevent land speculation. However, it cannot be regarded as a particularly effective instrument because it can usually be circumvented and can easily create a ponderous control system.

4.3.7 Public Acquisition

By acquiring land, local authorities can effectively manage development and implement their proposals. While most public land is usually acquired by negotiation, compulsory purchase powers are necessary on occasion to facilitate purchases of land critical to the effective implementation of planning policies. Compulsory purchase legislation (i.e. rate of compensation, etc.) varies from place to place. However, in most of the urban areas the local authority can compulsorily acquire land by paying a predetermined compensation price which should be equivalent to the market value. Compulsory acquisition of land is probably the most effective way of implementing public development proposals. As H.D. Drakin (Land Policy and Urban Growth, 1977) notes "it is the view of many experts from different countries including the U.K. Land Commission, various U.N. reports, and others, that growing needs for land in urban areas can more effectively be met through such policies of public land acquisition than through traditional taxation and land use controls."
4.3.8 Regulation of Land Prices

This is a system in which land prices are controlled by the government in order that they be kept to an acceptable level. The decision to regulate land prices often stem from the fact that the land component which is reflected in the total development cost often rise much faster than the construction component.

Land prices are the product of the interaction of a number of forces. Although the exact degree of influence is not known, five major forces seem to influence prices. These are urban population growth, speculation, land use differences, public improvements and public planning and development programs.

Urban areas in almost all countries have experienced rapid increases in land prices and it is often difficult to obtain reliable data on such changes in price. As a result of urbanization and the movement of people from the center to the suburbs, urban land prices seem to have risen much faster than prices of agricultural land.

Public authorities can fix the maximum price at which land may be sold or developed in two main ways. Some countries such as France and Spain have chosen to freeze land prices by direct legal directives. In other countries such as Australia and
Japan, the prices are regulated in connection with the granting of state loans. The loan application is rejected if the price paid for the land is estimated to be too high.

The use of this instrument can eliminate speculation to some extent. This kind of control, however, could lead to price distortions.

4.3.9 Pre-emption Right

The pre-emption right gives the opportunity to a local authority to acquire land for public benefit. According to this instrument, the landowner wishing to sell his property must first offer his land to the public authority and if the authority is not interested he may sell it to a third party.

This instrument enables the authority to control transactions where development is not planned or not desirable according to the Master Plan. Such a procedure gives better information about land values in different areas of the cities. It also allows local authority to influence land market by purchasing limited quantities of land in various parts of the city and saving future high compensation cost. Given a register of purchase prices, it allows the local authority to tax any gains made by the landowner, and thereby realize for the community some of the increased land value which may have
resulted from public infrastructure investment. This technique is used in Finland and Sweden.

4.3.10 Land Readjustment Scheme

This scheme provides for the compulsory acquisition of land needed by the public authority for development, and the compensation given is in the form of equivalent plots of land in the same area. The main objective of such a scheme is to provide a better layout of a specific area. As compared with expropriation, this scheme has the advantage of minimizing the liability of compensation and time delay on the part of the local authority while giving increased benefits to the community. This instrument has been used extensively in Japan and South Korea. In Nagoya City (Japan), 40 percent of redevelopment is reported to be carried out by this method (United Nations, "Planning for Urban and Regional Development in Asia or Far East," 1971). Hongkong and India have also attained remarkable success using this instrument.

4.3.11 Expropriation

To ensure that physical or land use plans can be properly implemented, the public authority must have effective expropriation powers. Local authorities generally have the power of expropriation for land needed for public purposes.
Expropriation powers should also be available in case land is required for private construction in accordance with the plan. The local authorities can then grant user rights or sell the land for private construction. In some countries there is a practice whereby land is expropriated by a public authority on behalf of a third party without the authority actually acquiring the land itself.

From the point of view of a public authority the advantages of land expropriation are evident. The government can control the development of the city in accordance with the guidelines that would appear to be in the best interest of society. By using this instrument, it is also possible to influence the supply of land and price level.

The success of using this instrument partly depends on how legislation on this instrument is framed. In certain cases, expropriation could lead to lengthy and acrimonious legal proceedings before the title is transferred to the authority.

4.3.12 Land Division Measures to Support Plan Implementation

Another basic condition for realizing urban land policy is the existence of an organization dealing with survey matters. In order to fulfill the tasks of land division of all sorts there must be a competent staff of well-trained technical people with the capacity to solve complicated problems. These consist not
only of concrete technical solutions on land but also on the human level to resolve questions between different interests as to the extent, value and location of the land.

Most of the developed countries for many years have had highly well-trained chartered surveyors working on different administrative levels and with good knowledge of the relevant legislation and its application.

It is a condition sine qua non to have a special organization in this respect but one should be aware of the risk of over-organization of the administration.

4.3.13 Proper Valuation of Urban Land

According to the mentioned goals of urban land policy, land prices should not increase unreasonably and no landowner should suffer any real losses because of urban development. Furthermore, the prices of different land areas should be reasonable in relation to each other. To ensure these, a competent valuation of urban land is needed. In practice, this means the existence of the following: (1) a sufficient number of competent professional valuers within the framework of an effective organization; (2) a suitable system for the education of such professional valuers; and (3) adequate provision for research on real estate.
If the above mentioned conditions exist, then this instrument can help avoid land speculation caused by lack of insight into land values. It can also promote the attainment of other goals formulated for urban land policy.

4.3.14 Land Bank

For many years, the idea of creating land banks has been accepted by public authorities as well as by larger private housing organizations and companies as part of urban land policy. The rapid growth in demand for owner-occupied housing since the 1950s contributed greatly to this development. The purpose of the creation of land banks is to ensure that there is a supply of suitable land available, particularly for housing and industry, capable of being developed usually within a five year period. The sites identified must therefore be free, or easily freed from planning, physical and ownership restrictions, and be in areas attractive to developers, homebuyers and industrialists. Land banks can be assembled by public authorities and by private bodies, in accordance with approved planning policy for general development. Land can be assembled by negotiation where possible, but with compulsory purchase powers for public bodies.

Land banking can be an essential tool for long-term planning, and can facilitate speedy implementation of development plans because it ensures adequate supply of suitable
land which can be developed within a five year period. It can also be useful in effectively coordinating and programming the investment and development strategies of private and public agencies in the land/building market.

This instrument may not achieve its stated objectives if builders are allowed to concentrate their development on prime sites within the land bank, leaving problem sites or less attractive sites undeveloped, often causing these areas to become derelict and eventually leading to a waste of infrastructure resources. Because of this, local authorities have been forced to introduce negative policies as well as extra incentives to persuade developers to build on less favorable land.

4.3.15 Land Price Conditions for Housing Loans

This is an instrument which can help keep land prices at a reasonable level by examining land prices in connection with an application for housing loans.

The application can be rejected by the housing bodies if the land price exceeds a reasonable level. The applications very often are handled by regional housing boards, which are working within a number of different regions with varying land ownership and price conditions. Therefore, the bases for decision can vary
somewhat when establishing what may be judged as a "reasonable" price for land.

This instrument can really influence land prices and housing costs if the loans are favorable and have a low rate of interest. This instrument is also easy to administer. There is a risk, however, of creating two separate land markets, two separate land markets, one, a free market and the other, a controlled market. Moreover, landowners and developers can be tempted to make fake agreements in order to qualify for housing loans.

4.2.16 Land Acquisition Loans or Subsidies to Local Authorities

Loans provided by the state and intended for municipal land acquisition could be an important instrument in the context of an active land policy. Such loans can give local authorities a better possibility to purchase additional land on the real estate market in such quantities that private speculation, primarily on the part of private construction firms, can be diminished.

Another type of loan provided by the state are loans with favorable terms which make it possible for local authorities to finance the leasing of municipal owned land instead of selling it. In this way, it is possible to influence and even to stop
the land prices from rising and to give the municipality an opportunity to benefit to a certain extent from the increased value of the land.

Grants or subsidies paid to the municipalities by the state have shown to be necessary for the implementation of urban renewal plans in a large number of countries. The influence of such measures on prices on the real estate market can of course be argued as subsidies often have non-desirable effects in the long-run.

This instrument can provide local authorities access to land at a low price, although there is a certain risk of creating two land markets, the subsidized and non-subsidized, which in itself can cause speculation.

4.3.17 Collection of Servicing or Betterment Charges

In the building or planning acts or in other laws in many countries, the landowner is obliged to pay charges for the provision of streets, water and sewerage services. These charges can be levied as soon as servicing is finished, whether or not the land is used.

By using this instrument, the municipality can recover its expenses, and the landowner will be induced either to develop the land or sell it.
4.3.18 Annual Site Value Tax

Annual site value tax is levied annually on the potential use value of a piece of land. This instrument is especially used for the taxation of land, whereas the potential use of the land can be laid down in land use or zoning plans. This instrument has the objective of bringing money to the authorities whereas the height of the tax rates may influence the market and the development of land.

By imposing tax on unused land, the public authorities may be able to induce owners to develop or sell the land. To be able to use this instrument successfully, it is important to create an effective organization with competent staff.

4.3.19 Tax on Commercial Sales

This is a special tax levied only on commercial sales. Commercial sales in this context are sales made by persons professionally selling and buying real estate as well as sales by the landowner himself, which by legal directions are classified as commercial sales\(^16\). This instrument can be used to avoid land speculation.

4.3.20 Tax on the Increment in Land Value

This tax is levied on the increment of the value of a piece of land, annually or incidently. This increment can be caused by
inflation or by changes in the land market or improvement made on the land by the landowner or the servicing of the land by public bodies.

This instrument allows public bodies to recoup investments made on the land.

4.3.21 Tax Exemption

This implies that exemption from certain taxes imposed on the selling of land is granted when the purchaser is a public authority. It can be used as a means to induce the landowner to sell his land to a public buyer. The effect of the instrument can be strengthened by special regulations of taxes on land sales as well as by higher capital gains tax, if the buyer is not a public authority.

By using this instrument, public authorities can acquire land in competition with private buyers and at a reasonable price. On the other hand, this can create injustice and can cause revenue losses.

4.3.22 Land Transfer Duty and Land Transfer Tax

These are duties and/or taxes paid by the buyer of real estate in connection with an official registration. This requires that the new owner pays land transfer tax/duty before
he is officially recognized, thus, giving a certain stability of information in the land market.

The rate of the land transfer tax varies from country to country. In Jordan it amounts to 1 percent of the sale price of land; in France, 1.25 percent; Germany, 5 percent; and Spain, 7.4 percent\textsuperscript{17}.

4.3.23 Income Taxes On Land

This instrument refers to special taxes on the income derived from the land. The tax can be levied annually on the real or potential earnings of the owner has from the land, or incidently in relation to actual sales.

In South Korea, the net profit accruing from the increase in land values are taxed at 50 percent to restrain land speculation\textsuperscript{18}.

This instrument, when levied annually, can be an effective instrument to bring idle land to development. However, to use this properly, an effective administration and a competent staff are needed.

4.3.24 Tax on Vacant Land

The main purpose of this instrument is to bring land into productive use to meet the needs of a growing urban population.
and economy. Ideally, the tax would motivate landowners either to develop their sites or to sell the property to interested private or public concerns willing to undertake development.

A number of countries have used this instrument. In China (Taiwan), vacant land which is not developed within a prescribed period is subjected to a tax ranging from three to ten times the land value tax, which is the standard real property tax.

In Chile, municipalities levy a tax based on the assessed value of all vacant land in urban areas. This rate begins at 3 percent and is increased annually to a maximum of 6 percent. Syria also has adopted a progressive tax that increases from 1 percent to 5 percent of assessed value.¹⁹

4.3.25 Official Building Appeal on Unbuilt Lots

A building or development appeal means that the competent authority gives the landowner an "order" to develop vacant plots within a certain period (or sell/rent them for development within the same time). If this order is not complied with, then the public authority has the right to acquire the unused or inadequately used plots of land. This is a necessary means of ensuring that privately-owned land is put to planned use.

However, a municipality must also be prepared to purchase plots compulsorily or voluntarily. In other words, decisions
must be carried through to the end or else the instrument loses its credibility.

The use of this instrument can secure the realization of a plan in the desired way and time.

4.3.26 Physical Development Department

Some countries have adopted regulations designed to facilitate physical development schemes through public assistance. The main idea behind this instrument is that cooperation between the private and the public sectors may remove difficulties associated with the raising of capital assemblage and improvement of land use patterns in view of the multiple complexities of the municipality's functions, its financial and manpower limitations. In some cases, it is necessary to establish an autonomous metropolitan authority at the local government level in order to carry out the execution of physical development projects within the framework of the master plan.

In most developing countries such a department runs parallel with the municipal corporation whose functions are then generally restricted to the maintenance of civil amenities, public utilities and general municipal affairs. The role of the Physical Development Department is extended to land acquisition, land development, provision of urban infrastructure and
redistribution of developed land in the private sector through sale, auction or allotment. This department may undertake in collaboration with other public agencies and private entrepreneurs, the construction of housing projects, community buildings, office/commercial complexes, educational and recreational projects or joint venture basis in order to stimulate construction activities in an orderly manner.

4.3.27 Development Prohibitions or Restrictions

Prohibitions and/or restrictions are to be found in most building or planning acts. They can either be final, to steer development in the desired direction, or temporary to give the authorities more time to consider the best possible plan.

It is in the interest of the community, especially one in expansion, to have access to means which make it possible to prohibit or restrict development activities. It can hardly be to its interest to accord an absolute right to any private landowner to use his land for building or for other purposes without any restrictions at all. If the landowner is deprived of existing building rights he ought, at least temporarily, to be compensated.

This instrument provides the community or public authority the possibility to accomplish its land policy, especially its
land use policy. It can also influence land prices in the desired direction. It can, however, hinder private initiatives which may be considered desirable for other reasons.

4.3.28 Municipalization of Urban Land

This is a right given to a municipality to take some or all land held by individuals or private groups of different kinds. The municipalization of urban land could be realized in the same way as in nationalization. It seems obvious that municipalization is a more commendable way than nationalization from the development point of view: the municipality is considered to have a better knowledge of the needs and wishes of the inhabitants concerned.

The municipalization of urban land allows the municipality total control on urban development, and prevents speculation and high prices on urban land. There is, however, a possible risk of hindering private initiatives.

4.3.29 Nationalization of Urban Land

This is a right held by the national government to take some or all of the land held by individuals or private groups of different kinds. The nationalization of urban land could be realized through confiscation, depending on the legal conditions prevailing in the country in question.
When ownership is transferred to, and retained by the state, the government can exercise total control on urban development and prevent speculation and high prices on urban land. The downside to this approach is that the transfer of ownership to the state can cause undesirable delay in urban development through a bureaucracy indifferent to municipal needs and wishes. Similar to the municipalization approach, there can be a risk that private initiative, which may be considered desirable for other reasons, is being hindered.

4.4 SUMMARY

This chapter presents and describes 29 instruments used in several countries, individually or in combination, to address problems associated with urban land and physical expansion. These instruments range from public involvement to incentives and indirect policies. Because of the diversified nature of problems between cities, the decision to apply these instruments in Saudi Arabia should be made in relation to the country’s legal, economic, political structure and pattern of development.
CHAPTER FIVE
ACCELERATION THE
URBAN INFILL PROCESS
5.1 INTRODUCTION

The fast tempo of urbanization in the Kingdom was associated with the growth of urban blocs, or pockets of built-up areas amidst vast vacant land, found in large urban centers in the country. Undoubtedly, the continuation of such a trend and the attached increasing social overhead costs have been deemed by the government as depletion and waste of resources.

For the purpose of laying down controls for the proper guidance and management of prospective urban development that would ensure efficiency in the utilization of resources, rationalization of public expenditures and the reduction of pressure on the budgets of municipalities, urban boundaries have been defined. An urban boundary represents appropriate limits and an optimal spatial framework for the accommodation of population and support activities in cities over the next two decades, and the phasing of development in conjunction with the Five Year Development Plan.

Studies conducted by the MOMRA on urban boundaries revealed that subdivided areas of lands within the cities' urban fabric remain underutilized, many of which are either serviced or in
proximity to infrastructure. The study which determined the capacity of subdivided land to accommodate projected increases of population and related activities up to 1995 would help in working out sound land use development policies whereby present needs are reconciled with the future, and efficient land use and conservation of the environment can be realized.

This chapter consists of two main parts. The first part will discuss the delineation of urban boundaries of cities and the prioritization of physical development to accelerate the process of utilizing vacant lands within existing boundaries to enhance infill. The second part will define the capacity of subdivided vacant lands within urban areas to meet housing requirements for the projected population increases up to 1995, without the need to search for new lands outside the urban boundary. This part will cover 29 cities which individually are estimated to have a population of more than 30,000 in 1987, and as a group accounts for approximately 93.4 percent of the total urban population. The atlas of the Saudi cities produced by the urban boundary study will serve as the basis for this applied part.

5.2 URBAN BOUNDARY

Probably one of the most direct and simplest approach to control growth is through the identification of a geographic area to limit development. This is usually based upon the needs
of the area for a specified period of time and the resource capacity to service the area. This technique is termed an "urban boundary" or "urban service area." The urban boundary is meant to set future limits appropriate to accommodate population and urban support activities in anticipation of future growth and available resources during a specified time frame. In Saudi Arabia, the urban boundary technique was selected due to its comprehensiveness and simplicity. The British experience with green belts also falls under this category.

5.2.1 Objectives of Delineating Urban Boundary

The objectives of delineating urban boundaries are not restricted to remedy the short-run negative effects of rapid urbanization in the Kingdom over the past two decades; but they also include long-run rationalization and direct spatial development. These objectives are as follows:

1. Control horizontal growth of cities through delineating growth phasing boundaries. It is expected, that this would encourage further the development of subdivided lands within cities rather than create horizontal sprawl, thus making the urban fabric more compact through infilling activities and increasing population density.

2. Ban development in natural areas, such as wadi and forest areas to avoid environmental degradation.
3. Alleviate pressures on utility infrastructures by controlling haphazard urban developments.

4. Facilitate the tasks of public authorities in performing their duties in connection with security and safety emergencies which could be satisfactorily achieved through restraining urban physical sprawl.

5. Facilitate coordination among concerned public authorities and ensure efficient provision of public services.

6. Maintain agricultural areas adjacent to cities as well as cultural areas of special significance.

7. Relieve pressures on utility infrastructure maintenance costs so as to improve the financial capability of municipalities.

8. Restrain speculation in land values.

The processes involved in the delineation of urban boundaries were as follows:

1) Administrative: In view of the gigantic task of covering 100 towns and limited technical know how available in the country particularly at the municipal level, the first
question was how to go about the whole exercise in a short period of two years. The possible options were:

a) use of a number of consultants assigned on a regional basis; b) use of a central pool of experts in the DMTP in undertaking the exercise; and c) use of limited technical staff in the municipalities working under the direction and supervision of DMTP experts.

In the first option, the engagement of consultants would have taken a long time due to procedural problems in addition to huge financial outlay and administrative requirement to monitor the work of consultants. In the second option, the small pool of experts would have to go from town to town and be responsible for all stages of work. This would mean much longer time and considerable logistical problems. In the third and last alternative, the work would be done by the municipal staff which in certain cases cannot be relied upon to be present all the time. This meant much stronger support from the DMTP at every stage of the work. This also meant the simultaneous start of work in all the municipalities, hence less time and financial resources required. In this option, however, some compromise on quality was inevitable.

Considering the pros and cons of the three options, the third one was selected. Once the administrative approach was chosen, a manual was prepared detailing the process into
identifiable stages. A small team of professionals was assigned to explain to the municipal staff the use of the manual and provide continuous guidance throughout the exercise. In very few cases, municipalities engaged consultants who were required to follow procedures.

2. **Technical**: The main activities carried out are briefly discussed below:

   a) **Updating of Base Maps**: The first and foremost problem was with respect to suitable mapping. In almost every situation the available maps were old and completely outdated due to unprecedented urban development witnessed in the decade before the urban boundary exercise. A proper updating through aerial photography of 100 towns spread around the country would have taken years at considerable expense. To shorten the process, municipal surveyors were directed to record additions and major changes on the old maps including locations of approved subdivisions both developed or undeveloped. The end result was updated maps which may not be very accurate but good enough to carry out surveys and delineate urban boundaries.

   b) **Data Collection**: A detailed plot by plot land use survey was carried out to obtain accurate ground picture which was important for the exercise. The rest
of the data, collected from concerned ministries and organizations, included health and education facilities, water supply, sewerage, drainage, electricity, telephones, recreational and cultural facilities, mosques, transportation network and other features special to a particular town.

All these data were presented in the form of tables and maps.

c) Analysis: Main areas covered in analysis were as follows:

i) Population Estimates: In the absence of any recent data and only one national census undertaken in 1974, estimation of the current population was the first task. A number of possible methods were examined taking into consideration the time constraint. The selected methods were based upon primary school enrolment, land use survey data, electric connections and others. The results obtained from various methods were compared and the suitable figures were carried out by assuming growth rates agreed through best guesses but without any functional analysis of the economic potential of the towns.

ii) Land Requirement: Using space standards and the projected population as a basis for the calculation,
iii) Infrastructure: This involved the analysis of each utility and road network with respect to their service areas and possibility of extension. This was carried out with the active participation of concerned department/organization.

iv) Public Facilities: This involved quick assessment of existing facilities with numbers and sizes of plots to be provided in the future. These facilities include health, education, religious, government and others.

v) Physical Structure: This included the determination of growth trends of towns for possible future growth scenarios, taking into consideration the existing built-up area, committed projects/sites and future land requirements.

d) Delineation of Boundaries: All these analyses led to the delineation of physical boundaries for the year 2005. In big cities subdivided lands, whether developed or undeveloped, were much more than required for the planning period. So the delineation was not based only on future requirements of land but the
judicious use of subdivided lands became a crucial factor. The end result has been a liberal extension of the boundaries. However, in smaller towns due to the non-existence of subdivisions, the boundaries have been tighter. An effort was made to delineate boundaries along identifiable natural or man-made landmarks but it was not possible everywhere.

Based on this exercise\textsuperscript{24}, three boundaries have been identified relating to specific time frames: phase I, for the year 1995; phase II, for the period 1995-2005; and phase III, beyond 2005. Within the boundary itself, phase I includes built-up and partially built-up areas to meet the requirements of population growth and the capacities of government departments/agencies to service these areas with utilities and public facilities.

Phase II relates to areas lying between boundaries. Outside the urban boundary, urban protection zones have been designated to serve as reserve lands for future expansion beyond the year 2005.

Areas beyond the urban protection zones are treated as agricultural areas where only 10 percent is allowed to be built up. This means that prospective builders beyond urban protection zones will be forced to go to other settlements for better use
of land and availability of utilities and services. Therefore, it can be seen that the urban boundaries scheme is quite comprehensive covering the entire national space and directing growth of settlements.

5.2.2 Planning Process

Municipalities were fully involved in all stages of development of urban boundaries. The basic work was done by municipalities, and the mayors were partners with DMTP officials in directing and supervising the work. Intensive discussions were held and written agreements reached with the departments/government agencies responsible for the provision of services and utilities with respect to areas included within the two boundaries. Participation of local and regional emirates were also actively sought and their views incorporated in the exercise.

The results of the study were then presented to the High Planning Committees of each emirate (region) which are headed by the Amir (governor) with Deputy Minister for Town Planning and cities Mayors or Director Generals of MOMRA as members. On their recommendation, the MOMRA submitted them to the Council of Ministers for approval.

Per approval order of the Council of Ministers any changes/modifications to the urban boundaries can only be
affected with the Council's approval. This has taken care of undue pressures on local and national authorities. An integral part of the approval of urban boundaries is a set of general regulations. MOMRA has also been directed to study areas in phase III within a period of three years from the date of approval order and propose control measures for these areas.

5.2.3 Implementation

It is too early to make an assessment of the implementation of the urban boundaries. However, there are indications that the system is working well and there are positive signs toward the realization of the objective of managing the growth of Saudi cities.

The municipalities are the implementing agencies which are directing growth according to the approved boundaries and regulations. In case of any problem, the matter is referred to MOMRA where the Deputy Ministry of Town Planning examines the matter from the technical point of view and takes appropriate measures. As can be expected, there are problems being encountered which are then feedback into the system for future improvement. Some of the problems being faced are as follows:

1. As mentioned earlier an effort was made to make boundaries identifiable on the ground but it was not possible in
every situation. This has created problems for landowners as well as municipalities with respect to demarcation. It is being rectified by fixing boundary pillars and some municipalities have already initiated the action.

2. There have been some questions regarding the arbitrariness of the boundaries particularly from those landowners whose lands were either fully or partially excluded but are just on the boundary. This problem is related to the justification of boundary alignment and the land ownership pattern. If the land ownership information was available at the time of delineation of the boundaries, the extent of the problem may could possibly have been reduced. On the other hand, the absence of land ownership information probably reduced biases and pressures for the inclusion or exclusion of certain areas.

3. In some small towns, it is already being felt that boundaries are too tight, resulting in very limited space for growth. This can be attributed to lack of functional and economic base analyses, studies which were not undertaken due to time limitation and lack of resources. However, such a problem can be solved through the revision of boundaries for which a procedure has been laid down. According to this procedure, a Technical Committee based in MOMRA with representatives from various ministries will
study the problems and make recommendations to the Council of Ministers through the Minister of MOMRA.

4. The technical and institutional capability of the majority of municipalities is very weak thereby creating difficulties with respect to the interpretation and implementation of the urban boundaries.

5.2.4 Conclusions

The simultaneous delineation of urban boundaries of 100 cities is a comprehensive attempt to control urban sprawl. There are certain weaknesses in the methodology followed but in view of the limited time and technical resources, the results are quite acceptable. The system is now under implementation and the problems identified will provide a useful feedback into the revision and updating of the boundaries. Although local authorities were actively involved in the process it is hoped that there will be improved public participation in future work to increase the acceptability and effectiveness of the system. The proposed system is integrated with regulations for areas beyond urban protection zones resulting in a framework for the total national space which has been possible through the centralized system of government and allocation of resources. Now that a basis is there in the form of urban boundaries, the provision of utilities, services and interest free loans can be
used as effective tools for bringing sense to the national urban landscape.

As the cities will be moving toward more dense and compact settlements, the local authorities will have to be prepared with a responsive planning framework so that development within the urban boundaries could be guided properly. This will mean better institutional capabilities and planning process which could result in more aesthetic and functional cities blending modernity with the past, consistent with Islamic principles.

In addition to the objective of controlling urban growth, the system has already made significant contribution in the following areas:

1. The intensive and extensive involvement of national, regional and local authorities, from the Council of Ministers to the mayor of a small municipality, has resulted in the creation of tremendous planning awareness in the country. This will be extremely useful in the preparation of more meaningful plans and their effective implementation in the future. Planning has, therefore, successfully entered the decision making process at all levels of government.
2. The municipal staff has gained very useful training by doing and being involved in all stages of the exercise. This will be useful in any planning work, implementation of urban boundaries and even day to day activities of the municipalities.

3. A wealth of data were collected particularly through a plot by plot land use survey. A beginning has been made to develop an information system at the municipal level. DMTP is training and assisting the municipal staff in the computerized land information system by using the survey data. This can be built upon and expanded into a more comprehensive system later on. Around 50 percent of the municipalities have already installed the system and more than 10 percent are fully utilizing it.

5.3 EXTENT OF UNDERUTILIZATION OF LAND IN MAJOR CITIES

5.3.1 The Importance of Optimal Use of Vacant Lands in High and Medium Density Zones

The average cost of providing the required utility infrastructure such as water, electricity, telephone, sanitary drainage and roads for a typical lot of vacant land amounts to approximately SR 300,000 (equivalent to US$ 80,000). The lifespan of the utility network is limited to 20 years. Therefore, providing vacant sites with infrastructure which are in close proximity to underutilized infrastructure represents a waste in the use of public investment. Within this context,
optimal utilization of utility network and rationalization of public expenditure would require adoption of strict regulations to foster the accelerated use of serviced vacant land to provide necessary housing to accommodate the anticipated increase in population within the first phase development phase. This period corresponds with the time frame adopted for the first phase of the urban growth boundaries of the Saudi cities.

The field studies conducted to delineate future phases of urban growth boundaries include the number and location of built-up and vacant lots within the physical structure of each city. The extent of physical development within different zones of each city has been categorized to three main groups:

1. High Density Zones, where rate of development in approved subdivisions exceeds 70 percent, and population density is relatively higher than the city average. Most facilities and utilities are available within these zones which are usually close to city centers where mixed land use is prevalent.

2. Medium Density Zones, where rate of development in approved subdivisions ranges from 30 to 70 percent. These zones are concentrated in newly expanded areas where government in the past years had given major considerations to provide
utility infrastructure. These zones are located mostly on the outskirts of the urban centers.

3. Low Density Zones, where the rate of development in approved subdivisions is below 30 percent. Usually, these subdivisions are remote from city centers and are concentrated along roads and at the extreme fringes of cities. The distance between the low density zones and the Central Business Districts (CBD) depends upon availability and ease of transportation. The cost of providing infrastructure within these zones is considerably higher than providing the same for underutilized land in high and medium density zones.

The main question raised by this study is to what extent the demand for housing can be met to accommodate the anticipated increase in population during the first development phase through the use of vacant land with adequate infrastructure located in high and medium density zones. Pursuing this will definitely improve the efficiency in the use of resources and help realize greater compactness of the urban physical fabric.

To do this, the study will first project the increase in the number of households in selected cities (all those having a population of 30,000 or more in 1987), then compare this projected increase in households with the additional housing
those cities can provide through the use of vacant land in high and medium density zones. Such comparison can lay the ground for an assessment of the extent of the need for additional land plots in low density zones within each individual city.

5.3.2 Projected Increase in Housing Demand for the Period, 1987-1995

The projected increase in the number of households is used as basis for the future demand for housing units in 1995. In projecting the increase in the number of households, the following data have been employed:

1. Population estimates and average household size for each city based on the findings of the urban boundaries studies (1987).

2. Average annual population growth rate of 4.6 percent. This rate has been used by the United Nations in estimating the projected increase of the Kingdom's urban population for the period 1990-1995. This average reflects not only the natural growth of urban population but also the continued rural-urban migration especially toward regional centers. The rate of migration, however, is slower than the past period as rural areas are expected to have better services and profitable job opportunities which help those areas retain their population.
3. Assumed constant household size.

The projected increase in the number of households in all cities under investigation during the period 1987-1990 are presented in Table 5.1. Total increase in households is estimated at 472,467 households. The share of the five major cities of Riyadh, Makkah, Madinah, Jeddah and Dammam amounts to 322,377 households representing 68 percent of the total projected increase in households.

5.3.3 Estimation of Potential Increase in Housing Supply

The data available from the Urban Boundaries Atlas (Existing conditions) have been employed to estimate potential housing supply in the different density zones. The data include the number of vacant plots in the different density zones in each city and the average number of dwelling units that can be built on each plot. The latter is assumed constant until 1995. Table 5.2 includes these estimates.

Major conclusions relative to the potential of providing dwelling units in the high and medium density zones can be summarized as follows:

1. Total dwelling units that can be built on vacant land sites in high and medium density zones amount to 518,487 units,
constituting 27 percent of the total dwelling units which could be built if all vacant land sites are developed.

2. Vacant plots in high and medium density zones in the five major cities can provide adequate sites for a total of 378,264 dwelling units, representing 73 percent of the total dwelling units possible to be erected in the high and medium density zones in all cities under investigation. This emphasizes the direct relationship between city size and its potential absorptive capacity.

3. Large potential to provide dwelling units in high and medium density zones exist in Makkah and Madina despite the relatively small size of these cities. This can be primarily attributed to the high average number of dwelling units that can be developed on a typical plot in both cities, which is in the range of four dwelling units per plot. This figure is found to be 1.6 dwelling units per plot in the city of Riyadh.

4. The possibility of building new dwelling units on vacant land in high and medium density zones in the medium-size cities situated in agricultural areas is limited mainly due to high population density and

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>1417</td>
<td>2026</td>
<td>609</td>
<td>6.3</td>
<td>96,666</td>
</tr>
<tr>
<td>Makkah</td>
<td>700</td>
<td>1001</td>
<td>301</td>
<td>6.0</td>
<td>50,166</td>
</tr>
<tr>
<td>Madina</td>
<td>500</td>
<td>715</td>
<td>315</td>
<td>5.0</td>
<td>43,000</td>
</tr>
<tr>
<td>Jeddah</td>
<td>1312</td>
<td>1876</td>
<td>564</td>
<td>5.5</td>
<td>102,545</td>
</tr>
<tr>
<td>Dammam</td>
<td>418.5</td>
<td>598.5</td>
<td>180</td>
<td>6.0</td>
<td>30,000</td>
</tr>
<tr>
<td>Taif</td>
<td>283</td>
<td>404</td>
<td>121</td>
<td>5.0</td>
<td>24,300</td>
</tr>
<tr>
<td>Al-Ahssa</td>
<td>251</td>
<td>359</td>
<td>108</td>
<td>8.8</td>
<td>12,273</td>
</tr>
<tr>
<td>Qatif</td>
<td>267.5</td>
<td>382.5</td>
<td>115</td>
<td>6.0</td>
<td>19,167</td>
</tr>
<tr>
<td>Buraydah</td>
<td>154</td>
<td>220</td>
<td>66</td>
<td>8.0</td>
<td>8,250</td>
</tr>
<tr>
<td>Tabuk</td>
<td>150</td>
<td>214</td>
<td>64</td>
<td>6.8</td>
<td>9,412</td>
</tr>
<tr>
<td>AlKhamis</td>
<td>164</td>
<td>234</td>
<td>70</td>
<td>5.0</td>
<td>14,000</td>
</tr>
<tr>
<td>Hail</td>
<td>101</td>
<td>144</td>
<td>43</td>
<td>7.5</td>
<td>5,733</td>
</tr>
<tr>
<td>Kharj</td>
<td>97</td>
<td>139</td>
<td>42</td>
<td>7.0</td>
<td>6,000</td>
</tr>
<tr>
<td>Jazan</td>
<td>79</td>
<td>112</td>
<td>33</td>
<td>5.5</td>
<td>6,000</td>
</tr>
<tr>
<td>Arar</td>
<td>65</td>
<td>93</td>
<td>28</td>
<td>5.0</td>
<td>5,600</td>
</tr>
<tr>
<td>Abha</td>
<td>60</td>
<td>86</td>
<td>26</td>
<td>7.0</td>
<td>3,714</td>
</tr>
<tr>
<td>Skakah</td>
<td>55</td>
<td>79</td>
<td>24</td>
<td>7.0</td>
<td>3,428</td>
</tr>
<tr>
<td>Najran</td>
<td>53</td>
<td>76</td>
<td>23</td>
<td>7.0</td>
<td>3,285</td>
</tr>
<tr>
<td>Yanbu</td>
<td>52</td>
<td>74</td>
<td>22</td>
<td>5.0</td>
<td>4,400</td>
</tr>
<tr>
<td>AlHafir</td>
<td>52</td>
<td>74</td>
<td>22</td>
<td>6.0</td>
<td>3,666</td>
</tr>
<tr>
<td>AlBaha</td>
<td>50</td>
<td>71</td>
<td>21</td>
<td>8.5</td>
<td>2,470</td>
</tr>
<tr>
<td>Unayzah</td>
<td>50</td>
<td>71</td>
<td>21</td>
<td>6.0</td>
<td>3,500</td>
</tr>
<tr>
<td>Qurrayah</td>
<td>40</td>
<td>57</td>
<td>17</td>
<td>7.0</td>
<td>3,428</td>
</tr>
<tr>
<td>Baljurahsi</td>
<td>40</td>
<td>57</td>
<td>17</td>
<td>8.0</td>
<td>3,125</td>
</tr>
<tr>
<td>Sabiyah</td>
<td>40</td>
<td>57</td>
<td>17</td>
<td>7.0</td>
<td>3,428</td>
</tr>
<tr>
<td>Aldawasir</td>
<td>35</td>
<td>50</td>
<td>15</td>
<td>7.0</td>
<td>3,125</td>
</tr>
<tr>
<td>Dawadmi</td>
<td>35</td>
<td>46</td>
<td>14</td>
<td>6.5</td>
<td>2,154</td>
</tr>
<tr>
<td>Ras Tanura</td>
<td>30</td>
<td>43</td>
<td>13</td>
<td>7.0</td>
<td>1,857</td>
</tr>
<tr>
<td>Arras</td>
<td>30</td>
<td>43</td>
<td>13</td>
<td>7.0</td>
<td>1,857</td>
</tr>
</tbody>
</table>

Total: 6,578 \( \times \) 9,402 \( \times \) 2,824 \( \times \) 472,467

compactness of the physical fabric. This is found to be true of the cities of Sabiyah, Biljurshi, Jazan, Unayzah, Aloewasir, Arar and Hail. All these cities are located in areas where agriculture is considered the primary economic activity.

The major conclusions that can be derived with respect to the possibility of providing dwelling units in low density zones are summarized as follows:

1. Total number of dwelling units that can be built on vacant lots in low density zones in all cities under investigation (29 cities) amounts to 1.1 million. These dwelling units are capable of absorbing a total of 6.6 million inhabitants.

2. A large concentration of vacant plots exist in low density zones of Riyadh and Jeddah. This reflects the continued preference of individuals to obtain land grants in these particular cities rather than elsewhere. Development of such plots would provide 676,000 additional dwelling units which represent 61 percent of total dwelling units that can be realized in vacant land in low density zones if these subject cities are fully utilized.
<table>
<thead>
<tr>
<th>City</th>
<th>Dwelling Units Within the Urban Structure and its Conditions</th>
<th>Distribution of Vacant Land in Different Density Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Built</td>
</tr>
<tr>
<td>Riyadh</td>
<td>313,950</td>
<td>105,150</td>
</tr>
<tr>
<td>Makkah</td>
<td>135,400</td>
<td>111,844</td>
</tr>
<tr>
<td>Madina</td>
<td>88,359</td>
<td>30,201</td>
</tr>
<tr>
<td>Jeddah</td>
<td>190,090</td>
<td>54,397</td>
</tr>
<tr>
<td>Dammam</td>
<td>135,000</td>
<td>65,00</td>
</tr>
<tr>
<td>Taif</td>
<td>32,180</td>
<td>26,634</td>
</tr>
<tr>
<td>Al-Ahsa</td>
<td>58,120</td>
<td>34,720</td>
</tr>
<tr>
<td>Qatif</td>
<td>51,102</td>
<td>23,430</td>
</tr>
<tr>
<td>Buraydah</td>
<td>34,493</td>
<td>13,526</td>
</tr>
<tr>
<td>Tabuk</td>
<td>21,834</td>
<td>11,503</td>
</tr>
<tr>
<td>AlKhamis</td>
<td>28,920</td>
<td>14,629</td>
</tr>
<tr>
<td>Hail</td>
<td>29,600</td>
<td>19,250</td>
</tr>
<tr>
<td>Kharj</td>
<td>24,918</td>
<td>13,857</td>
</tr>
<tr>
<td>Jazan</td>
<td>8,425</td>
<td>8,425</td>
</tr>
<tr>
<td>Arar</td>
<td>10,930</td>
<td>7,370</td>
</tr>
<tr>
<td>Abha</td>
<td>15,272</td>
<td>2,811</td>
</tr>
<tr>
<td>Skakah</td>
<td>11,806</td>
<td>6,110</td>
</tr>
<tr>
<td>Najran</td>
<td>7,665</td>
<td>2,193</td>
</tr>
<tr>
<td>Yanbu</td>
<td>39,828</td>
<td>8,546</td>
</tr>
<tr>
<td>Al-HAfr</td>
<td>42,250</td>
<td>11,200</td>
</tr>
<tr>
<td>Al-Baha</td>
<td>10,222</td>
<td>7,122</td>
</tr>
<tr>
<td>Unayzah</td>
<td>19,948</td>
<td>7,382</td>
</tr>
<tr>
<td>Qurrayah</td>
<td>8,478</td>
<td>4,444</td>
</tr>
<tr>
<td>Baljurashi</td>
<td>5,207</td>
<td>3,321</td>
</tr>
<tr>
<td>Sabiyah</td>
<td>13,430</td>
<td>13,207</td>
</tr>
<tr>
<td>Arras</td>
<td>10,190</td>
<td>4,811</td>
</tr>
<tr>
<td>Al-Dawasir</td>
<td>8,652</td>
<td>6,260</td>
</tr>
<tr>
<td>Dawadmi</td>
<td>10,239</td>
<td>3,847</td>
</tr>
<tr>
<td>Ras-Tanura</td>
<td>3,686</td>
<td>2,687</td>
</tr>
</tbody>
</table>

Total: 1,370,194 623,887 746,307 69,465 87,760 589,082

Derived from: (1) Urban Boundaries Atlas (Existing Condition, 1987).
(2) M. Arhman (1990), p.32.
Table 5.2a: Possibility of Providing Dwelling Units on Vacant Lands Within the Urban Structure, Cities of More than 30,000 Population in 1987.

<table>
<thead>
<tr>
<th>City</th>
<th>Potential Units</th>
<th>Potential Units in Different Density Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>High/Med.</td>
</tr>
<tr>
<td>Riyadh</td>
<td>1.6</td>
<td>33,600</td>
</tr>
<tr>
<td>Makkah</td>
<td>4.0</td>
<td>82,960</td>
</tr>
<tr>
<td>Madina</td>
<td>4.0</td>
<td>58,468</td>
</tr>
<tr>
<td>Jeddah</td>
<td>4.0</td>
<td>197,236</td>
</tr>
<tr>
<td>Dammam</td>
<td>2.0</td>
<td>6,000</td>
</tr>
<tr>
<td>Taif</td>
<td>4.0</td>
<td>21,452</td>
</tr>
<tr>
<td>Al-Ahsa</td>
<td>1.0</td>
<td>6,564</td>
</tr>
<tr>
<td>Qatif</td>
<td>2.0</td>
<td>3,042</td>
</tr>
<tr>
<td>Buraydah</td>
<td>1.5</td>
<td>4,354</td>
</tr>
<tr>
<td>Tabuk</td>
<td>2.0</td>
<td>5,650</td>
</tr>
<tr>
<td>AlKhamis</td>
<td>3.0</td>
<td>19,608</td>
</tr>
<tr>
<td>Hai</td>
<td>3.0</td>
<td>1,800</td>
</tr>
<tr>
<td>Kharj</td>
<td>2.0</td>
<td>9,962</td>
</tr>
<tr>
<td>Jazan</td>
<td>1.6</td>
<td>-</td>
</tr>
<tr>
<td>Arar</td>
<td>2.0</td>
<td>1,164</td>
</tr>
<tr>
<td>Abha</td>
<td>2.0</td>
<td>8,570</td>
</tr>
<tr>
<td>Skakah</td>
<td>2.0</td>
<td>7,846</td>
</tr>
<tr>
<td>Najran</td>
<td>2.0</td>
<td>8,558</td>
</tr>
<tr>
<td>Yanbu</td>
<td>4.0</td>
<td>5,516</td>
</tr>
<tr>
<td>Al-HAfr</td>
<td>2.0</td>
<td>17,500</td>
</tr>
<tr>
<td>Al-Baha</td>
<td>2.0</td>
<td>3,614</td>
</tr>
<tr>
<td>Unayzah</td>
<td>1.8</td>
<td>1,607</td>
</tr>
<tr>
<td>Qurrayah</td>
<td>2.0</td>
<td>3,210</td>
</tr>
<tr>
<td>Baljurashi</td>
<td>1.6</td>
<td>-</td>
</tr>
<tr>
<td>Sabiyah</td>
<td>3.0</td>
<td>-</td>
</tr>
<tr>
<td>Arras</td>
<td>1.5</td>
<td>2,368</td>
</tr>
<tr>
<td>Al-Dawasir</td>
<td>1.5</td>
<td>1,642</td>
</tr>
<tr>
<td>Dawadmi</td>
<td>2.0</td>
<td>5,692</td>
</tr>
<tr>
<td>Ras-Tanura</td>
<td>2.0</td>
<td>504</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>518,487</td>
</tr>
</tbody>
</table>

Derived from: (1) Urban Boundaries Atlas (Existing Condition, 1987)

(2) M. Arhman (1990), p.32.
3. A limited possibility exist for providing dwelling units in low density zones in the cities of Makkah, Taif and Dammam as well as in cities located in agricultural areas such as Skaka, Najran, AlBaha, Sabiyah and Al-Dawasir. This may be attributed to slow expansion of physical development due to topography, compactness of physical fabric and relatively higher density.

4. Ample areas of vacant land exist in low density zones of Yanbu and AlHafr. These areas are sufficient for the construction of 119,612 and 44,600 dwelling units in these two cities, respectively.

5.3.4 Compatibility between Potential Supply and Demand for Housing

Comparing estimates of projected demand for housing with the extent of potential supply of housing if available vacant land sites within cities boundaries are efficiently used can lead to the following conclusions:

1. The possibility to provide new dwelling units in high and medium density zones alone exceeds the projected needs until 1995. Data presented in Tables 5.3 and 5.4 show that a total of 518,484 dwelling units could be constructed in high and medium density zones whereas projected increase in total number of households over the period 1987-1995
amounts to approximately 472,462 households. The main conclusion is that the potential

Table 5.3: Cities with Capacity Exceeding Demand up to 1995, in High and Medium Density Zones.

<table>
<thead>
<tr>
<th>City</th>
<th>Projected Increase in No. of HH, 1990-1995</th>
<th>Potential Units in High and Medium Density Zones</th>
<th>Coverage (in %)</th>
<th>Potential Units in Low Density Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makkah</td>
<td>50,166</td>
<td>82,960</td>
<td>165%</td>
<td>11,264</td>
</tr>
<tr>
<td>Madina</td>
<td>43,000</td>
<td>58,468</td>
<td>136</td>
<td>173,984</td>
</tr>
<tr>
<td>Jeddah</td>
<td>345,536</td>
<td>197,236</td>
<td>192</td>
<td>345,536</td>
</tr>
<tr>
<td>AlKhamis</td>
<td>14,000</td>
<td>19,608</td>
<td>140</td>
<td>232,265</td>
</tr>
<tr>
<td>Abha</td>
<td>3,714</td>
<td>8,570</td>
<td>230</td>
<td>16,352</td>
</tr>
<tr>
<td>Skakah</td>
<td>3,428</td>
<td>7,846</td>
<td>229</td>
<td>3,546</td>
</tr>
<tr>
<td>Najran</td>
<td>3,285</td>
<td>8,558</td>
<td>260</td>
<td>2,386</td>
</tr>
<tr>
<td>Yanbu</td>
<td>4,400</td>
<td>5,516</td>
<td>125</td>
<td>119,612</td>
</tr>
<tr>
<td>AlHafr</td>
<td>3,666</td>
<td>17,500</td>
<td>260</td>
<td>2,386</td>
</tr>
<tr>
<td>AlBaha</td>
<td>2,470</td>
<td>3,614</td>
<td>164</td>
<td>2,586</td>
</tr>
<tr>
<td>Qurrayat</td>
<td>2,428</td>
<td>3,210</td>
<td>132</td>
<td>4,858</td>
</tr>
<tr>
<td>Arras</td>
<td>1,857</td>
<td>2,368</td>
<td>127</td>
<td>5,700</td>
</tr>
<tr>
<td>Dawadmi</td>
<td>2,154</td>
<td>5,692</td>
<td>264</td>
<td>1,400</td>
</tr>
<tr>
<td>AlKharj</td>
<td>6,000</td>
<td>9,962</td>
<td>166</td>
<td>12,160</td>
</tr>
</tbody>
</table>

Total 243,112  431,108  177  767,249

Source: (1) Table 4.1 Data on projected household increases (2) Table 4.2 Data on potential dwelling units in different density zones.
Table 5.4: Cities With Capacity Less Than Demand in High and Medium Density Zones, 1987-1995.

<table>
<thead>
<tr>
<th>City</th>
<th>Projected No. of Households</th>
<th>Potential Units in High and Medium Density Zones</th>
<th>Coverage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riyadh</td>
<td>96,666</td>
<td>23,600</td>
<td>35</td>
</tr>
<tr>
<td>Dammam</td>
<td>30,000</td>
<td>6,000</td>
<td>20</td>
</tr>
<tr>
<td>Taif</td>
<td>24,200</td>
<td>21,452</td>
<td>89</td>
</tr>
<tr>
<td>Al Ahssa</td>
<td>12,273</td>
<td>6,564</td>
<td>53</td>
</tr>
<tr>
<td>Qatif</td>
<td>19,167</td>
<td>3,043</td>
<td>16</td>
</tr>
<tr>
<td>Buraydah</td>
<td>8,250</td>
<td>4,354</td>
<td>53</td>
</tr>
<tr>
<td>Tabuk</td>
<td>9,412</td>
<td>5,650</td>
<td>68</td>
</tr>
<tr>
<td>Hail</td>
<td>9,722</td>
<td>1,800</td>
<td>21</td>
</tr>
<tr>
<td>Jazan</td>
<td>6,000</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Arar</td>
<td>5,600</td>
<td>1,664</td>
<td>21</td>
</tr>
<tr>
<td>Unayzah</td>
<td>3,500</td>
<td>1,607</td>
<td>46</td>
</tr>
<tr>
<td>Baljurashi</td>
<td>2,125</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Sabiyah</td>
<td>2,428</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Al Dawassir</td>
<td>2,143</td>
<td>1,642</td>
<td>77</td>
</tr>
<tr>
<td>Ras Tanurah</td>
<td>1,857</td>
<td>504</td>
<td>27</td>
</tr>
</tbody>
</table>

* Required in low density zones to cover for shortage

Sources: (1) Table 4.1 Data on household increases
(2) Data on potential dwelling units in different density zones.

The supply of housing that can be provided if vacant land within medium and high density areas is fully utilized far exceeds the total needs through 1995. It is found that potential housing supply represents 110 percent of potential demand.
2. Although the aggregate number of vacant land sites and the potential supply of housing in high and medium density zones exceeds housing demand in 29 cities under investigation, some of these cities suffer from shortages. Table 5.3 shows that 14 cities have surplus and their potential to supply housing is estimated to be 177 percent of the projected increase in the total number of households.

There are 15 cities, however, which may experience shortages. As indicated in Table 5.4, the housing potential of these cities is estimated to be only 49 percent of the total projected increase in the total number of households through 1995. The need to utilize vacant land in low density zones for the purpose of alleviating the shortage is quite clear for the cities of Taif and Unayzah, where development of approximately 100 percent and 10 percent of vacant areas in low density zones of these two cities, respectively, will be needed.

3. Vacant land in high and medium density zones in the five major cities can provide for housing based on projected demand until 1995. The cities of Makkah, Medina and Jeddah are expected to have excess supply. On the other hand, a shortage of vacant land in high and medium density areas may exist in Riyadh and Dammam for the same period. As for
vacant land in low density zones, the cities of Riyadh and Dammam have ample vacant land which can be used for providing 464,720 housing units. Areas in low density zones in Riyadh and Dammam that would be needed to overcome shortages in vacant land in high and medium density areas would amount to only 18 percent and 19 percent of the vacant areas in low density zones in these two cities, respectively.

4. Studies of urban boundaries reveal that large number of vacant houses in good condition exist within the high and medium density zones of most cities. These, if taken into account, would further increase the actual absorptive capacity of the high and medium density zones.
CHAPTER SIX

URBAN INFILL PROCESS


The look of the cities in Saudi Arabia after the implementation of Urban Infill.
CHAPTER SIX:

URBAN INFILL PROCESS

6.1 INTRODUCTION

Land is the main element influencing urban development; planning and programming for their optimal use thus becomes a vital instrument for guiding urban growth and providing a healthy and aesthetically pleasing community environment. However, the imbalance of economic structure causes a 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 the absence of adequate investment opportunities in the productive sectors, the investor finds real estate a lucrative business. 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 the investment costs and hence impede economic development projects. The increase in land value may be a result of monopoly in the land markets; where a few people dominate big portions of land and hence dominate the prices. Those few persons may even
dominate the growth of the city itself and consequently put constraint on urban development and the rate of growth.

These repercussions should be forestalled and the present and future boundaries of the city as well as the requirements of the urban infrastructure should be protected against this danger through an urban infill policy that would provide a balanced layout of different uses on sound economic basis.

6.2 OBJECTIVES OF URBAN LAND INFILL

The rapid rise in land prices, the withholding of land for speculative purposes, the scarcity of land that is readily available for construction and the inefficient patterns of urban development are several factors which necessitate laying down a urban land infill policy based on the following objectives:

a) To achieve an optimum 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.

b) To increase the supply of urban land in an orderly manner in accordance with the phased program of development for services and utilities.

c) To curb undue increases in land values and prevent land speculation.
d) To influence development so as to improve patterns of land use and the spatial and sectoral allocation of investment.

e) To create conditions in which the poor and the underprivileged get a fair deal in the matter of housing, and in the enjoyment of the common physical environment.

6.3 URBAN INFILL PROCESS

The process of urban infill involves vacant lands within cities targeted for development during the first phase of development (1987-1995). In coming up with recommendations and designing regulations for the implementation of the urban infill, vacant lands were classified at various levels taking into consideration several factors. These include land ownership and its service extension with respect to infrastructure, land subject to subdivision as well as the nature of the land relative to its potential for urban development, and its location in the approved urban boundary phases.

Figure 6.1 illustrates the urban infill process whereby several stages of land classification were done before land ownership is identified and the type of instrument(s) selected.
Figure 6.1. Urban Infill Process

URBAN INFILL PROCESS

VACANT LAND WITHIN THE CITY

URBAN BOUNDARIES FIRST PHASE

LAND UNSUITABLE FOR URBAN INFILL

LAND SUITABLE FOR URBAN INFILL

LAND RESTRICTED FOR DEVELOPMENT

SUBDIVIDED LANDS

UNSUBDIVIDED LANDS

LAND OWNERSHIP

PUBLIC UTILITIES

DISPUTED LANDS

UNDISPUTED LANDS

SERVED LANDS

UNSERVED LANDS

BETWEEN INDIVIDUAL & GOVERNMENT

BETWEEN INDIVIDUAL & INDIVIDUAL

PRIVATE

MINISTRIES

GOVERNMENT OFFICES

ENTAILED (donated) LANDS

SELECTED OF INSTRUMENTS see FIGURE 6.2

126
6.3.1 **Urban Development**

The first level of classification is in terms of the suitability or potential of the land for urban infill development, which include restricted land for development. Restricted lands are defined here as those lands which cannot be developed during the first phase of development because they are earmarked for use by the military or for other purposes such as schools.

6.3.2 **Subdivision of Land**

The second level of classification is whether the land is subdivided or unsubdivided. Subdivided lands are those subdivided and approved by the municipality; while unsubdivided lands are large areas of vacant lands located within the urban boundary for which no subdivision plans have been prepared. Unsubdivided lands suitable for development are subject to subdivision under the urban infill policy.

6.3.3 **Land Ownership and Public Utilities**

The third level category is in terms of vacant lands which have clear titles or whose ownership has been determined and those under dispute. Undisputed lands are further categorized into three: (a) private, which are owned by one or more individuals; (b) public, which includes land owned by ministries, government agencies, and commissions; and (c)
entailed lands, which are lands donated by the owner for certain purposes.

Disputed lands are those lands whose ownership is not clear, and they are further classified into lands disputed between the government and individuals, and those lands disputed among individuals.

Also considered under this category is the question of whether the land under study is served by public utilities or not. The public utilities network covers water, electricity, telephone, sewerage, storm water drainage, and roads. Water and electricity are the two main utilities which were taken into consideration in determining whether land is served or unserved by public utilities.

6.4 ALTERNATIVE INSTRUMENTS

The orderly implementation of urban infill can be achieved by making land available at the right time, in the proper location with the appropriate land use and under reasonable financial conditions. With such a planning framework, urban land infill would attempt to maximize social and economic benefits. The urban land infill policy could be divided into three main parts. The first part pertains to urgent and dire instruments which will be applied during the first phase of development in order to restrict the spread of vacant land in the cities. The
second part refers to alternative instruments which the government may opt to use whenever changes occur or any event that require such alternative instruments. The third part are general long-term instruments to ensure an orderly pattern of development in the Kingdom.

6.4.1 Urgent and Dire Instrument

6.4.1.1 Preventing Development Outside the Urban Boundaries

Studies on the urban boundaries for many cities in Saudi Arabia reveal that the dispersal and scattering of neighborhoods and residential areas outside the city has resulted in the existence of vacant lands within cities. This is attributed to land made available outside the city boundaries at low prices. The overriding objective for preventing development outside the urban boundaries is to promote a compact rather than a sprawling spatial development. Specifically, this recommendation is aimed at achieving the following:

a) Restricting the random expansion of cities that constrain the concerned agencies from covering the urban areas with public utilities and services.

b) Giving priority to financing public utilities and service projects within the limits provided for by the development phases.
c) Creating a balancing mechanism between population growth and urban expansion according to acceptable population densities to reach the ideal size of cities.

d) Enabling the concerned agencies to provide public utilities and services within the limits of the phases of development, and facilitating the necessary process of coordination among the various sectors, which would allow the completion of the project in the shortest time possible, and at the least cost.

e) Providing facilities to security sectors like fire, traffic, and police to enable them to better undertake their missions.

6.4.1.2 Lands of the National Guard and Ministry of Defense

The conclusions arrived at by the urban boundaries studies for several cities of the Kingdom indicate that there is no need to retain lands for the ministries as they cause the following problems and confusion:

a) Exploitation of broad areas of the strategic sites which suit urban development within the cities; this constrains opportunities for intensive urban
development and leads to scattered development which affects the urban pattern and land use in the city.

b) Raising of the cost of public utilities and services network extension, and the related maintenance activities due to the extension of the cities in broad areas beyond the capacity and the need of the city.

c) Affecting the orientation of the future urban development and constraining this development to be oriented towards undesired directions; as such these areas may act as constraints within the cities.

d) Difficulty in making these lands yield to urban development patterns inside the cities because this will adversely affect the road network and building standards.

e) Unsuitability of these sites located within the cities designated for security purposes such as lands designated for the Ministry of Defense and Aviation and National Guard; in addition to the dichotomy between the uses specified for these sites and the uses determined in the general plans for the cities. The recommendations provide that these areas be studied and discussed by professional committees to

131
establish the efficiency of exploiting these areas for the purposes designated. Then, the land that cannot be exploited could be substituted with alternative lands located outside the physical urban boundaries; the ownership of these lands should revert to the concerned municipalities to be used for various development purposes.

6.4.1.3 Lands of Ministry of Public Works and Housing, and ARAMCO

Studies of the historical development of many cities of the Kingdom have shown the availability of broad areas of government lands designated for one of the ministries or commissions such as the National Guard, Ministry of Defense and Aviation, Ministry of Public Works and Housing, and lands granted to the ARAMCO company. As these lands were granted to these agencies a long time ago, and are located outside the cities, urban development has been extended around these sites. Thus, it is necessary to review the existing sites designated for these purposes from the standpoint of their consistency with existing land use as well as the efficiency of their use. It is also important that the actual need of housing projects in every city be studied as well as the extent of their advantages in meeting the requirements of housing in light of the general plans of the cities, the projected population growth, or housing the
residents of the neighborhoods that need to be moved. This can be done according to the following procedures:

a) Vacant lands designated for the Ministry of Public Works and Housing should be studied, and their uses should be specified in the general plans of the cities.

b) The actual area required for housing should be retained while use of the remaining areas should be reviewed so that these will be owned by the concerned municipality.

c) If it is confirmed that there is no need for housing projects in a city, necessary procedures should be taken with respect to transferring the ownership of the land from the Housing Ministry to the concerned municipality, so that these lands can be used in providing the necessary services to the city.

d) The lands designated for ARAMCO’s use will be treated in the same way as the previously mentioned land of the Ministry of Housing and Public Works.
6.4.1.4 Subdividing Vacant Land within the Urban Boundaries

Because it is essential to exploit the vacant lands located within the urban boundaries of the cities, the concerned authority (municipalities) has to make the necessary arrangements regarding subdivision of such lands, and for organizing the growth of the city in a way that conforms to the areas served with public utilities and services. Priority should be given to subdividing the private vacant lands included within the second phase of development, as well as giving priority to every phase at a specified time frame. It is worth mentioning that it is also necessary to plan these lands without either conferring with, or waiting for, requests to subdivide these lands. Subdividing these lands should be done in light of the master plans of the cities and in accordance with the uses specified. And due to the importance of linking all the neighborhoods and areas of the city by the road networks approved in the master plan, the concerned agency, upon approval of these plans, must begin the execution of the road network, provided that the total area designated for constructing streets and public utilities should not exceed the regular proportion (40%) specified for this purpose.
6.4.1.5 Land Grants

As has been discussed in Chapter 3, land has been made available for development in the Kingdom through land grants. It is suggested that in the future, land grants should be made available with the following conditions:

a) First, all the recipients of large areas (more than one hectare) requiring subdivision should be required to contribute 50 percent of the land 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) Second, serviced individual plots (granted within an approved subdivision) that are not developed within three years, should be withdrawn by the local authority. This is in accord with Islamic traditions. Abu Yousif ("Kitab-Al-Karaj")\textsuperscript{29} gives examples whereby the Holy prophet (S.A.W.) and Caliphs granted 'iqta' (land grants) which were withdrawn if the land remained uncultivated, i.e., undeveloped for three years. Similarly, Yahya Ibn-Adam\textsuperscript{30} ("Kitab Al-Kharaj") would appear to suggest that such grants could be withdrawn from the recipient if they were not
cultivated after a period of three years, and given to someone else. Mohammad Ibn Shafi\textsuperscript{31} has also expressed similar views ("Kitab Al-Umm," 1903-1904).

c) Third, it is suggested that if the recipient sells the land before the three year period, he should be obliged to pay at least a minimum of 50 percent of the value received to the local authority. Such funds can be utilized in paying compensation elsewhere.

6.4.1.6 Real Estate Development Fund (REDF)

The REDF is considered as one of the major instrument of control due to its role in offering loans to vacant land owners who are interested in building permanent structures. Thus, it is recommended that this fund be used as the main basis for giving priority to owners whose lands are included within the required phase of development since this will be an important boost for development of vacant lands. Also, it is essential to indicate that studies on the existing conditions of the main cities show the availability of a large number of vacant buildings. In this case, discerning residential land development is required. However, the fund must be oriented to offer easy and more flexible loans to those who are interested in purchasing houses.
6.4.2 Alternative Instruments

The government will resort to these instruments when confronted with some changes such as the rise in land prices during the first phase of development which will be completed by 1995; and in preventing purchases of vacant lands included within this phase. These instruments can be used when the owners abstain from developing their lands which will constrain the implementation of the urban infill, in addition to possible unforeseen changes that may occur in the future. It is recommended that these instruments after being fully studied and determined are to be used with the preceding ones according to the following priorities:

6.4.2.1 Evaluation of Land Prices

By investigating the causes of the phenomenon of vacant lands spreading within the cities, it is clear that most of the owners of these lands intend to keep their lands undeveloped because of speculation and their desire to raise the prices of these lands in the long-term. Because of this, the idea of pricing these lands during the first phase of urban infill is important. This procedure is to be done by a committee including representatives from the Ministry of Finance and the National Economy, the municipality, the Emirate, and experienced professionals. This committee will be assigned to evaluate and price the lands during the present phase of urban infill. Also,
the committee will re-evaluate the prices periodically in consecutive periodic phases. Thus, the owners who are interested in speculation will be prevented from proceeding. This will also fix the prices of lands and will assist those who are interested in development to purchase land during the phase, as well as provide a clear indication to the government when it decides to own some lands for construction of government projects.

6.4.1.2 Imposing Zakat Tax\textsuperscript{32} on Investment in Land

The existing conditions studies clearly show that most of the subdivided and undeveloped vacant land within the urban boundaries of the cities have been held for investment and speculation. As the Zakat is a prescribed right of the owners of lands, it is proposed that the collection system on these lands be re-organized by official committees to be formed by and from the concerned governmental authorities. These committees would undertake collection every 12 months of Zakat imposed on vacant lands held for investment and which are located within the boundaries of the cities. This is seen as an instrument which will assist in pushing the owners to develop their lands rapidly.

6.4.1.3 Imposing Service Dues

It is admitted that it costs the government an immense amount of money for providing public utilities. The cost of providing every square meter of a parcel with water,
electricity, telephone, sewage, storm water drainage and road network is about US$60,000. The existence of undeveloped vacant lands for long periods of time means that the immense fortune the government spent for constructing and maintaining these networks are wasted, and the life expectancy of networks may be over without maximum benefit. Thus, it is proposed that the Ministry of Municipal and Rural Affairs in the light of the studies of the urban boundaries of cities, allow the owners of vacant lands a period of not more than two years, during which they are to develop their lands; otherwise a service tax will be imposed on vacant lands. The following illustrates how this instrument can be worked out:

a) Committees may be formed in cities to estimate how much tax can be imposed on both planned and unplanned vacant lands in the light of the actual cost of public utilities networks, taking into consideration all the special conditions of vacant land sites, the number of serving utilities, and the reasons for these lands remaining undeveloped.

b) Regarding unsubdivided vacant lands included within the first phase of development which need to be developed, the concerned authority will notify the owners to subdivide their lands within a specified period of time during which lands will be exempted
from the aforementioned taxes. But in case the owners fail in subdividing these lands, then service taxes will be imposed from the date the authority had notified the owner to subdivide his land.

c) Regarding the subdivided vacant lands included within the first phase of development, the concerned authority will permit the owner to develop his land within a period not exceeding two years. In case he fails to develop his land during the permitted period, then service taxes for the existing utilities will be imposed retroactively from the date of the permission period or from the date of providing utilities to the land, whichever comes first.

6.4.1.4 Substitution of Vacant Lands

Setting up of necessary procedures by the concerned authorities to encourage owners to develop their lands is one of the alternatives set up for developing the private vacant land included within the present phase of development. In case of the owners' failure or unwillingness in developing their lands within this period, the municipalities can take their lands included within the required phase of development and grant them alternative lands outside this phase. Granting them the same advantage and characteristics of their original lands should be considered as far as possible.
6.4.3 Long-Term Instruments

6.4.3.1 Land Bank

Generally speaking, public land 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 the control of one authority that undertakes coordination with other ministries and local authorities the redistribution of land according to specific programs, it is necessary to establish an institution or bank for land.

A land bank is concerned with buying, holding and selling land usually for long-term development needs. Consequently, if a land bank is to be established it seems natural that it should be part of the government which is closely associated with land development policy. In this respect, it is suggested that the Ministry of Municipal and Rural Affairs would be a suitable agency through which to operate a land bank.

The purposes of organizing a land bank should be:

a) To secure the supply of land and to promote sound land development.

b) To maintain the price of land at a reasonable level.

c) To prevent land speculation.
The main aim of a land bank is to buy and manage land according to the phased urban boundary program. When the appropriate time is reached, the land bank should release the land for development, thus, ensuring the implementation of urban infill goals. A land bank may also be empowered to lease land on a temporary basis to satisfy immediate demands and it thus able to ensure that the land is used in a suitable way.

6.4.3.2 Betterment Tax

This tax is imposed on the owners of the property whose value increased as a result of the implementation of projects for public benefit. It is a very significant tool of achieving equality between the interests of the owners and the interests of society. This instrument has to be adopted with reservation as there is no tax system in the Kingdom and this is a question to be settled by the concerned officials. It has to be noted however that this technique realizes some sort of equity between the owners and the community and fair distribution of projects.

6.4.3.3 Environmental Pollution

Strict and well-enforced regulations should be introduced to control the pollution of the air, water, and ground. No activities which emit excessive noise, fumes, dust, smoke or other pollution into the environment should be permitted in location where such activities would cause disturbance or inconvenience to local residents. Permission for such activities
should be conditioned by controls on the levels or amounts of pollution which will be allowed over a given period of time.

Such instruments are considered urgent if the environment is to be given protection from the more serious effects of pollution.

6.4.3.4 Land Registration and Cadastral Surveys

Land registration means the recording of various information on land such as the ownership, the type of buildings on the land and its assessed value. Cadastral survey means the collection of the same information through a well-established process.

Land registration has to be made in order to:
- Provide certainty and security to land owners as well as to others having rights in land;
- Reduce the occurrence of disputes and litigation concerning land;
- Facilitate all transactions concerning land and to make dealings in land easier, cheaper and safer;
- Make land or rights in land more acceptable as security for monetary credit;
- Make land reform measures such as land consolidation possible; and

- Facilitate the development and implementation of public projects.

The cadastral surveys cover a large number of actions for the compilation of a land register. The most important tasks are:

- Preparation of survey maps;

- Define land ownership boundaries by individual plots, from deeds and other documents, and register on survey map;

- Survey existing boundaries to check conformity with the deeds and other plot descriptions;

- Act as investigators for boundary disputes; and

- Keep the land registration map and records up to date by recording changes in owners.

It is strongly recommended that the system of cadastral survey and land registration be introduced as early as possible.
so that land titles are clear and land can be easily transferred. This would greatly facilitate the process of land development.

6.4.3.5 Disposal of Land By Government

The traditional method of land disposal by way of transfer of the whole interest is not considered suitable for a rapidly developing country like Saudi Arabia. This enables the land to be freely transferred forever and there are very limited controls over the land.

There have been examples in many countries over the years of limiting the extent of disposal of the land. Instead of a buyer receiving the full title of the land, he receives a limited interest, known as leasehold in Western countries.

The advantages of leasehold from the government's point of view are twofold. It enables the government to write into the arrangements covenants which will bind the buyer to carry out obligations of a kind which would not be achievable in normal planning conditions; and more important, perhaps, the land reverts to the government at the end of a specified period, say 50 or 100 years. The land reverts free of any charge. This enables the government to start again to seek redevelopment. An appropriate period may be equivalent to two building period, i.e., the tenant can erect a building which might last him say
25 years and then rebuild for a similar period, giving a lease term of 50 years after which the government could start again with another tenant.

6.4.3.6 Intra-regional Population Mobility

Policies need to be adopted to encourage intra-regional population mobility to realize the maximum use of services and infrastructures in the cities with surplus of vacant land (as shown in Chapter 5), especially in the high and medium density zones. This has to be carried out within the framework of comprehensive regional development policies.

6.4.3.7 Structural Plans

Structural plans showing distribution networks of public infrastructures and land uses in the area between the urban growth and development protection zone boundary for each city, need to be prepared. These structural plans should show that such plans have the optimal orientation for managing and directing physical growth over the long-term, beyond 2005.

6.4.3.8 Public Education

Finally, the importance of public education should not be underestimated. Legal processes are only likely to be effective in so far as they are generally accepted by the public as a whole. More publicity should be given to discussion of the objectives of the urban infill, problems of city growth and
proposed instruments of effecting improvement. In this way, there should be more popular understanding of, and consensual support for the constraints imposed by public authority in seeking to effect community goals.

6.5 SELECTION OF INSTRUMENTS

All Instruments are not equally effective. Moreover, the effectiveness of one and the same instrument can vary notably according to the legislation and practices in the country concerned and to the prevailing circumstances. This effectiveness can be ascertained by checking how well a certain instrument achieves the accepted objectives.

For example, we must make sure that the instrument chosen really has the desired effects and does not have harmful side-effects. How to identify the proper instruments, once the urban infill problems have been identified, can be illustrated as shown in figure 6.2.
Figure 6.2 Selection of Instruments

A. Actual Situation and Probable Trend

Possible feedback and adjustment

B. Objectives of Urban Infill

Comparison of A and B

Identification of Land Problems

Listing all Possible Instruments

Checking all Direct and Side-effects of Instruments

Separation of the most effective Instruments

Identification of Necessary Legislation or other condition and Possible Limitation for the use of the best Instruments

PROPOSALS
CHAPTER SEVEN

CONCLUSION AND
RECOMMENDATIONS
CHAPTER SEVEN:
CONCLUSION AND RECOMMENDATIONS

7.1 INTRODUCTION

In a case where the rate of development is as rapid as it is in Saudi Arabia, current land development policies need to be operationalized as quickly as possible before they become out of date, and must be constantly revised and supplemented.

After examining the need for a new or modified land development policy, it is concluded that several recommendations are fundamental to the creation of a policy which will be both effective and practical.

The difficulties inherent in creating and operating new policies are recognized. However, most of the recommendations made in this chapter are deemed feasible to realize within a short period of time the objectives of urban infill and should therefore contribute towards a more orderly pattern of development in the Kingdom. It is also hoped that the more urgently needed of these recommendations will be put into effect as soon as possible.
7.2 RECOMMENDATIONS

A number of attempts have been made to develop instruments or measures for achieving the objectives of urban infill. With reference to the earlier comments made in Chapter 6, the following list of recommendations is presented together with brief notes on each.

7.2.1 Giving Priority for the Application of the Urgent and Dire Instruments

7.2.1.1 Prevention of Land Subdivision Outside the Cities

Subdividing land outside the urban boundaries should be prevented to limit the prevalence of vacant lands spreading and scattering inside the cities, and enabling the concerned authorities to provide public utilities and services to all urban areas.

7.2.1.2 Review of Lands Owned by Ministries and Government Offices

Unused vacant lands located within the cities and which are designated for the use of ministries and some government offices should be reviewed in the light of the efficiency of their use, taking into account security needs.

7.2.1.3 Subdivision of Land Inside the Cities

Due to the existence of unsubdivided lands within the cities, subdivision of these lands is proposed, without turning
to their owners, in the light of the general plan of the city and according to the land use in the master plan. This way the growth of the city can be organized conforming to the areas served by utilities and other services.

7.2.1.4 Restriction of Grants

Land grants in all cities of Saudi Arabia should be restricted, and grants designated for those of low income should be reviewed in the light of the actual need for these grants.

7.2.1.5 The Role of Real Estate Development Fund in Land Development

The Real Estate Development Fund can be used in organizing the development process by offering loans to those interested in building and to those whose lands are included within the required phase of development. Also, the fund should be oriented to offer easy loans to those willing to purchase existing dwellings in cities which are found to have a surplus of housing.

7.2.1.6 Imposition of Service Charge

Service charge should be imposed on lands served by public utility networks which owners intend to retain undeveloped. The main aim of this procedure is not to collect money but to push owners of the land to develop their lands and to impress upon them the implications of spending uselessly on services and utilities provided to them.
7.2.1.7 Temporary Use of Land as Green Areas and Other Uses

Due to the urban, environmental and socio-economic problems caused by vacant lands, and the need for green areas and parking lots and similar services, it is proposed that these lands be planted by their owners, or transformed into parking lots serving the neighborhood temporarily. By this proposal, a kind of temporary development is expected to occur.

7.2.2 Using Alternative Instruments to Respond to Future Changes

7.2.2.1 Evaluation of Land Prices

Evaluating prices of land by concerned committees will limit both speculation and the rise in land prices. This will assist those who are willing and interested in development and discourage those who are contemplating to purchase vacant land included within the required development phase.

7.2.2.2 Offering Land for Public Sale

The concerned authorities will allow the owners of vacant lands a specified period of time during which they are to develop their lands; otherwise, these lands will be offered for public sale. The purchaser will be required to develop the land within a specified period of time.
7.2.2.3 Committing the Land for Development

The concerned authorities will take the necessary steps to allow the owners to develop their lands for a specific period of time. In case of delay, the authority will commit the land to whoever will develop it—either a government office or individual—and to rent the land from the owner during the period of development. The ownership of the land will revert, after development, to the original owner.

7.2.2.4 Land Substitution

This is one of the alternatives to encourage the owners of vacant land to develop their lands. In case of delay or unwillingness of owners to develop their lands, then the concerned authority will exchange these lands included within the development phase with lands outside the coverage of the existing development.

7.2.2.5 Expropriation

Some governments expropriate private lands which are suitable for development and which owners cannot develop. Then the government can undertake the development of these lands as well as constructing the necessary projects. However, this proposal is in relation with the government's need for such projects.
7.2.2.6 Collection of "Zakat" Tax

The "zakat" tax imposed on lands should be revised to take into account undeveloped lands.

7.2.3 Implementing Long-Term Instruments

7.2.3.1 Land Bank

It is necessary to establish a land bank in order to buy and manage land according to the phased urban boundary program. When the appropriate time is reached, the land bank could release land for development, thus, ensuring the implementation of urban infill goals. The land bank may be also authorized to lease land on a temporary basis to satisfy immediate demands and to ensure that land is used in a suitable way.

The land bank to be established should be part of a government agency which is closely associated with land development policy. In this case, it is suggested that the MOMRA would be a suitable agency through which to operate a land bank.

7.2.3.2 Betterment Charge

The imposition of a betterment charge, which is a tax imposed on the property whose value has increased due to improvements (i.e., infrastructure and/or service facilities) made by the government, should be considered. There is, however, certain reservations on the adoption of this instrument as this
has no precedent yet since the Kingdom has never had any form of taxation.

7.2.3.3 Environmental Pollution Control

Strict enforcement of environmental regulations should be adopted by the government. Activities which emit excessive noise, fumes, dust, smoke or other pollution into the environment should not be permitted.

7.2.3.4 Land Registration and Cadastral Surveys

The system of cadastral survey and land registration should be introduced in the Kingdom to provide certainty and security in land ownership as well as reduce the occurrence of land disputes and litigation. If land titles are clear, land transactions and land development can be undertaken easily.

7.2.3.5 Disposal of Land by Government

The Kingdom may consider adopting a new method of land disposal through the leasehold system. This system will allow government control over the development of the land through a leasehold agreement which would bind the buyer or lessee to carry out certain obligations stipulated by the government. After a specified period of time, say 50 or 100 years, the land reverts to the government, and the government has the option to seek redevelopment.
7.2.3.6 Intra-regional Population Mobility

The government has to adopt measures, within the framework of the comprehensive regional development policies, to encourage population movement among and within regions. This movement should be directed to areas which have surplus vacant land and which are found to have underutilized infrastructure and service facilities.

7.2.3.7 Structural Plans

Structural plans showing the distribution networks of public infrastructure and land uses within the urban boundary zone of each city should be prepared by the concerned authority.

7.2.3.8 Public Education

The government should generate popular understanding and consensual support for the urban infill program. To do this, more publicity should be given to the discussion of the objectives of the urban infill, problems of city growth and proposed instruments to effect improvements in the urban environment.

7.3 CONCLUSION

The spread of Islam in the Arab Peninsula brought large tracts of land under the control of the Muslims. All these lands according to verses G-10 of the Quran chapter LIIX (SURAT AL-HASHR) actually belonged to the 'UMMA' (the community) and are
mainly reserved for the good of all Muslims. The history of Islam during the early period very clearly indicates that all resources of land were organized for the benefit of all.

As earlier noted, land grants in the Kingdom have been a primary source whereby land comes into the market. This is not a new process in Islamic society. Dhiaa Al-Haqu (Landlord and Early Peasants in Islam, IRII, 1977) in his analysis of the land grant (‘IQTA’) concludes that the prophet Mohammed (S.A.W.) and the early caliphs in particular, granted ‘iqtas’, but only on a limited scale and only from an ‘ownerless’ land. Such grants, as characterized by Abu Yusif Yaqub Ibn Ibrahim ("Kitab-Al-Kharaj," Al-Mataba Al Miriyya, 1884), were conditioned by the fact that the general interests of the "UMMA" should not be harmed, and that land grants should safeguard the interests of both rich and common people. Yahya Ibn Adam in his analysis ("Kitab AlKharaj," Ed. by Th. Jaynball Leiden; E.J. Bril, 1896) indicates that the granting of ‘iqta’ became a practice largely by the ‘uthman’ (the caliph). Uthman’s grants were based on the fact that cultivation and development of "dead" land would make them productive and increase revenues for the state. He gave them to Muslims who could cultivate these lands and pay "USUR" (tenth of the produce) as a revenue. Abu Ubayad AlQasim Ibn Sallam in ("Kitab Al-Ammwal," Ed. by M.H. Alfiqqi, 1934) also indicates that the main purpose of granting these estates was economic: to bring "dead" land to life with the help of
irrigation and to develop them in order to increase agricultural production and revenues of the state. Dhiaa Al-haqu further concludes that land grants became personal possession with limited rights which later became hereditary. In the Kingdom, a similar situation was developed (Chapter 3, section 3.3.9) whereby land grants from the King became personal possession and mostly sold in the market. Thus, in light of the above sources, it is imperative that land grants should be utilized primarily for the betterment of the community.

It cannot be denied (in the light of Quran and Hadiths) that the Islamic community should operate in the best interests of society as a whole; that is to say that each action or deed of a Muslim should not be harmful to or create problems for others. Similarly, the ownership of land and its use should be taken within the same context. As Abu Yusif in ("Kitab Al-Kharaj") has indicated, the state should encourage the development of landed property in every possible way.

Technological progress, industrial development, and the growing needs of urban society require that a new concept of land ownership and land control should be introduced. As noted by D.H. Drakin in his well-documented analysis (Land Policy and Urban Growth), social attitudes to land ownership in various countries have been changing as a result of pressures of urban growth and technical development. He observes that in countries
such as Italy, Spain, West Germany, Taiwan and Indonesia, while private property is recognized and protected by the state and freedom of private economic initiative is valid, all forms of land ownership are subordinate to the needs of the nation and welfare of the community. Such a concept is not very different to Islamic ideology where individuals are required to sacrifice for the benefit of the community.

It is true that there are few examples of control of land use in the history of Islam but socio-economic progress has been such that in order to safeguard the safety and interests of the community, certain regulations and restrictions are vital—even if these did not previously exist in Islamic history.

Therefore, in the interests of the community, the conditions of land grants and land ownership need to be reviewed and modified so that the majority of the population can enjoy the benefits of urban life in an increasingly complex era of rapid industrial, technological and physical development.

This chapter has recommended some of the instruments in which the responsible authorities in the Kingdom can use to respond to the problems of vacant land. It should, of course, be clear that none of these instruments on their own would provide an adequate solution, nor, that they all need to be implemented at once. But it is equally clear that a broadly based set of
policies and methods, implemented consistently over a period of
time, is necessary if the Kingdom is to achieve the high
standards and objectives which have been adopted in the national
development plans. The purpose of this work has been to
contribute to the continuing discussion of how best to achieve
the government's objective of making Saudi cities healthier,
more attractive and more efficient places in which to live and
work.
NOTES

1. The Gulf Cooperation Council comprises of Bahrain, Kuwait, Oman, Qatar, the United Arab Emirates and Saudi Arabia.


3. Two population censuses were conducted in the Kingdom of Saudi Arabia. The 1963 census was not officially approved because of technical errors which affected the final results. The 1974 population census was officially approved and has been used as the main source for later estimates.


5. Municipal services include:

   a) All project studies which form the basis on which required development plans are formulated.
   b) Provision of water supply systems, wells, reservoirs, house connections and treatment plants.
   c) Building of sewage disposal systems, rain water, drainage works, sewage house connections, dams, rain water channels and pipings, and flood protection works.
   d) Improvement and beautification of roads, pavements, lighting, bridge and parking areas.
   e) Erection of public buildings such as municipal halls, libraries, stores, garages, laboratories and all other buildings which are not rented by the authorities.
   f) Building of central markets for meat, vegetables, and fruits.
   g) Provision of public utilities such as public lavatories, cemeteries, mortuaries, fencing of private vacant lands and swimming pools.
h) Establishment of gardens and parks and fencing of parks for the children's playgrounds together with the provision of necessary facilities.

i) Acquisition of privately-owned properties after paying appropriate compensation to their owners.

j) Various other projects not mentioned in the above classification.

6. It has been argued that "...official policies for rural development have been designed to accelerate detribalization" (Keith McLaehlan, "Saudi Arabia's Political and Social Evolution," in Arabia and the Gulf: From Traditional Society to Modern States," Ian Richard Netton (ed.), Barons and Noble Books, Totowa, New Jersey, 1986, Chapter 7, p. 100).


9. The hijri date comes first followed by the cirica date. In case of years, the hijri year is written first, followed by the cirica year with a slash in between.


15. Urbanization, op cit, pp.92-93.


17. Urbanization, op cit, pp. 92-93.

18. Ibid. pp. 97

19. Ibid. pp.90

20. Ibid, pp. 93-99


22. Ibid.

23. The two-year (1986-88) target was set by the Council of Ministers as part of Order No. 13 dated 6/7/1406-1986 in which MOMRA was directed to undertake the exercise.

24. Existing Conditions, op cit,


26. These studies were done by the urban boundaries group between 1986 and 1988.


28. Ibid and Existing Condition, op cit.


32. Zakat is a kind of tax in Islam imposed on investment land. This tax is collected every twelve months.


34. International Federation for Housing and Planning, op cit, pp. 22.


163
36. Abu Yousif Yaqub, op cit, pp. 251-258.


Al-Ruwaithy, M. Population of the Kingdom of Saudi Arabia, Geographic and Demographic Study, Riyadh (Arabia), 1979.


Goldsmith M. Politics, Planning and the City. Hutchinson, London, 1980


Kukaskuseri, T. Land Readjustement in Japan, Tokyo, 1968.


Ministry Of Agriculture and Water, Laws and Regulations Issued for Agriculture Lands in The Kingdom. Alharamin Press, Riyadh, No Date of Publication.

Ministry Of Municipal and Rural Affairs, _Regulations, Ordinances and Instruction_. No Publisher Name. No Date of Publication, 1975. Vol. 1.

Ministry Of Municipal and Rural Affairs, _Regulations, Ordinances and Instruction_. No Publisher Name. No Date of Publication, Vol. 2.


Ministry Of Municipal and Rural Affairs, _Regulations, Ordinances and Instruction_. No Publisher Name. No Date of Town Publication, Vol. 6.


Ministry Of Finance and National Economy, _The Law of Real Estate Fund and the Execution By-Laws_. No Publisher Name. No Date.

Ministry Of Finance and National Economy, _Real Estate Fund: Directory for Commerical Investment Loans_. No Publisher Name. 1983.


APPENDIX I

SELECTED DECREES, DIRECTIVES, AND ORDERS RELATING TO URBAN PLANNING AND LAND USE REGULATIONS

The following list identifies significant decrees, directives, and orders that have been issued from time to time concerning planning and regulation of urban land in the Kingdom 2/.

1) Royal Decree No. 8723, dated 20/07/1357-1937, describes the structure and responsibilities of municipalities, including the preparation of city plans showing "public and private places, public roads, and other elements."

2) An unnumbered set of basic regulations adopted in 1365/1945 directs the preparation of city plans, to be prepared by a special technical committee and studied and approved by the municipality and the higher authorities. The regulations deal generally with protecting residential areas from "obnoxious uses", establishing building lines, dividing land into building sites, and establishing building regulations and a building permit system.

3) Council of Ministers Decree No. 6408/W2, dated 26/11/1397-1977 established "general directorates" in the Western, Central, and Eastern Regions of the Kingdom under the Ministry of Municipal and Rural Affairs. These directorates are responsible for all the activities of the Ministry in these provinces in the fields of technical and municipal services, rural affairs, and administrative and financial affairs.

4) Council of Ministers Decree No. 1054, dated 07/09/1393-1973, classifies land uses into three categories according to the hazard, harm or inconvenience that they cause to the citizenry and are subject to special regulations.

5) Ministerial Directive No. 5162/W/2-340/5/2, dated 01/01/1397-1977, describes the procedures for preparing subdivision plans and the responsibility of those agencies involved.

6) Royal Order No. 20/1/13/1009, dated 17/06/1374-1954, deals with the planning of land in the suburbs of each town and its sale to private citizens.
7) Royal Decree No. M/23, dated 11/06/1394-1974, establishes the Real Estate Development Fund and authorizes it to acquire, plan, and sell land for development or redevelopment.

8) Ministerial Directive No. 1/1/1/4W/1555/3, dated 03/04/1389-1969, deals with the application of Master Plans in deciding road locations.


10) Ministerial Directive No. 13747, dated 22/09/1386-1966, declares that no building permit shall be issued before the land is planned and subdivided.


12) Ministerial Directive 124/5, dated 25/3/1393-1973, declares that plans should be modified only with the consent of the Planning Department.

13) Ministerial Directives No. 707/4, dated 14/2/1392-1972 and No. 684/4/D, dated 25/2/1390-1970, deal with the relationship between planning and budgeting and specifically require that prior to the inclusion of project costs in ministerial budgets, the proposed project must be approved by the principal planning department and a local building permit obtained.

14) Council of Ministers Decree No. 602, dated 19/7 1386-1966, requires the owners of large-scale buildings (more than three stories in height) to provide parking space on the ground or at least 50% of the lot area.

15) Ministerial Directives No. 1/1/1/3/Q/15219, dated 28/10/1386-1966 and 1/1/1/4/D/1350/3, dated 10/4/1388-1968, implement Ministerial Decree No. 602 with regard to parking in the main cities of the Kingdom and direct the cities to designate certain streets for the enforcement of parking regulations.

17) Council of Ministers Decree No. 1277, dated 2/12/1397-1977, authorizes the use of public land by the private sector for the development of multi-story parking structures.


19) Royal Decree No. M/26, dated 23/6/1392-1972, prohibits the issuance of building and renovation permits on identified historic or religious sites.

20) Ministerial Decree No. 4127/3, dated 19/10/1389-1969, deals with the allocation of land by the municipalities for industry and warehousing.


22) Ministerial Directive No. 1/1/4/1/14599, dated 11/10/1386-1966, directs the municipalities not to issue building permits for structures which block the view of a mosque or are aesthetically incompatible with their surroundings.


24) Ministerial Directive No. 274/5, dated 29/8/1394-1974, deals with the allocation of school sites in Master plans and defines the minimum size of school sites.


and require that any illegal structure be removed and any damage repaired.

29) Ministerial Directive No. 1/1/1/89/4087/2, dated 6/11/1391-1971, authorizes the municipalities to remove any unauthorized construction and to collect a fee at the time of the issuance of a building permit.


33) Ministerial Directive No. 316/5, dated 12/9/1393-1973, orders the cooperation of the Emine, the municipalities and the directors of police to stop the unlawful acquisition of land.

34) Ministerial Directive No. 44/5, dated 13/2/1394-1974, limits the role of the municipalities in preparing industrial sites to the grading, planning and renting of the land.

35) Ministerial Directive No. 55/5, dated 29/2/1394-1974, orders the municipalities not to sell land that has been designated in the plan for public purposes.

36) Ministerial Directive No. 66/5, dated 10/3/1394-1974, orders all land designated in plans for a specific public use (school, mosque, etc.) to be transferred immediately to the respective public agency or institution, even if such agencies do not have the necessary budget appropriations for the construction of their projects at the present time.


38) Royal Decree No. 806, dated 13/01/1379-1979, prohibits the illegal occupation of government-owned land and orders the removal of any building erected in contravention of building regulations or the building permit.