



**The Ability of the Local Planning Authority to Implement
Zoning Regulations:**

A Case Study of Jeddah, Saudi Arabia

By
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بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِيْمِ

In the name of Allah, the most Gracious, the most Merciful

Declaration

I hereby declare that this thesis is the result of my own effort, work and investigation. Where others work and sources of information have been used in this thesis have been duly acknowledged.

I also declare that this thesis has not already been accepted in substance and also not being simultaneously submitted for any degree.

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Dedication

*This work is a simple dedication to my
beloved parents who are the light of my
academic path*

To my beloved and affectionate mother



To my beloved father

*I would like to say to my parents that this
achievement is due to yours prayers*

*May Allah bless and protect you from any
harm*

Acknowledgement

“My Lord, enable me to be grateful for your favour which you have bestowed upon me and upon my parents and to do righteousness of which You approve, and admit me by your mercy into [the ranks of] Your righteous servants” (Quran: 27:19)

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Abstract

The Municipality of Jeddah adopted a ‘smart growth policy’ to address issues of urban sprawl and housing affordability that resulted in the adoption of new zoning regulations in 2007. The new regulations intended to generate urban intensification and vertical expansion. Jeddah Municipality have permitted six-storey dwellings with a parking level in areas of existing low rise detached housing, which have caused conflict between residents and developers over infringement of privacy. The implementation of zoning regulations has exposed inherent weaknesses at the Municipality level.

The aims of the research are: firstly, to explore the rationale of the Municipality of Jeddah in increasing buildings heights. Secondly, to assess the performance of the local government and to identify the critical factors that determines its performance. Thirdly, to explore the impact of the applying the new regulations and residents reaction. The research uses mixed-methods and case studies to collect primary and secondary data. The fieldwork includes the views of householders, city officials and professionals. The research uses descriptive and inferential statistics to analyse quantitative data and description and thematic text to analyse qualitative data. Furthermore, it draws on the UN-HABITAT Urban Governance Index (UGI) to evaluate the performance of Jeddah Municipality.

The main findings of the study are that there is a need to increase buildings heights to accommodate the increase of population and their future housing needs and demands but this need to be planned with greater sensitivity to neighbourhood context. There are deficiencies in the planning system at the local level specifically there is a lack of integration between urban planning, urban management and other stakeholders. Residents who have no recognised voice in the planning decision making process managed to overturn decisions. The study concludes that, in the Saudi context, a blanket mixing of building heights in residential areas is unacceptable.

Key Words: Urban Governance, Zoning Regulations, UN-HABITAT UGI, Jeddah Municipality, Municipal Council of Jeddah, Participation, Privacy and Jeddah.

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Acronyms and Abbreviations in the Thesis

ARAMCO	Arabian American Company
BPD	Building Permissions Department
CBD	Central Business District
CC	Consultative Council
CDSI	Central Department of Statistics and Information
CNDP	Carbon Neutral Design Project
CPI	Consumer Price Index
COM	Council of Minister
DMMA	Deputy Ministry for Municipal Affairs
DOMI	Department of Monitoring and Inspection
GCC	Gulf Cooperation Council
GHA	General Housing Authority
GDP	Gross Domestic Product
GIS	Geographic Information System
FAR	Floor Area Ratio
FBC	Form-Based Code
FED	Faculty of Environmental Design
HRD	Human Resource Department
IDEA	Institute for Democracy and Electoral Assistance
JCC	Jeddah Regional Climate Center
JM	Jeddah Municipality
JUOC	Jeddah Urban Observatory Centre
KAU	King Abdulaziz University
KSA	Kingdom of Saudi Arabia
LDP	Local Planning Department
LTDD	Land Titles and Dimensions Department
MC	Municipal Council
MOEP	Ministry of Economic and Planning
MOF	Ministry of Finance
MOH	Ministry of Housing
MOI	Ministry of Interior

MOJ	Ministry of Justice
MOMRA	Ministry of Municipal and Rural Affairs
MOSA	Ministry of Social Affairs
REDF	Real Estate Development Fund
PUD	Planned Unit Development
TCPA	Town and Country Planning Association
TDR	Transfer Development Rights
UGB	Urban Growth Boundary
UGI	Urban Governance Index
UN	United Nations
UNDP	United Nations Development Programme
UN-HABITAT	United Nations Human Settlement Programme
UNDESA	United Nations Department of Economic and Social Affairs
WCED	World Commission on Environment and Development
WWII	World War Two
SPSS	Statistical Package for Social Science
SR	Saudi Riyal

Glossary Arabic Terms in the Thesis

<i>Allah</i>	God
<i>Amir</i>	Prince
<i>Dustur</i>	Constitution
<i>Emart Makkah</i>	Province of Makkah or Makkah Region
<i>Fatwa</i>	Legal opinion
<i>Fiqh</i>	Islamic jurisprudence
<i>Harim</i>	Inviolate zone
<i>Hima</i>	Reserve land
<i>Ijma</i>	Islamic scholars' consensus
<i>Ijtihad</i>	Discretion
<i>Istihsan</i>	Preference
<i>Istislah</i>	Public interest
<i>Mahram'</i>	Closest male relatives such as her father, husband and brother
<i>Majlis Ash-Shura</i>	Consultative Council
<i>Nizam Al-Hukum</i>	Basic Law or Basic Statutes of Governance
<i>Qiyas</i>	Analogy
<i>Rawasheen</i>	Wooden lattices
<i>Shariah</i>	Islamic Law
<i>Sunnah</i>	Method, is the Apostle Mohammed's deeds, words and approvals
<i>Taddyat</i>	Squatters areas
<i>Tashria</i>	Legislation
<i>Urf</i>	Usages or Customs
<i>Zakat</i>	Wealth tax
<i>Zawayah</i>	Small mosque

Chapter One: Research Introduction

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CHAPTER ONE: RESEARCH INTRODUCTION

1.0 Introduction

The purpose of this chapter is to give an overview of the research. This chapter is divided into six sections. The first section gives the background of the research problem, while the second justifies the selection of the research problem. The third section presents the research's aims, objectives, issues and questions and the fourth illustrates the research's significance. The penultimate section presents the research's methodological approach. The last section provides an overview of the research structure.

1.1 Background

The built environment is the result of a system made up of development regulations, customs, and behaviours of individuals and wider society. Scholars throughout the centuries, from the Greek philosophers Socrates, Plato, and Aristotle, were interested in answering such questions as: What is Utopia? What do we understand by the term 'the good city'? (Lynch, 1981; Fishman, 1996; Amin, 2006). According to Lynch (1981) cities are too complicated, beyond our control and are influenced by many people who are subject to many cultural variations to permit any rational answer. However, the idea of a good city changes throughout time and is associated with different principles and visions. Thus, cities have emerged in one form or another suggesting that one definition of civilisation might be our ability to form good cities. The three manifestoes of the urban revolutionaries, Sir Ebenezer Howard, Le Corbusier and Frank Lloyd Wright, were put forward in an attempt to answer what the good city is, during the 19th and 20th centuries, which was a turning point in the history of city planning (Fishman, 1996).

Since the 20th century, urban land use planning theories such as central place theory, the concentric zone model, sector concept, multiple nuclei and classic theory of land use (bid rent model) (Chapin and Kaiser, 1979), have influenced the physical form of cities and towns (Waugh, 2000). Since WWII cities have witnessed a massive expansion and a new phenomenon emergent and dominant in most urban form, known as urban sprawl (Arbury, 2005 and Ingersoll, 2006), that

has affected both developed and developing countries (Garcia and Riera, 2003). This type of urban form is characterised by low density, commercial strip development, leapfrog development and wide streets (Neuman, 2005). Owing to the implications of this type of urban form, the UN-HABITAT (2013) declared urban sprawl one of the main issues needing to be addressed in shaping of 21st century cities.

Sustainability became the central concept of a good city. Sustainable development has been defined by the World Commission on Environment and Development (WCED) as, “development which meets the needs of the present without compromising the ability of future generations to meet their own needs and aspirations” (WCED, 1987: 47). The aim to achieve sustainable development has encouraged scholars to look for idealised urban forms. One of the notable options to achieve sustainability has been the concept of compact cities (Gunn, 2003). According to Burton (2000), this phenomenon has emerged in response to the widely held need to find more sustainable models for cities. This type of urban form is characterised by high density, efficient public transport, and walkable and narrow streets. The compact city was a radical shift in urban design for most cities in the USA, Australia and New Zealand (Arbrey, 2005). However, smart growth policies are difficult to implement (Dieleman and Wegener, 2004). The debate is whether people prefer to live in low or high-density developments, where both sprawl and compact city promote benefits and have had their own implications on the physical, social, environmental and economic aspects of the city. The success or failure of any proposed form differs from place to place. In addition, the success or failure depends on appropriate planning regulations, an efficient public management and acceptability (Song, 2012).

Planning regulations are one of the most powerful tools for shaping urban areas (Anju, 2007). Zoning regulation is the most common form of land use regulation (Fischel, 2000). It is a planning apparatus used by the local spatial planning authority to control and direct development in order to protect the health, safety and general welfare of all citizens and to achieve desirable cityscapes. They regulate as well as control land use, building height, storey numbers, setbacks and density (Anju, 2007; Qian, 2008). It is an American term in origin, adopted in

New York City in 1916 to exclude people who do not fit a group's social image from neighbourhoods, segregate incompatible uses and prevent pollution in residential neighbourhoods because of dirty industry (Healey, 2006; Qian, 2008). According to Cullingworth and Caves (2009), zoning was a new remedy and a 'wonder drug' for planners.

New methods of zoning emerged owing to the inflexibility and rigidity of the conventional zoning regulations, such as the planned unit development (PUD), performance zoning, conditional zoning, incentive zoning, mixed-use zoning and form-based code (FBC) (Elliott, 2008). Zoning regulations, according to Salsich and Tryniecki (2003) and Cullingworth and Caves (2009), need to be reviewed and modified from time-to-time. Although, zoning regulations provide benefits, these regulations can generate substantial conflicts and create urban, social, economic and environmental problems, especially, if the regulations are not in harmony with the prevailing socioeconomic milieu and do not respond to peoples' needs (Arimah and Adeagbo, 2000; Rakodi, 2001; Healey, 2006). In many developing world cities, zoning regulations were imported from overseas and implemented without adaptation. Thus, the imported regulations have failed to consider the norms and values of developing countries and generally failed to respond to peoples' needs (Eben Saleh, 1997; Arimah and Adeagbo, 2000; Tipple, 2000, 2001, Al-Hemaidi, 2001). This may suggest that development regulations are implemented without impact analysis to measure the impact on the built environment (Salsich and Tryniecki, 2003; Garba, 2004). In some cases planning regulations are implemented without consultation or public participation. Many scholars believe that local acceptability and satisfaction with urban transformation and zoning regulations are important aspects in the successful implementation of urban policies, as it could contradict with inhabitants' wants and needs.

Local planning authorities are basically the most essential planning agencies which hold the power, responsibility and resources to formulate, implement and enforce the regulations that manage places and the wider city (Arimah and Adeagbo, 2000; Rakodi, 2001; UN, 2006). However, according to Rakodi (2001; 2003) and UN-HABITAT (2009), the traditional method for managing city

development must change because it has failed to address a wide range of challenges and cope with changes. By the 21st century, cities are facing serious dynamic, fundamental, economic, social and environmental changes and challenges (Boogers and Denters, 2013). Thus, commentators such as Rakodi (2001), Healey (2002) and Coaffee and Healey (2003), suggested that there is a need to shift from government into governance. According to the former UN Secretary-General, Kofi Annan, governance is a key element in promoting development (UN, 1998). Decisions and policies in good governance depend on the interactions of different stakeholders, where citizens have a voice and decision-makers are obliged to hear them (Shafiei, 2011). In addition, there is a need for consistency in and continual assessment of the performance and capacity of existing governance to address deficiencies in the capacity of the system in order to improve the quality and capacity for proactive management (Garba, 2004; UNDP, 2009). However, the success or failure of governance is a relative issue differing from place to place depending on political and cultural milieu. Developing countries in particular suffer from the lack of public participation, equity, coordination, weak accountability, centralisation and pay little attention to resource requirements (Rakodi, 2001; McGill, 2007). Therefore, what is required is an adequate governance system and continual assessment so that the local planning authority can manage the city and tackle planning issues.

1.2 The Nature of the Research Problem

Saudi Arabia in late 1930s decided to establish – Arabian American Company – ARAMCO to cooperate with the US in oil exploration. Since the discovery of oil, Saudi Arabia has experienced remarkable urban transformation and development, reaching one of the highest levels of urbanisations in the world (Mandeli, 2008), where according to Almarshad (2011), more than 85 per cent of the nation's population now lives in cities. However, owing to the lack of Saudi architects and planners in the past, contracted companies primarily from America, brought their own architects and introduced their own planning ideas and development regulations, such as the grid-iron pattern, large-blocks and set-backs. During the early 1950s, the villa became the favoured housing type among the Saudi upper and middle class' nuclear families and by the mid-1950s the 'apartment', 'flat' or 'condominium' was introduced spreading across the whole country (Al-Hathloul,

1981; Salagoor, 1990; Alkhedeiri, 1998; Adas, 2001). These Western planning ideas and regulations, and the Law of Buildings and Roads of 1941, introduced the first rudimentary land use regulations (Salagoor, 1990; Al-Hemaidi, 2001).

The array of imported planning ideas and regulations transformed the physical attributes and urban fabric of new neighbourhoods and cities morphology in Saudi Arabia, from walled towns to vibrant metropolises. The modernized Saudi cities are characterised by wide roads and large individual housing. Although, the development regulations were beneficial because it provided different housing types and encouraged development and investment, these regulations have been criticised by Saudi scholars. The criticism lies in the regulations themselves for being inconsistent with Saudi culture and climate. According to Eben Saleh (1997), the imported regulations produced a monotonous built environment. The arterial road networks have caused families to keep their children off residential streets and behind walls in the interests of safety and they have created a superblock system which resulted in a marked reduction in the interaction between neighbours (Salagoor, 1990; Adas, 2001; Mandeli, 2011). The positioning of a single detached unit in the middle of the plot makes the outdoor spaces both directly exposed to heat of the sun, but also allows visual intrusion from the adjoining neighbours, making the outdoor spaces useless to the family, especially, women in Saudi Arabia (Al-Hemaidi, 2001). According to Eben Saleh (1997), privacy in Saudi Arabia is more than mere protection against intrusion, it is also a significant religious and cultural obligation not as in the West. These fixed zoning regulations have created class segregation. In addition, the plot value increases to more than ten times its original value after planning approval

Since the early 1960s, five master plans have been approved for and enacted in Jeddah Metropolitan area in an attempt to control urban development, form the city and to deal with planning issues. The first four master plans were seen as responsible for encouraging low density development, which led to urban sprawl causing long commutes, urban fragmentation, shortage of affordable housing and huge urban infrastructure provision costs (Madeli, 2008). The issue of massive growth can be attributed to the limitations of conventional spatial planning practices and public action for urban development regulation (Madeli, 2011). In

addition, rapid urbanisation became a challenge for local authorities, especially, the municipalities.

In line with the historical trend to import Western town planning practices, Jeddah Municipality adopted a ‘smart growth policy’ to address issues of urban sprawl and housing affordability that resulting from the four previous master plans. The zoning regulations in the latest master plan bring forward the idea of compact city by promoting urban densification and vertical expansion of four repeated storeys, roof villas of two storeys and parking level¹. As is always the case, the decision has not included provisions for the consultation with citizens, including those most likely to be directly affected. In addition, Jeddah Municipality did not justify the reasons for densification and did not estimate the implications of the new regulations on the built environment. Mandeli (2008) forecasts that the decision to densify may lead to serious social and ecological problems and lower living standards, which Jeddah Municipality has not anticipated. Therefore, Mandeli (2008) suggests that to successfully implement the new zoning regulations, the Municipality needs to improve its capacity.

Already, the implementation of new zoning regulations that took place in 2007 in areas of existing low rise detached housing has caused conflict between residents and developers over privacy infringement. As the Saudi municipalities, at the local level are responsible for formulating, implementing and enforcing zoning regulations, more attention should be given to the performance of these municipalities and how this can influence the implementation of zoning regulations. Therefore, this research does not object to zoning regulations per se but the way these regulations are applied. It links the Municipality’s performance and the implementation of zoning regulations to reveal how the implementation of zoning regulations has exposed inherent weaknesses in the Municipality. In addition, this research focuses on assessing the local planning government to identify deficiencies in the system hindering the successful implementation of zoning regulations.

¹ Roof villa is a two storey dwelling at the top of apartment block, a kind of top floor maisonette in the UK.

1.3 Research Aims, Objectives and Associated Questions

This research investigates links between the capacity of urban government and the implementation of zoning regulations by addressing two key issues: first, the ability of the local spatial planning authority in Jeddah to implement zoning regulations, and second, the implications of the new zoning regulations within modern residential areas in Jeddah.

Table 1.1 illustrates a number of the research aims. Firstly, the research explores the rationale of the Municipality of Jeddah to increase buildings heights. Secondly, it assesses local government performance and identifies critical factors determining its performance. Thirdly, it explores impacts of applying the new regulations and residents' reaction to the application.

Therefore, two main questions can be asked: To what extent is Jeddah's local planning authority able to implement the new zoning regulations to achieve smart growth? What are the implications of applying the new zoning regulations within modern residential neighbourhoods? The first question relates to the role and performance of the local planning authority: How should the performance of the local planning authority be assessed? What are the issues hindering the local planning authority to implement its decisions? What are the professionals' and officials' views regarding the performance of local planning authority? The second question relates to zoning regulations: What is the rational of adopting new zoning regulations? What are the impacts of zoning regulations? To what extent are conflicts from applying the new zoning regulations on the ground related to the local planning authority's capacity? Are the conflicts amongst stakeholders (i.e. residents, developers and officials) a reflection of poor planning practice? Does the Municipality need to develop better knowledge about the city? To what extent are residents and developers satisfied with the new zoning regulations? The two main questions will be addressed in line with the stated research aims through the research's sub-questions, issues and objectives.

Table 1.1: Research issues and objectives.

Sub-questions		Objectives
1) What is the rationale of Jeddah Municipality to adopt and apply the concept of smart growth?		
Issues	Increase density	Identify the issues that have led the Municipality to increase the density of the city in the new master plan
	Change urban morphology	Explore the role of planning through the apparatus of zoning regulations in shaping the morphology of Jeddah
2) At what standard is the local planning authority in Jeddah performing?		
Issues	Assess performance of Jeddah Municipality	Identify a suitable framework for assessing the performance of Jeddah Municipality
	Implement zoning regulations	Investigate issues influencing implementation of zoning regulations
	Views of professionals and officials of Municipality performance	Explore views of both professionals and officials regarding the Municipality performance
3) How does the implementation of the new zoning regulations impact on local people?		
Issues	Citizen role	Discuss role and reaction of local residents in the implementation of zoning regulations
	Residents satisfaction	Measure various levels of resident satisfaction within different zones
	Impact of the new zoning regulations	Investigate impacts of the contemporary zoning regulations on modern residential areas from the perspective of officials and professionals

1.4 Significance of the Research

Most existing urban studies in Saudi Arabia focus on Riyadh the capital city of Saudi Arabia while - Jeddah has been given little attention. In addition, most of the studies suffer from a lack of empirically derived evidence, especially, in assessing the capacity of the local planning authority in Jeddah.

The descriptive work of Aziz Al-Rahman (1985) focused on zoning regulations by outlining the classification of land use controls. The study used the classification to provide an outline of the legal system for land use regulations in Saudi Arabia and to review and analyse the operation of these regulations in Jeddah. He illustrated how the planning and land use regulations in KSA are based on Islamic Law. In addition, the study showed and discussed two master plans of Jeddah and the city growth until 1980. The work of Salagoor (1990) was descriptive and focused on illustrating the chronological transformation of Jeddah's urban morphology from an old town to a modern city and discussing the first three of Jeddah's master plans. The study provided the main planning laws in KSA and how they are based on Islamic Law. The study criticised the imported planning regulations, concluding that the imported regulations are inconsistent with the socio-economic and socio-cultural characteristics of such a community.

Daghustani in his descriptive work (1990) illustrated the first two of Jeddah's master plans, discussed planning regulations in Saudi Arabia and administrative reforms for the planning institution to manage urban growth. The study discussed the system's hierarchy and the functions and responsibilities of the MOMRA and local municipalities. It discussed the urban transformation of Jeddah city from a walled town to a big city. In addition, the study showed the strengths and weakness of the system for managing urban growth. The study concluded that the planning system was not capable of managing urban growth and development did not take place in accordance with planning policies owing to particular problems in the system. In 1991 Daghustani focused on discussing problems affecting the operation of city management and its planning system such as centralisation, absence of collaboration among government and staff quality and quantity. Another research study of city management is that of Abu-Suliman (1996), who discussed the first three master plans of Jeddah and illustrated the chronological development of city planning and management in Jeddah. The study concluded with revealing issues in the planning system, such as centralisation and bureaucracy, corruption, such as nepotism and favouritism, as well as the lack of trust and lack of resources.

Recently, an empirical study conducted by Azzam (2004) assesses the effectiveness and efficiency of the main services provided by the Jeddah Municipality by using the Municipal services as criteria, the Delphi technique and questionnaire. The study concluded with recommendations to improve the effectiveness and efficiency of the selected services focusing instead on accountability and transparency. Mandeli (2008), in his work, illustrates an array of urban problems such as urban fragmentation, slum proliferation, inadequate urban services and spiralling land prices and construction costs. It addressed Jeddah's urban development through the five stages of the city master plans. In addition, it showed that there is a lack of participation, the local municipalities are poorly equipped, have significant staff shortages, limited fiscal and annual budgeting and an absence of coordinated action. In 2010, Mandeli focused in his descriptive work on managing Jeddah's public space, wherein he addressed the obstacles hindering Jeddah's local planning authority to promote public space governance. The study illustrated some reforms in the structure and duties in Jeddah Municipality; it also addressed the issue of the local planning system. These issues are: un-responsiveness, bureaucratic rigidity, fragmentation of responsibilities and lack of participation and involvement in decisions related to open spaces.

Almurshed (2011), in his recent work, showed the impact of political and administrative reforms on the effectiveness of local authorities in managing local affairs and services. It discussed institutional development and reforms in KSA. The study focused on implications of Municipal elections, on decentralised local governance and public participation. It discussed the structure of the power hierarchy and the duties of each authority at different levels within the system. It analysed the administrative capacity of Saudi municipalities, demonstrating that there are deficiencies in terms of financial capacity, citizen participation, cooperation with the private sector and administrative capacity.

This research establishes an appropriate conceptual framework to assess the performance of the local planning authority in Jeddah to achieve good urban governance, which is considered important to successfully implementing a city's zoning regulations in the future. The thesis is the first study that applies the UN-

HABITAT– Urban Governance Index (UGI) model on Saudi municipalities to assess the performance of the local planning authority in Jeddah. This research identifies deficiencies in the planning system at the local level, in terms of lack of resource, including finance, data, and adequate staff. In addition, it reveals the lack of responsibility, equity, participation, cooperation, collaboration and accountability. The research illustrates the impacts of applying zoning regulations in neighbourhoods on different stakeholders and gives comparisons between levels of residents' satisfaction in three different zones. The study shows that Jeddah Municipality failed to consider the cultural importance of privacy – a fundamental principle of Saudi society – leading to conflict between residents and developers. Evidence presented in this study reveals that, in spite of citizens *de jure* exclusion; they are *de facto* an influential force in the implementation of planning decisions. The study reveals that mixing different residential uses with different heights is unacceptable in the Saudi context. What is clear is that while zoning regulations may be necessary, it is not the regulations themselves that are problematic, rather it is the way in which they have been implemented that causes conflict. Therefore, a more sensitive application of the regulations is called for.

The research outcomes contribute to a deeper understanding of the relationship between the capacity of the local planning authority and the implementation of zoning regulations, where the former directly influences the capacity to implement planning regulations. Therefore, this study will make an original contribution to literature on urban governance, public participation and zoning regulation in the Middle East, specifically, in Saudi Arabia. The intention of this research is to provide inclusive guidelines that aid planners and decision makers in local government to enhance its performance, encourage public participation, achieve good urban governance and deliver potential zoning regulations. In addition, this research constitutes a platform for the researcher and other researchers to carry out further research on urban governance and zoning regulations in Saudi Arabia.

1.5 Methodological Approach

The approach of this research follows a sequence of steps outlined in Figure 1.1. The research begins by determining the research problem, aims and objectives the

study seeks to achieve and the research questions the study aims to answer. This has evolved through studying a rich and extensive body of relevant literature, which has led to the development of an appropriate framework and methodology.

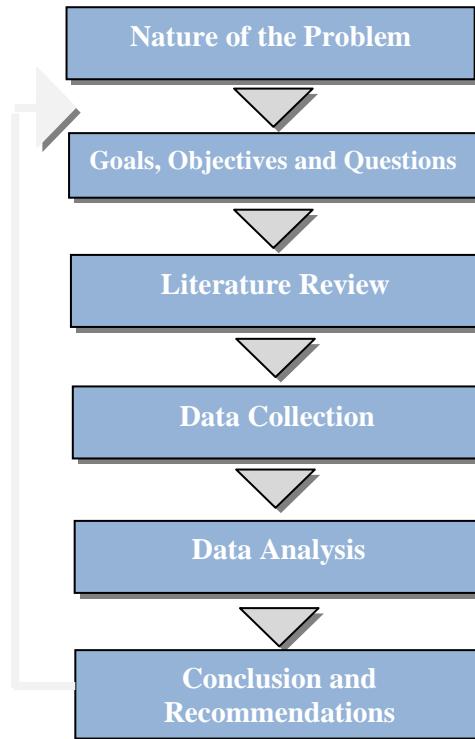


Figure 1.1: The research methodological approach.

The research used “mixed methods” that combine both quantitative and qualitative methods to capture the strength of both methods (Creswell, 2003; Bryman, 2004). The strength of the quantitative approach is that it provides objective measures, such as statistical measurements and correlation analysis of distinctive variables to establish generalisation, while the qualitative approach explores subjective data in order to obtain validity and reliability of findings from the field (Mandeli, 2011). In addition, this research used a case study method to explore the real world phenomenon, where it allows explanatory questions as to “how” and “why” to be posed (Yin, 2008). Triangulation was used in this research as one of the approaches of the multi-strategy research (Bryman, 2004). The study employed the UN-HABITAT – Urban Governance Index (UGI), to assess the performance of local urban governance in Jeddah. The UN-HABITAT model combines mixed method focusing on quantitative data. The model

measures four indicators: effectiveness, equity, participation and accountability. Each indicator consists of a group of sub-indicators.

The fieldwork went through four main phases. It begins in the preparation phase for the pilot study, immediately followed by the pilot study itself, which took place in 2009. The researcher used and tested different type of methods and identified key actors. The evaluation of the pilot study, preparation of structured interviews, determining the sample size and identifying the appropriate methods of data collection made up the work of the next stage. At this time, a decision was taken to investigate three residential zones (villa, apartment with new zoning regulations and residential mixed use zones). The main fieldwork was conducted in 2010, over the course of three months in Jeddah, to collect the core data for this investigation. Regarding the sample size, only 250 interviews were conducted with residents. In addition, the researcher conducted 15 face-to-face structured interviews with officials and 20 with professionals (i.e. architects and planners in private sector).

The researcher collected data from primary and secondary sources. Face-to-face structured interviews were conducted with different stakeholders including residents, officials and professionals to collect primary data. In addition, the researcher's observations were used to gain information on the characteristics of the built environment, photos were used to visualise and illustrate issues, especially, in mixed-use zones. There were unstructured interviews with academics in the Department of Urban and Regional Planning at the Faculty of Environmental Design in King Abdulaziz University, focus groups with planners, architects and lawyers, and the researcher attended meetings at Jeddah Municipality and the Municipal Council. Four case studies were selected through the Jeddah Municipal Council and a local newspaper. In terms of secondary data, the researcher collected published and unpublished materials from different governmental sectors, articles from local newspapers about different issues related to the topic and the new zoning regulations textbook. In addition, census data and housing statistics for Saudi Arabia and Jeddah, as well as the budget of Jeddah Municipality, MOMRA and Saudi Arabia were collected from different governmental sectors.

Regarding data analysis, different techniques are used to analyse and present the collected data. The researcher used tables and different types of graphs to illustrate the quantitative findings of the interviews and their empirical data. In addition, the researcher employed descriptive and inferential statistical measurements to analyse the quantitative data. The researcher used both Microsoft Excel for creating charts and SPSS (Statistical Package for Social Science) for data analysis. The UN-HABITAT – UGI model was used to assess the performance of the Jeddah Municipality, and then was recast and reweighted the indicators to suit the study. In terms of qualitative data, the researcher employed grounded theory (inductive approach) to identify the key themes of the research.

1.6 Structure of the Thesis

Overall, the thesis is organised in 10 chapters, as follows:

Chapter One (Research Introduction): provides an introduction to the study illustrating the research justification, goals, objectives and questions. In addition, it outlines the research's significance, methodology and organisation as presented in this chapter.

Chapter Two (Literature Review): reviews relevant literature, which starts by developing a framework that provides research orientation. The chapter discusses ideas of creating good places through urban form, discussing the concepts of urban sprawl and compact city, planning apparatus that shape the urban form, the concept of density and the impact of zoning regulations. It then questions the relationship between urban governance and good cities, by reviewing the roles of the planning institution and showing the reason for shifting from government to good urban governance. In addition, it gives a brief overview of different models to evaluate urban governance. The chapter addresses various factors and issues influencing the capacity of the local spatial planning authority. It provides examples from developed and developing countries. It discusses the important of acceptance and satisfaction regarding urban form, neighbourhood, housing and how to measure the level of residential satisfaction with their dwellings and neighbourhoods.

Chapter Three (Research Approach): explains the research methodology by offering a brief introduction to the research design and the rationale of selecting a mixed method strategy. It then reports in detail on the pilot study and the main fieldwork activities. The chapter clarifies justifications for conducting this research in Jeddah. In addition, it explains in detail the data collection methods used in this research and the analytical methods applied. The chapter also discusses the UN-HABITAT model for governance evaluation and how this approach will contribute to the research processes. It discusses the research ethics. Finally, it summarises the constraints and obstacles experienced in the fieldwork through carrying out this research.

Chapter Four (The Planning Framework in Saudi Arabia): clarifies the context of decision-making and the local culture. The chapter discusses in brief the economy of Saudi Arabia, which has played an important role in the country's development and spatial transformation. Then it explains the nature of the political, legislative and planning systems. The chapter describes the authority hierarchy in the planning system and includes a review of planning laws. It reflects on issues that affect the performance of decision-making. Finally, it illustrates changes in social structure, the importance of privacy, as well as the rapid increase in urbanisation levels and the heterogeneity of Saudi society.

Chapter Five (From Walled Town to Vibrant City: The Impact of Plans and Zoning Regulations on Jeddah Metropolis): describes the nature of Jeddah's geographic location, economic status and importance. It then illustrates the massive metropolitan urban growth and urban determinants. There is a discussion of the impact of master plans and zoning regulations on the massive morphological transformation in the configuration of the urban form of Jeddah. Finally, it explores the rationale of the Municipality's decision to densify development in the latest master plan.

Chapter Six (Assessing Local Planning Authorities Performance in Jeddah): focuses on assessing the performance of the local spatial planning authority in Jeddah by using the UN- HABITAT Urban Governance Index (UGI) to show issues in the planning system at the local level. The chapter attempts to create a platform for illustrating deficiencies in the current planning system at the local

level that need to be addressed in the future in order to achieve good urban governance. It then critiques deficiencies of the UN-HABITAT assessment model. Lastly, it assesses the performance of Jeddah Municipality through modifying the UGI model to fit the study.

Chapter Seven (Stakeholders' Performance Assessment of Jeddah Municipality and the New Zoning Regulations): presents the analysis and findings of structured interviews with Municipality officers, professionals. It aims to explore issues related to the performance of the local planning authority from different perspectives, and in turn, its ability to deliver and implement potential zoning regulations. The chapter clarifies general factors influencing the local planning governance's ability to implement zoning regulations. It then presents stakeholders' perspectives of Jeddah Municipality's current performance. It explores the existence of discretion in the planning system as well as corruption. The chapter evaluates professionals' and residents' most recent experiences with the Jeddah Municipality. Finally, it discusses issues related to the impacts of zoning regulations from the architects' and professionals' perspective.

Chapter Eight (The Impact of Applying the New Zoning Regulations on Stakeholders in Jeddah): is a detailed exploration into the impacts of applying the new zoning regulations by considering real cases. The chapter aims to show that there are other subjective issues related to the performance of the local planning authority that cannot be measured using the UGI or quantitative methods. It reveals imperfections in the planning system at the local level, the conflict between the stakeholders (residents, developers, and local spatial planning authority), and reflects the level of resident and developer satisfaction. The chapter describes and analyses issues within each case and poses key questions related to the main line of the research. It also clarifies the factors affecting the implementation of new zoning regulations. In addition, it explores people's reaction regarding the implementation of the new regulations. The chapter explores the cases from the perspective of Saudi law. Finally, it suggests ways forward.

Chapter Nine (Assessment of Residential Satisfaction with Regulations within Different Zones): presents the structured interviews' analysis and findings collected during the fieldwork from residents living in three different zones (i.e. villas, apartments with the new zoning regulations, and mixed-use). It measures the level of residential satisfaction with their dwellings and neighbourhoods to determine the differences in the level of satisfaction in each zone and to find out what extent the regulations are responsive to people's needs.

Chapter Ten (Conclusion and Recommendation): summarises the research questions, methodology, findings and concludes the research's investigation. In addition, it addresses the limitations of the research. The final part of this chapter includes recommendations for further research.

Chapter Two: Conceptualizing the Good City

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CHAPTER TWO: CONCEPTUALIZING THE GOOD CITY

2.0 Introduction

The aim of this chapter is to explore the literature review to develop a theoretical framework for understanding the factors that influence the good city. The chapter is organised into five sections. The first section draws a framework for the literature review. The second section considers theories of urban form that have been developed to achieve the idea of good city. Section three reviews zoning regulation and explores the concept of density. In addition, it considers why there is often low compliance in developing countries. The penultimate section looks at the notion of good urban governance; approaches for measuring the performance and quality of urban governance; factors that influence institutional capacity and challenges of urban governance particularly in Middle East countries. A brief review of the importance of citizen satisfaction, acceptability and values in urban development is provided in the last section.

2.1 The Conceptual Framework

The thesis asserts that a good city rests on the interplay between four factors: urban form, adequate regulatory frameworks, good urban governance and a high level of citizen acceptance and satisfaction (Figure 2.1).

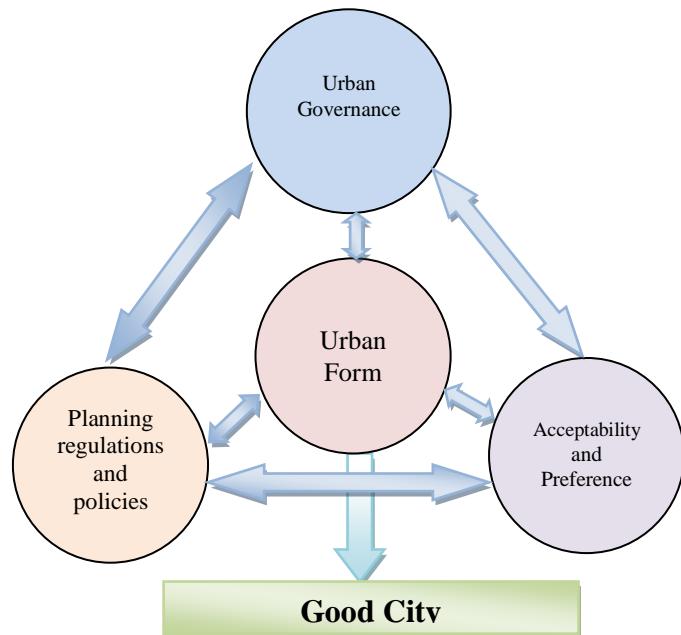


Figure 2.1: Conceptual framework of literature review.

2.2 Urban Form and Good City

Cities have evolved in every civilisation in one form or another and it seems that deep within many cultures and throughout the centuries in an attempt to respond to human daily requirements, aspirations and to suit the economic interests of citizens. According to Lynch (1981), cities are too complicated, too far beyond our control, and are influenced by many people who are subject to too many cultural variations to permit any rational answer. The idea of the good city however remains a powerful and orientating goal. Scholars through the centuries have been interested in knowing and answering the questions: 'What is the ideal city? What is a good city? And what does good city mean?' (Fishman, 1996; Amin, 2006). Over time, different ideas of what is utopian have emerged. Thus, if city development should improve the life quality of its citizens, and be geared to achieve happiness, equal rights and fulfilment of its people (UN, 2013), then it calls for some kind of conscious planning.

2.2.1 City ordering in the pre planning era

The morphology of ancient town such as Alexandria and Giza in Egypt and Babylon (renowned for its hanging gardens) and Ur in Mesopotamia were determined by the site characteristics and the climate (Kostof, 1991; Greed,

2000). In addition, people with common economic and social interests began to live together for mutual benefits and to improve their survival chances (Alshuwaikhat, 1999:14). The classic Greek and Roman civilizations were considered the source of ideas and philosophies of Western civilization (Greed, 2000). Most Greek settlements were planned as a grid layout and characterised by a flexible design, which was responsive to the site's topography and paid attention to the need for sanitation, water drainage, and water supply. The Roman towns were more decorative than the Greek and based on a simple grid layout with a square (or Forum) in the centre surrounded by government buildings. The Forum served as the centre for religious, economic, political, commercial activity, debate, festivals, funerals and criminal trials (Favro and Johanson, 2010). This is suggesting that the heart of the city was not simply a place; it was a set of ideas about what is important in a place. The most essential feature of many Roman settlements was protective city walls.

The Prophet Mohammed (Peace Be Upon Him (PBUH)) set out the main principles of urban planning of Islamic cities in Medina. Thus, Medina is the first prototype of a Muslim city (Neyazi, 2007). He laid down the idea of urban zoning by dividing Medina into zones according to their functions such as residential, religious, commercial, industrial, inviolate zone '*Harim*'¹, and reserve land '*Hima*'². In addition, he set the concept of the land grant by subdividing land into plots and granting them to different tribes to build their dwellings (Neyazi, 2007). Islamic cities such as Baghdad, Samarra, Al-Fustat (old Cairo), and Tunis were small in size, densely inhabited, took the circular form, compactly organised in a labyrinthine pattern, with narrow streets and cul-de-sacs, often surrounded by ditches, walls, or both, mainly for protection and designed based on human scale and within a reasonable walking distance (Al-Hathoul, 1981; Al-Shareef, 1986; Mortada, 2003). The main mosque is located in the city centre to serve as a social hub, spiritual symbol and create identity. This form encouraged social interaction between different income levels, and considered ecological aspects, such as wind, to encourage fresh air and sun movements that minimize the influence of direct

¹ It is a zone that prevents development from taking place in such an important resource areas such as watercourses, well, river, water ditches or valleys (Aziz Al-Rahman, 1985).

² In Islam it is a zone for land reserve for social welfare such as forest or land for cattle or heritage (Aziz Al-Rahman, 1985).

solar radiation and increases shaded areas reducing the impacts of desert heat (Alshuwaikhat, 1999). The most two influential factors on Islamic cities are; Islamic Law (*Shariah*) (see appendix 1) and cultural customs (Hakim and Ahmed, 2006; Neyazi, 2007).

The most important principle informing planning practices is: “Do not harm others and others should not harm you” (Hakim and Ahmed, 2006). Harm is understood in two distinct ways: the intrusion on others’ privacy and damage to others’ (i.e. neighbours) property. For instance, Islamic Law give citizens the right to exercise complete control over their personal property, but always limited by the condition that any change should not to harm anyone for example neighbours and passers-by on the roads (Salagoor, 1990; Kostof, 1991). Privacy in the Islamic context does not refer simply to the protection against intrusion, as in Western communities, rather it is a religious and cultural obligation (Eben Saleh, 1997; Al-Hemaidi, 2001). Thus, privacy has been maintained in design considerations, particularly in terms of building height, as well as placement of windows and doors (Al-Hathloul, 1981; Salagoor, 1990).

Figure 2.2 illustrates the influence on the Islamic city on the Roman orthogonal grid street, which transformed the Roman urban form into a narrow organic pattern with a web of alleys that divided the city into residential quarters by merging the existing structures into solid superblocks and reducing open spaces through progressive infill (Kostof, 1991).

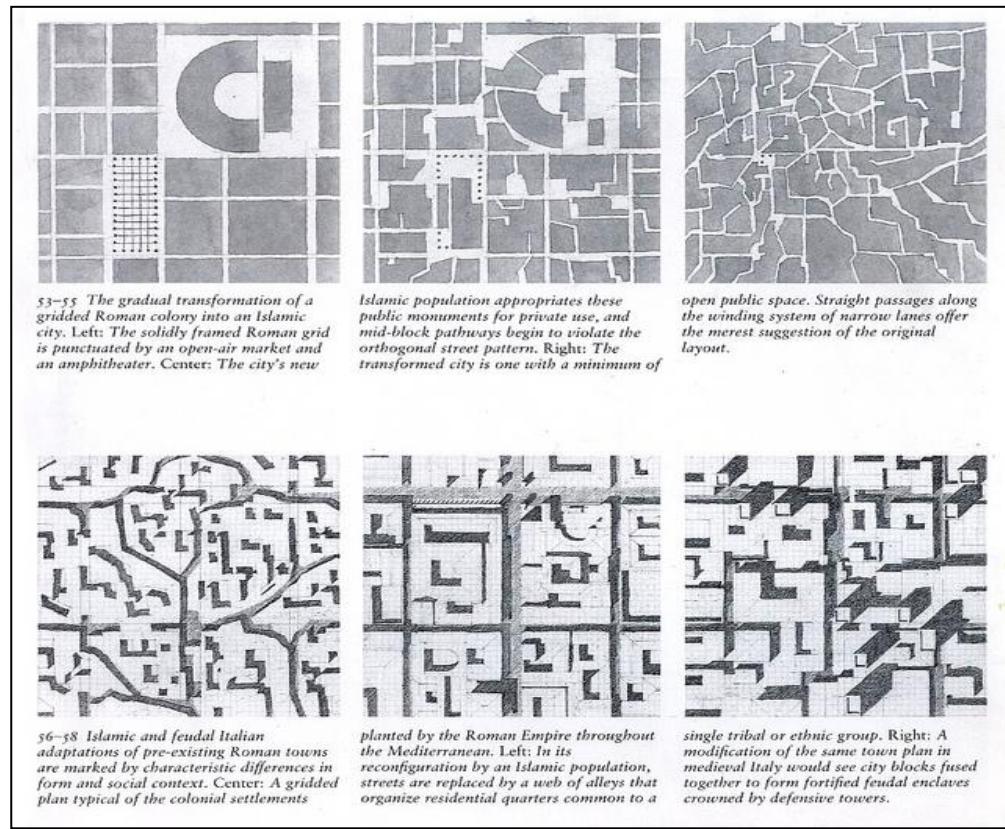


Figure 2.2: The metamorphosis of the Roman gridiron pattern into organic pattern.
Source: Kostof (1991:49).

European cities of the medieval era were influenced by the strict class structure of the feudal system. The church was dominant and development of new market places, squares and relevant buildings came under ecclesiastical powers (Greed, 2000). The cities of the European Renaissance conversely demonstrated the subordination of the church to the flourishing secular power of the city-state (Alshuwaikhat, 1999). The Baroque style of the Renaissance incrementally spread throughout Europe to express the power and magnificence of the governor and state. Thus, many European cities were re-planned with fountains, squares, boulevards, statues and triumphal arches (Greed, 2000).

2.2.2 City ordering in the planning era

The industrial revolution in the mid-18th century changed people's lives through new forms of technology. The development of the railways from the 1840s in Britain and later made it feasible to live in low density environmentally pleasant areas and commute by train to a place of employment. For others it meant the

opportunity to move to the city for work. The influx of people from the countryside led to overcrowding. This led to squalor and the spread of disease among the poor who lived in the crowded alleyways and tenements. Public health action that was developed to tackle issues of water supplies and sanitation quickly became fused into a need for overall spatial planning to address urbanisation, pollution, poor housing and the related problems of overcrowding and disease (Greed, 2000). During this period several new ideas of how cities might respond to industrial change and growth were developed: the linear city, the Garden city and the city beautiful movement (Table 2.1).

Table 2.1: Three models of the ideal community in the 19th century.

Ideal community ideas	Urbanist	Year
Linear city	Arturo Soria Y Mata	1892
Garden cities of tomorrow	Ebenezer Howard	1898
Beautiful movement	Frederic Law Olmsted	1899

According to Frey (2000: 82) “The linear city grows along a continuous transport line, ideally public transport, or a parallel series of lines” (Figure 2.3). In 1910, Edgar Chambless’ *Roadtown* proposed a denser version with five-storey buildings that was promoted in the USSR, by Milyutin, for socialist industrial towns in the late 1920s and early 1930s (Ingersoll, 2006). The linear city gave rise to a new set of problems, that of urban sprawl, that will be discussed later.

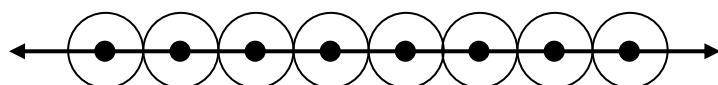


Figure 2.3: The linear city concept.
Source: adapted from Greed (2000) and Frey (2000).

The Garden City put forward by Sir Ebenezer Howard in 1898 attempted to combine the employment and cultural opportunities of the city and the social support and environmental benefits of the village in what he felt was the ideal community (Figure 2.4). It was based on moderate decentralisation, cooperation, socialism and modern transportation (Fishman, 1996 and Greed, 2000). The Garden City concept was applied in southern Britain and was a source of inspiration for the 1922 English satellite towns by Raymond Unwin, who was in favour of low density housing (Greed, 2000). In the USA, Henry Wright and

Clarence Samuel Stein took up the Garden City applying it to Radburn, New Jersey (Ryan and McNally, 1995).

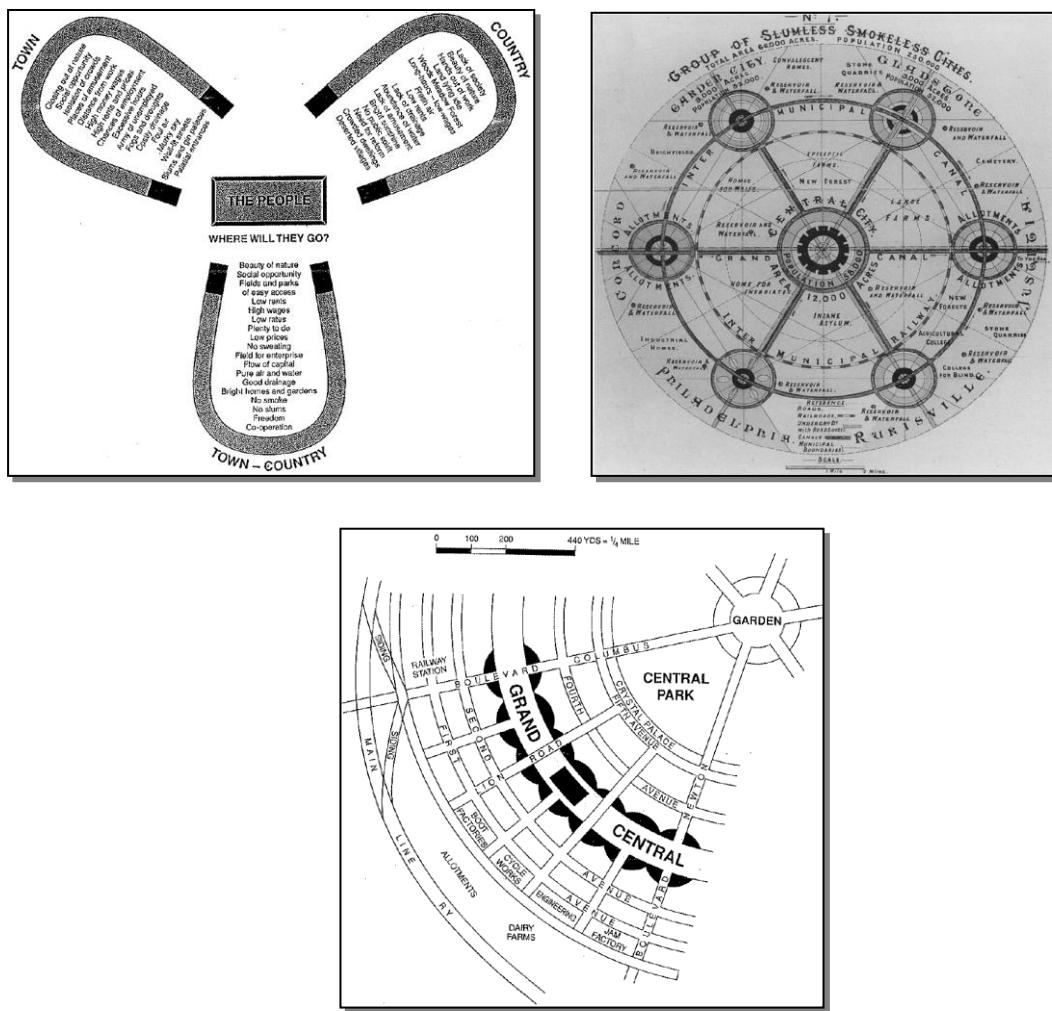


Figure 2.4: Howard's Garden city of tomorrow.
Source: Kostof (1999)

The city beautiful movement, concerned with aesthetics, was founded in the USA by Frederic Law Olmsted in 1899 and put into practice by Daniel Burnham and Edward H. Bennett in preparing the plan of Chicago (Scott, 1969). The movement advocates beautifying the city by creating an extensive system of green areas, decorating streets and using monuments, sculptures, fountains and obelisks (Mandeli, 2011: 55). It was criticised for excessively concerning itself with empty aesthetics and was considered to be a shallow representation of Americans ideals (Wilson, 1996).

2.2.3 Post-modern urbanism

The 20th century experienced the most profound transformation of human settlements system, again propelled by the widespread availability of the motor car and the fluidity of economic (Sorensen and Okata, 2011: 1). In an extension to Howard's vision of the utopian city, Le Corbusier and Frank Lloyd Wright, tried to answer what is a good city? Although, each one of them did his work alone, they mutually believed that their societies needed restructuring and a new urban form might reflect new kinds of cities that solved not only the physical issues but social problems as well (Fishman, 1996). Le Corbusier's plan, known as the Radiant City or the contemporary city, was created in 1922 and applied in Paris. The idea of Le Corbusier's plan was based on rail networks and modern building technology to enable his city to spread upward vertically (Greed, 2000). The city was laid out in a rigid symmetrical grid pattern consisting of neatly spaced rows of identical and strictly geometrical skyscrapers blocks (LeGates and Stout, 2007:322). The American architect, Frank Lloyd Wright, proposed the 'Broadacre City' in 1932. His plan was based on individualism, unlike Howard's, which was based on cooperation (Fishman, 1996). Wright's city was based on car borne transport, a low-density grid and decentralisation (Fishman, 1996).

Urban land use planning came into being in the 20th century and introduced the 'master plan' (Waugh, 2000). Land use planning influences the physical form of towns and cities. Thus, many urban land use theories emerged (Bramley and Power, 2009). In 1933, Walter Christaller proposed the 'Central Place' or 'Threshold Theory' based on investigations in southern Germany. The two principles of Christaller's work were the range and the threshold of goods and services. The range is the maximum distance that people are willing to travel to obtain goods and services from central places and the threshold is the minimum number of people required to support the central places. Christaller assumed that customers would always employ the rationale that they would want to travel as little as possible and take their services as near as possible to home (Waugh, 2002). Table 2.2 illustrates four urban models, emerged that were influential in determining land use and the concept of Central Business District (CBD) (for more elaboration see Chapin and Kaiser, 1979; Waugh, 2002).

By the 1960s, the work of Kevin Lynch (1960), Jane Jacobs (1961), Christopher Alexander (1966) and Gordon Cullen (1971) was developing postmodern urban design theory which in turn influenced the work of later scholars such as Rappaport (1982), Appleyard (1979), Barnett (1982), Bacon (1985) and Lang (1987). These postmodern urban designers promoted urban vitality and sought to enhance the public realm by creating a series of plans for the improvement of parts of the city (Mandeli, 2011: 58).

Table 2.2: Urban land use theories.

	Model	Urbanist	Year	Assumptions	Critique	Example
Descriptive Model	Concentric Zone	Burgess	1924	<ol style="list-style-type: none"> 1. City assumed built on flat land and morphological features such as river and valleys are removed. 2. Transportation modes are of limited significance being easy and cheap in every direction. 3. Land values increased in the city centre and decline rapidly outwards to give a zoning of urban functions and land use. 4. Old buildings are close to the city centre and become progressively new toward the city hinterland. 5. Cities comprised of different well-defined socio-economic and ethnic zones. 6. Poorer classes have to live in the city centre as they could not afford expensive housing or transport. 7. No concentration of heavy industry 	<ol style="list-style-type: none"> 1. Ignores transport 2. Cities not always built on flat land. 3. Based mainly on housing, while other types of land use were neglected 	Chicago
	Sector Model	Hoyt	1939	<ol style="list-style-type: none"> 1. Same assumptions of Burgess. 2. Wealthy people, select the best locations (i.e. it is based on 'ability to pay'). 3. Wealthy inhabitants live further from industry and nearer the main road because they can afford private car and public transportation. 4. Similar land uses attract other similar land uses, concentrating function in a specific area and repelling others. 	<ol style="list-style-type: none"> 1. Cities not always built on flat land. 2. Based mainly on housing, while other types of land use are neglected 	Calgary
	Concentric Zone - Sector Model Combination	Mann	1965	<ol style="list-style-type: none"> 1. High-class housing located in the south-western part of the city because of the prevailing winds. 2. High-class housing found away from industry and smoke. 3. Low-class housing usually found in 'zone of older housing'. 	<ol style="list-style-type: none"> 1. Industry not always located to north-east of British cities 	Sunderland and Belfast
	Multiple Nuclei	Ullman and Harries	1945-1962	<ol style="list-style-type: none"> 1. Cities do not grow from one CBD but from many autonomous nuclei. 2. Each nucleus acts as a growth point and has different functions from other nuclei within that city. 3. Within time there will be an outward growth from each nucleus until they merge as one big urban centre. 4. If the city becomes too large and congested, some functions might be scattered to new nuclei. 	<ol style="list-style-type: none"> 1. It does not include redevelopment plan and modern edge-of-city development 	London and Tokyo
Explanatory Model	Classic Model (bid-rent theory or land value model)	Alonso	1964	<ol style="list-style-type: none"> 1. The highest bidder will obtain the use of the land in a free market. 2. Inhabitants who can afford to commute are able to live near the city periphery because of the lower land value, which allows to buying of land large plots and creates low density. 3. Inhabitants who cannot afford to travel have to live near the CBD and owing to high land value they buy small plots which results in high housing density. 4. The peak land value intersection PLVL is the most valuable site within the city centre. 	<ol style="list-style-type: none"> 1. It was developed in a specific time period and under a specific system 2. It is not always the case in other cities. 3. It assumes complete economic rationality among all the actors in the housing market 	Chicago

2.2.4 Urban dispersion vs. smart growth

First: urban sprawl

The modern usage of the term ‘urban sprawl’ was introduced by Earle Draper in 1937 (Nechyba and Walsh, 2004). The term sprawl, in popular literature, refers to the vast expansion of the large metropolitan areas (Angel, 2008). This phenomenon dominated most urban form from WWII (Arbury, 2005 and Ingersoll, 2006). It is characterised by low-density suburban development, segregated land use, commercial strip development and leapfrog development (Neuman, 2005).

Many factors have encouraged sprawl: technologies, where shifts in transport modes and telecommunication (Cullingworth and Caves, 2009). In addition, cars came to shape the sprawl and fragmented the form of the modern metropolis (Dieleman and Wegener, 2004). Economy, where increases in household income, lower taxes and low land prices in the suburban areas encouraged people to move there, thus led to urban sprawl (Arbury, 2005; Angel, 2008). Market forces, promotes a ‘leapfrogging’ pattern, where developers favour greenfield sites because they are simpler to prepare for construction and thus more profitable (Jenks and Burgess, 2009). Policies such as mortgage, loans and planning regulations encouraged urban dispersal (Duany et al., 2001; Arbury, 2005). Planning concepts such as the linear city, the Garden City, satellite towns, superblocks and the Broadacres theory, allowed development to take place in any direction. Finally the tremendous increase in population and migration to urban settlements has been an important factor influencing urban expansion, where in the 19th century less than 10 per cent of the world population lived in cities, by 2050 it is expected to be 70 per cent. In summary, urban expansion was promoted by what Newell (1977; from Aziz Al-Rahman, 1988: 34-36) has called the two dynamics movements. The first is the ‘Suburban Pull’ where the suburbs act as a counter magnet to the central area of the city because of rise of income, relatively low price of land and car ownership. The second called ‘Central Area Push’, where the city’s CBD imposes a push effect on land uses because of unpleasant environment in the inner cities.

Advocates of urban sprawl claim there are many positive aspects of horizontal expansion (Arbury, 2005). Urban sprawl has helped people to have access to land because it is less expensive and the large lots are available for single family dwellings away from the alleged problems in the city centre (Burchell and Mukherji, 2003). In addition, urban sprawl is attractive and provides benefits to both developers and people (Gordon and Richardson, 1997; Carruthers and Ulfarsson, 2002). However, urban sprawl is a controversial issue amongst planners and has been increasingly criticised (Garcia and Riera, 2003: 1925). The 1970s rise of the modern environmental movement claimed that urban sprawl creates a wide range of negative social and environmental impacts (Bengston et al., 2004). Calthorpe argues that urban sprawl development has had its day and the conventional suburban dream is becoming more incompatible with today's culture, owing to changing household structures, family types, workplace environments and increasing environmental concerns (1993).

Urban sprawl has been criticised in planning literature because it has had negative impacts on the built environment and the quality of life (Carruthers and Ulfarsson, 2002; Arbury, 2005). Bengston et al. (2004: 272) argue that the costs of sprawling development have started to outweigh the benefits by generating traffic congestion, loss of open space and a generally inefficient use of land (Nechyba and Walsh, 2004; Arbury, 2005). In terms of the environment, urban sprawl consumes land, water and energy leading to destruction of natural resources and unsustainable environments (Clarion Associates, 2000; Arbury, 2005; Jenks, 2009b). In addition, urban sprawl leads to air and water pollution owing to the high level of automobile trips (Clarion Associates, 2000). In terms of health, sprawl discourages walking and in doing so leads to the increased possibility of developing many physical ailments such as heart disease, obesity, diabetes and hypertension (Kelly-Schwartz et al., 2004; Badland and Schofield, 2005). In terms of economics, low-density sprawl has been highly inefficient, especially, in respect to the cost and provision of infrastructure and public services (Clarion Associates, 2000; Carruthers, 2012). Also, sprawl increases the costs of transportation with suburban inhabitants needing two cars to fulfil the suburban lifestyle for many families (Bengston et al., 2004; Arbury, 2005).

Arbrey suggests the impact of urban sprawl on social aspects is perhaps the most damning evidence of its unsustainability (2005). It has reduced social equity and led to individual isolation, forms of exclusion and segregation, owing to exclusionary housing markets and an inability to adapt to changing lifestyles (Arbrey, 2005). In addition, sprawl has been linked with socio-economic segregation, as local residents oppose any plans to build more affordable housing in their neighbourhood because of the adverse impacts it may have on their property values (Duany et al., 2001).

Thus, it becomes clear that continuing the pattern of urban sprawl development into the future will be highly unsustainable (Arbrey, 2005). According to the UN-HABITAT (2013) urban sprawl is one of the main issues to be addressed in shaping the 21st century cities and the increasing spatial scale of cities.

Second: smart growth

Governments, especially, at the local level were prompted to adopt a number of additional tools in an attempt to control urban expansion and its implications (Bengston et al., 2004). Sustainability is the world topic for contemporary city development (Shin, 2010). It has become an urban planning goal over the last decade and a half (Bramley and Power, 2009). Elkin et al. (1991) suggests that a sustainable city form must be appropriate for walking, cycling, preserving the countryside, creating efficient public transport and encouraging social interaction. One of notable options to achieve sustainability has been the concept of compact cities (Gunn, 2003), also known as ‘New Urbanism’, that emerged during the early 1990s in the USA as a reaction to conventional suburban development.

Since 1990 onwards, much of the planning literature focuses on the compact city as a concept design to implement sustainable development within urban environments and to counteract the negative impacts of urban sprawl (Arbrey, 2005). The key factor for compact development is by getting the right policies, management and form for cities (Jenks et al., 2010). The compact city is a radical shift in urban design for most cities in the USA, Australia and New Zealand, thus, it would be naïve to expect that these changes can be easily implemented (Arbrey, 2005).

The process of achieving compact development is usually termed ‘intensification’, ‘consolidation’ or ‘densification’, which involves an increase in the population density in urban areas (Burton, 2000). The compact city paradigm focuses on urban intensification, encourages mixed-use development and focuses on the role of efficient public transportation and urban design quality (Arbury, 2005). The location of mixed-use buildings around public transport modes are often referred to as Transit Oriented Developments (TOD) (Dieleman and Wegener, 2004). This pattern is based on a highly interconnected street network (often in the form of a gridiron), designed to accommodate the pedestrian and bicyclist as equals with the automobile (Ryan and McNally, 1995). However, there are few opportunities for a compact city to be created from scratch (Arbury, 2005: 46). Designers and policymakers have to face the significantly more difficult challenge of retrofitting sprawling cities to meet the demands and ideals of the compact city (Jenks et al., 2010).

Europeans are considered the strongest advocates for the compact city (Jenks et al., 2010). During the early 1990s, the compact city policies were enthusiastically implemented by planning authorities throughout Europe, especially, in the UK, as they were linked to the goal of ‘sustainable development’ (Arbury, 2005). In the USA, the public sector created a wide range of policies to manage urban growth and protect open space from development. The two approaches of urban containment policies are ‘greenbelts’ and ‘urban growth boundaries’ (UGBs) (Bengston et al., 2004). A greenbelt refers to a green space such as forests or farmlands that surrounds a city as a permanent barrier to urban expansion. This growth management approach applied in the UK but rarely been used in the USA (Hall, 1974; Bengston et al., 2004). UGB is used in contrast to greenbelts, where it is not a physical space but a dividing line to separate urban areas from rural land, while also working to ensure urban containment (Steiner and Butler, 2012). In 1973 the state of Oregon applied UGB for Portland, which has proven to be effective tool in revitalising the city and making it liveable (Dieleman and Wegener, 2004).

New Urbanism concept has subjected to criticism. Commentators, such as Breheny (1992a; 1996), Gordon and Richardson (1997), Dieleman and Wegener

(2004) and Thomas and Cousins (2010), remained uncertain of the smart growth benefits on urban life quality. Breheny (1992a and b) has refuted the idea that compact city is the solution to settlement ills, which has been a provocative position to take up (Thomas and Cousins, 2010). Jenks critiques the ideological position which views the compact city as a universal panacea (2009a: 347). Breheny (1997: 2010), focuses on three problems: whether compact city can actually deliver its promises; or whether the compact city model can be feasibly implemented and finally whether the resulting environment is acceptable to the local populations. According to Arbury (2005: 54) “where compact city policies had been implemented, follow-up studies began to show that the predicted benefits were not happening as they should have been”.

High-density development can result in very little open space and a congested cityscape. If population exceeds the system’s capacity, then high-density can easily overload the system and deteriorate services. Also, high-density frequently causes traffic congestion (Cheng, 2010) as in Bangkok, where there is low road capacity. Madanipour emphasises high density as potentially jeopardising the quality of urban life (2007). Furthermore, plans to regenerate downtown areas through densification frequently fail (Gordon and Richardson, 1997).

The environmental argument that the compact city ‘saves’ the countryside from greenfield development and the belief that the number of car trips per person has decreased with higher density, have both been questioned by empirical evidence. Research conducted in three London Boroughs showed no reduction in car use and the environmental gain achieved from leaving the countryside undeveloped is often rejected as inconsequential (Williams, 1999: 172).

Regarding health aspects, Burton (2000) believe that health risks are associated with densification and mixed-use developments. For Roaf (2010), simply putting so many people together increases health risks, as disease spreads rapidly through densely packed populations. In 2003, Severe Acute Respiratory Syndrome

(SARS) spread rapidly between people in Hong Kong's Amoy Gardens, especially, residents in high-rise apartments (Roaf, 2010; Wong, 2010)³.

From an economic perspective, there are contradictory claims about the effects of compact development as capable of providing affordable housing (Burton, 2000). According to Song, there is an indication that the compact city's policies hold the potential to raising housing and land prices, as well as construction costs, where low and middle income families will priced out (2012). According to Breheny (1992b: 143) "It is to be expected that congestion and property costs will rise in the compact city". This is owing to improved amenities and when land or housing demand outstrips available supply (Song, 2012; Steiner and Butler, 2012). Portland was rated the 'least affordable' city in the USA in the late 1990s.

From the social point of view, there is a scarcity of studies that evaluate a sense of community in smart growth developments. Some scholars argued that high-density can cause a lack of visual privacy, which can lead to social problems (Cheng, 2010; Lawson, 2010), especially, in Muslim culture in the Middle East (Pedersen, 1997; Lozano, 2007). In addition, McLaren (1992) and Williams (1999), state that high-density developments are often associated with high levels of crime. Watson et al. (2003) believe mixed-use affordable housing increases the mix of different income strata and ethnic groups in a way that many communities may find frightening. Classic urban theory suggests that living in high density developments results in social disorganisation and psychological problems (Adams, 1992).

According to Dieleman and Wegener, smart growth policies are difficult to implement (2004). This could be attributed to the complexity of the compact city concept (Arbury, 2005), lack of efficient public management, inappropriate planning regulations and planning policies (such as incentives and taxation) and to the lack of acceptability of the compact city concept (Bengston et al., 2004; Song, 2012). In terms of urban management, a question is posed by Acioly (2009) "Can urban management deliver the sustainable city?". According to Arbury, the local planning authority should identify various 'areas of change' and 'areas of

³ Amoy Gardens is a complex of 19 apartment blocks, typically have 33 storeys per building, with eight flats per floor with and an average flat size of approximately 45 square metres (Wong, 2010).

stability', where intensification should and should not take place (2005). The lack of enforcement and/or funding support, lack of participation and lack of evaluation and monitoring of smart growth progress, might be the reason behind the ineffective implementation of planning policies and concepts. Thus, it is important to have a strong local government, improve efficiency of the planning institution (Song, 2012).

The local government should modify land use designations that control use, intensity and density to ensure there is an adequate supply of buildable land for a number of projected years (Steiner and Butler, 2012: 381). Steiner and Butler state:

The important detail of an urban growth area is that land-use regulations applied to land within it must allow existing or proposed land uses at densities and intensities sufficient to permit urban growth that is projected for a specified period (2012: 379).

Thus, it is important for planners to prepare a comprehensive plan with transportation, adequate services and public facilities to support smart growth (Steiner and Butler, 2012). In addition, it is important to improve the efficiency of planning policies and tools, as well as to make them clearly visible in the pursuit of smart growth aims (Arbrey, 2005; Song, 2012). The influence of compact development on residents' quality of life varies depending on the context and it is sensitive to the spatial scales at which urban form is examined (Yang, 2008; Song, 2012). For instance, the general preference in the USA and New Zealand is for large houses and lots (Adams, 1992). Therefore, to successfully implement sustainability in future urban developments, either these cultural attitudes will need to dramatically change, or developments will need to be carefully designed to be more economically, environmentally and socially sustainable, but at the same time attractively appeal to consumers as a place to live (Arbrey, 2005: 44). In addition, smart growth might be achieved through public participation, where people are involved in the decision-making.

2.2.5 Does density matter and how?

Both sprawl and compact city promoted benefits and have had their own implications on urban environment aspects. Urban sprawl is attractive to individuals (both residents and developers) even if it is unsustainable at regional

and city levels. Sprawl has become part of the culture of cities in the developed world, where people largely prefer a large house on a large lot to most other housing options (Arbrey, 2005: 17). Many surveys illustrate strong preferences for suburban living (Gordon and Richardson, 1997). Australia, a more recently settled country, has a very large supply of unoccupied land that has been attracting sprawl. The Australians do not see the point in intensification when they have surplus land. In addition, they point out that their dwellings, in comparison with dwellings in Japan, are bigger in space and cheaper in price. It is thought that living in the suburbs is more conducive to happiness, owing to lower population density, lower crime rate and more a stable population, in comparison with highly urbanised areas (Adams, 1992). However, according to Gordon and Richardson (1997: 97) “in a world of heterogeneous tastes, there are people who prefer alternatives to the dominant decentralized life style”.

On the other hand, other urban planning literatures do not support urban sprawl, where Carruthers and Ulfrasson (2003) and Hasse and Lathrop (2003), amongst others, have emphasised the negative impacts of sprawl on land resources and cost of public services. It seems that the issue, from the perspective of Cullingworth and Caves (2009), is that people want to encourage growth, while at the same time want to protect the environment and enhance their quality of life. However, it seems that according to Calthorpe & Fulton (2001: 274) “The issue is not density, but design, the quality of place, its scale, mix, and connections”. Cheng (2010) argues that to increase the benefits and avoid the negative impacts of high-density development, there is a need to integrate and coordinate between planning strategies, provision of public transportation and density control. For instance, in the USA, one of the most contentious planning conflicts is that decisions on density and transportation are often made at odds with one another (Lozano, 2007). Thus, future zoning needs to acknowledge the importance of density and transportation systems in tandem (Elliott, 2008: 79).

2.2.6 Urban design and new ideas

As a result of the challenges facing the compact development concept, recent literature has focused on creating a diversity of urban solutions and forms that likely fit with the area they are to be implemented in (Guy and Marvin, 2000).

According to the UN-HABITAT (2013: 11) “Well planned and designed cities can generate better financing, higher levels of wellbeing, and better employment opportunities”. Arbury argues:

Strong urban design controls can help overcome the negative stigma associated with urban intensification, and therefore move towards a situation where higher density housing can be individually attractive, in a way similar to urban sprawl, but because of its higher densities be far less communally destructive (2005: 59).

Williams et al. (2000) suggest that instead of focusing on one specific urban planning approach, such as compaction, there is a need to recognise a diverse range of urban solutions for the future. Thus, there is a need to focus on the processes, functions and design of the city as well as how they contribute to sustainability, rather than just focusing on density, the dominate approach evidenced in the planning literature of the 1990s (van Der Burg and Dieleman, 2004). According to Arbury, (2005: 61) the New Zealand Urban Design Protocol has drawn seven important design guidelines to create high quality urban design, which are as follows:

1. Context: seeing buildings, places and spaces as part of the whole city.
2. Character: enhancing the distinctive character, heritage and identity of urban environment.
3. Choice: ensuring choice and diversity for people.
4. Connections: enhancing links between networks for people.
5. Creativity: encouraging innovative solutions.
6. Custodianship: ensure that design is environmentally sustainable, safe and healthy.
7. Collaboration: communicating and sharing knowledge among stakeholders (i.e. sectors, professions and with communities).

2.2.7 Urban spatial planning in developing countries

Scholars such as Angel (2008), Jenks (2009b) and Sorensen and Okata (2011), and organisations such as UNDESA and UN-HABITAT predicted that developing cities will experience a massive growth in urban population. According to the UN-HABITAT (2009: 15) the total urban population of the

developing world will increase more than double from 2.3 billion in 2005 to 5.3 billion in 2050. It is estimated that within 30 years, for every one person living in cities in the developed world there will be four in the cities of developing countries (Jenks, 2009b: 2). This increase will be accompanied by high demand on urban services and housing. This rapid urbanisation, has resulted in urban sprawl becoming a developing as well as developed world problem. In the Ghanaian city of Kumasi urban growth continually encroaches cocoa farms and market gardening areas (Tipple, 2000). However, while some developing world cities suffer from urban sprawl, others exhibit both urban sprawl and compactness.

The majority of Egyptian cities are characterised by a high level of compact form, where it is common to find an informal building with six-storey and 100 per cent plot coverage, coupled with mixed-uses and narrow streets with inadequate accessibility and traffic congestion. Cairo and Giza are examples of the adverse impacts that the compact city can deliver with; air and noise pollution and lack of open public space that damage health and constitute a threat to sustainable development (Acioly Jr, 2009). From Ibrahim and Shaw's (2009) perspective these issues are not related to compact form itself, but to the spontaneous informal compaction owing to socio-economic aspects, the absence of efficient management that can enforce basic urban planning standards and minimum development control, developers and non-appropriate planning standards. This is not helped by a failure to introduce an efficient transit system and public transportation (Acioly Jr, 2009).

Conversely local governments in Brazilian cities such as Curitiba and Sao Paulo are actively using a range of urban management apparatus and are engaged with policies that result in compact form and the optimal use of infrastructure and land (Acioly Jr, 2009). Curitiba is acclaimed internationally to be a friendly environmental city (Acioly and Davidson, 1996), where it links public transport, housing and land use in an intelligent intensification strategy that support the city to preserve energy and ease congestion (Acioly Jr, 2009). In addition, zoning regulations are becoming popular amongst city planning authorities with an efficient public transportation. Although, Curitiba has the second highest level of

car ownership in Brazil, it also has the most efficient public transport. The city promotes mixed-use and higher FAR in plots located alongside the structural axis. The FAR decreases with distance from the public transport network, resulting with high-rise and high-density built areas, low-rise and low-density environments and urban parks containing public services and amenities (Figure 2.5).

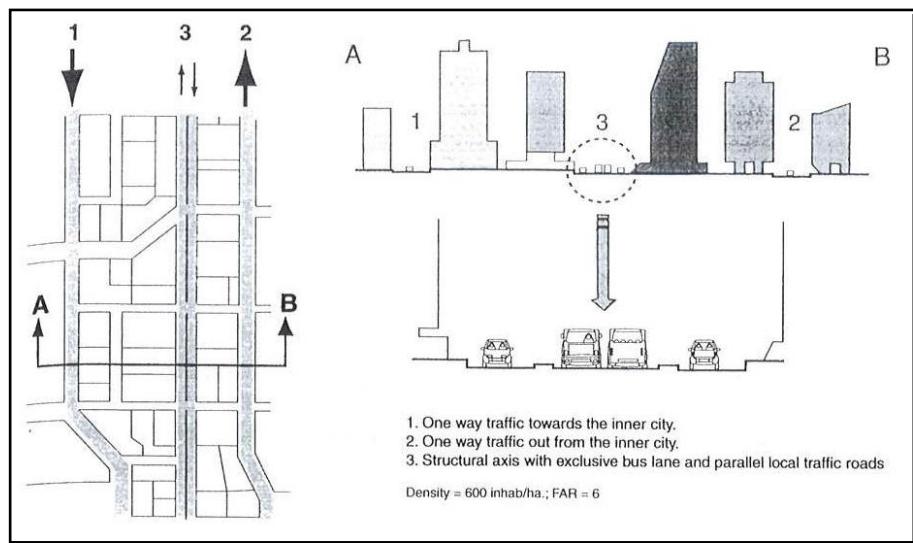


Figure 2.5: The form and system in Curitiba.

Source: Acioly Jr (2009: 133)

Another widely used policy in Brazilian cities is the ‘Transfer Development Rights’ (TDR), that has become popular as a revenue source and as a tool for redistribution. TDR contains the right to develop or use a parcel of land with transferred to another parcel or another portion of the same parcel (Figure 2.6). This is done as a way to allocate the parcel for a high density development, or preservation of open space, ecologically sensitive areas, or historical buildings from development without paying compensation to the land owner (Acioly Jr, 2009). The success of compact development in a city like Curitiba is attributed to proper management capacity, participation and accurate knowledge of the built environment. In addition, densification could not take place without a cautious study of the impacts of intensification on infrastructure, transit and public services.

The aforementioned argument makes it clear that cities are complex in terms of different urban experiences, which has led to various problems in the search for

solutions and makes the task of development a daunting one (Jenks et al., 2010). In response, Bengston et al. (2004: 273) question, “How can policy makers and planners design growth management programs that are effective in accomplishing their goals?”

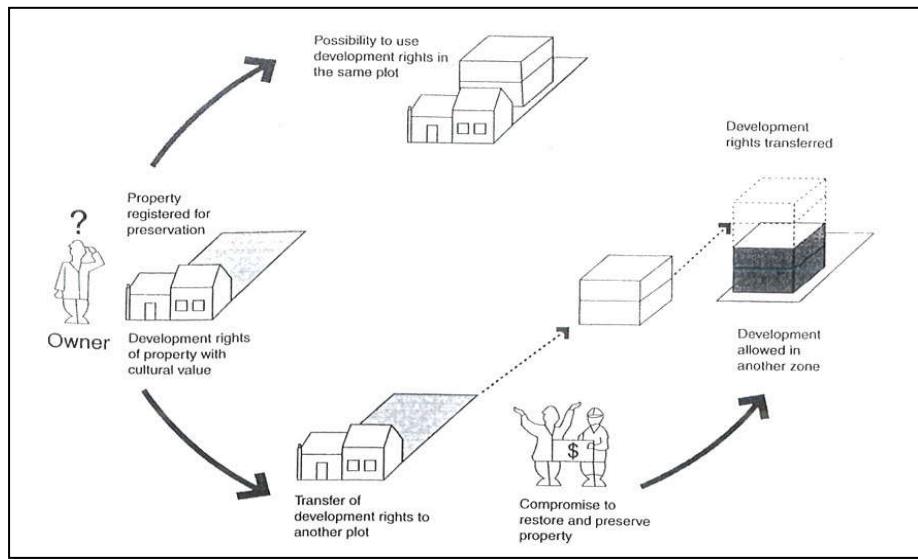


Figure 2.6: Transfer of Development Rights in Curitiba.

Source: (Acioly Jr, 2009: 134)

2.3 Planning Regulations and Good City

Good regulations are the basis of effective urban governance, management and planning (UN-HABITAT, 2013: 6). Development controls are the generators of changes to urban form (Sorensen, 2011). Figure 2.7 shows that Lichfield (1979) finds three categories of development controls. The first is direct controls over development, with and/or without taking ownership of the land and controlling development by direct participation. The second is indirect control over development, called fiscal controls (Aziz Al-Rahman, 1985) or fiscal zoning (Evans, 2004), which aims to increase government revenue through an array of taxation methods, property tax and direct charges are the main two large sources of local revenue (Rakodi, 2001). Jenks and Burgess (2009) proposed taxation as a method to encourage development of vacant plots and prevent ‘leapfrogging’ development of the rural areas. Lastly, there are general controls, which include a range of policies influencing the land market, such as development coordination and land registration (for more details see Litchfield, 1979 and Aziz Al-Rahman, 1985).

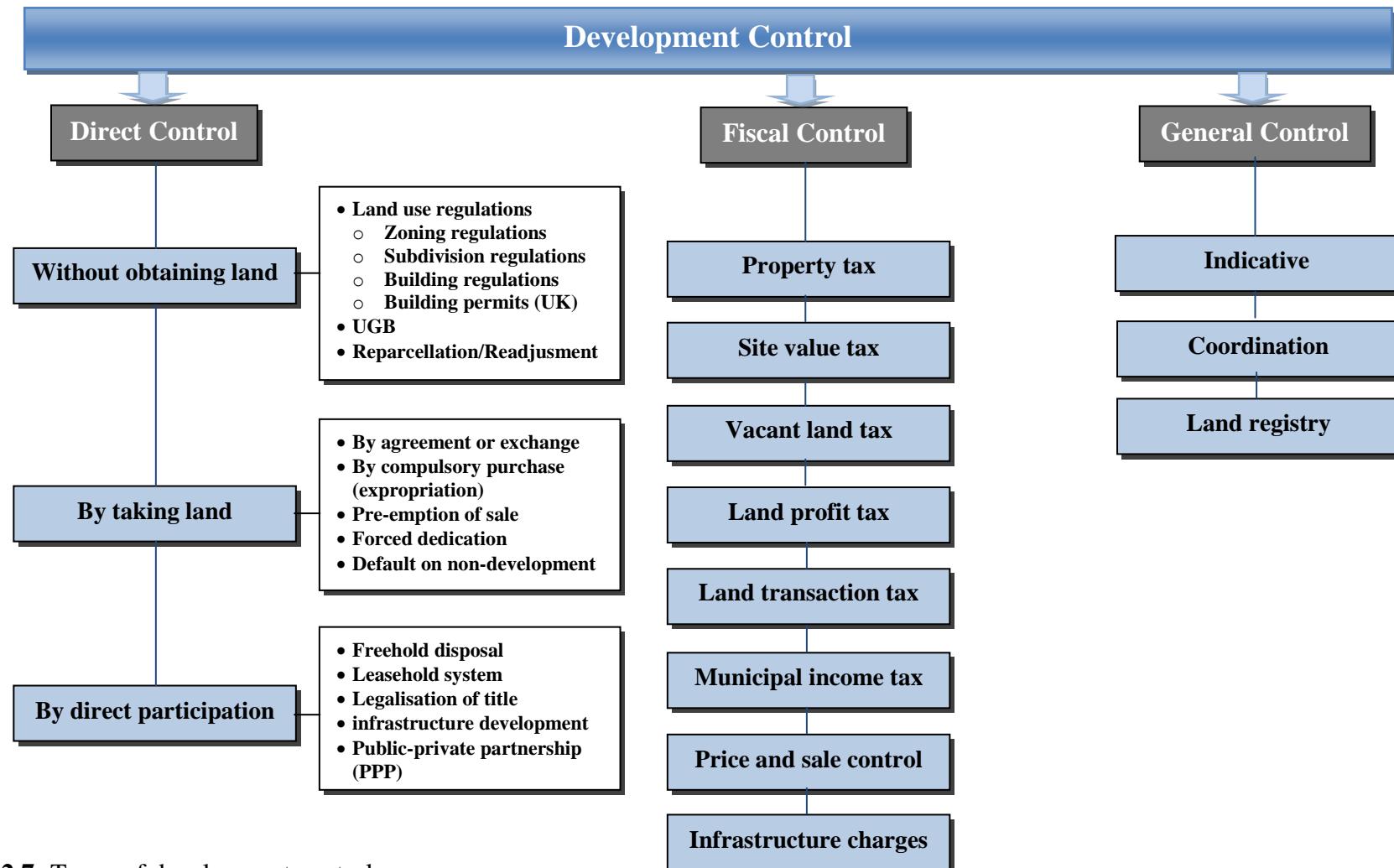


Figure 2.7: Types of development control.

Source: Author.

According to Anju (2007), land use regulations are exercised by local government, as a powerful legal apparatus to control, manage, shape, transform and direct the built environment in order to provide a better quality of life for citizens. The British planning system employs use class orders and building regulations to realise the development set out in the master plan. Almost all new development must go through the development application procedure to obtain planning permission for development. The UK system in adopting use classes also controls change of use class in existing buildings. According to Tipple (2001: 4), a change from one use to another within any class is not regarded as development but still requires planning permission.

Land use regulations in the USA include zoning, subdivision and building regulations, which Lichfield (1979) classified as mechanisms that have direct control over development without gaining ownership of the land. Both zoning and land-subdivision regulations together provide the framework for the approval of building permits, so that the eventual physical development is consistent with the master plan (Arimah and Adeagbo, 2000). The zoning system is also used in France, Germany, Netherlands and Hong Kong (Rakodi, 2001). Zoning regulation, in its simple form, divides a local government's jurisdiction into districts or zones which are subject to different regulations (Roeseler and McClendon, 1986; Evans, 2004).

Zoning regulation regulates the type of land uses, intensity and density of development, height of the building, bulk, setbacks, FAR, placement of the structure amount and design of parking, lot size and site coverage (Pogodzinski and Sass, 1991; Carmona et al., 2010). Zoning regulations are an essential tool that aim to deal with market failure, control development, sustainability and the insurance of health and safety for residents and the general community welfare (Arbury, 2005; Baffour Awuah and Hammond, 2014). Zoning regulations include: the zoning map (master plan) and the zoning ordinance (the text) (Patterson, 1979; Steiner and Butler, 2007). Both are adopted, applied and enforced by local governments. In addition, land use regulations should be interrelated with business and social life (Healey, 2006).

2.3.1 Other efficient methods of zoning regulations

The two new efficient methods for zoning regulations are: incentive or bonus zoning, and form-based code (FBC). Incentive zoning has been used in cities to encourage infill and direct development into areas that are already urbanised, in order to redevelop them and make urban containment policies effective (Bengston et al., 2004; Song, 2012). One of the incentives is TDR, which has been used in Curitiba, Brazil. A density bonus is another incentive that offers developers a bonus to build over the maximum permitted residential density if they agree to construct affordable housing below market-rate housing units (Cullingworth and Caves, 2009). Other incentives to induce smart growth are the expedited development application processing or development fees waiver for smart growth projects (Cullingworth and Caves, 2009). According to Song, “One set of tools includes a waiver or reduction of development fees, subsidized land costs, tax exemptions or reductions, and improvements to infrastructure in a desired development zone” (2012: 421).

FBC is an alternative approach to conventional zoning, where it intended to focus on ‘place making’ rather than uniform set of rights for each plot (Elliott, 2008). FBC is considered a tool to implement the concept of ‘New Urbanism’ and to improve the quality of built environment and communities, as well as fight urban sprawl and its detrimental impacts (Elliott, 2008; Parolek et al., 2008). FBC is presented in both words and drawings (Anju, 2007), which make it a more concise, organised and powerful vision of the place (Figure 2.8) (Cullingworth and Caves, 2009).

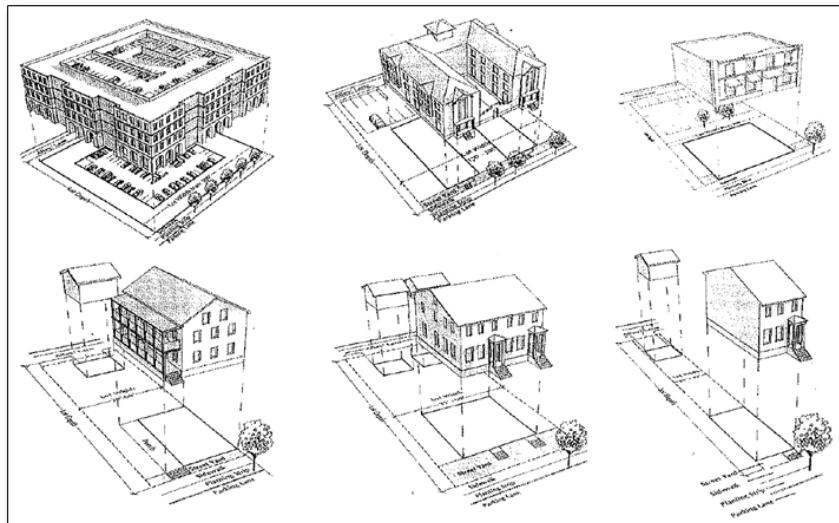


Figure 2.8: Form-base code illustrated through diagrams.
Source: Parolek et al. (2008: 269)

2.3.2 Understanding density

Density is an important element in building urbanity⁴, and its measurements are essential to understanding need thresholds for different services and activities to function properly in the city (Lozano, 2007). According to Cheng (2010), building density plays an important role in the shaping of the urban form and has attracted wide interest owing to the pressure of land scarcity and increase in urban population. However, it is important to distinguish between density and intensity, where the former deals with the number of people or buildings and the latter deals with how people use an area-suggesting interaction (Gunn, 2003). Density varies considerably from one country or city to another (Evans, 2004; Bayoumi, 2009), where densities in developed cities are typically much lower than those of developing cities, especially, in the core of the city (Richardson et al., 2009). The 1996 United Nations Conference on Human Settlements concluded that there is no universal recipe for urban densities that will deliver an ideal density for residential development (Acioly Jr, 2009). According to Cheng, there are two perspectives regarding density – namely, physical and perceived density (2010: 3).

⁴ According to Lozano urbanity is, “the potential capacity of the inhabitants of a town or city to interact with a sizable number of people and institutions concentrated in that town or city” (2007: 313).

First type: physical density

This type of density is a quantitative and measurable spatial indicator, as the concentration of individuals or physical structures within a specific scale of geographical reference can be accurately measured. It includes people density which is the number of people per given area and building density which is the ration of building structure to an area (Cheng, 2010)

Measuring residential density

There is no agreement on a fixed definition of net and gross area, thus definitions vary between cities and countries. For instance, the net residential area in the UK is land covered with residential development, gardens and other spaces that are physically included, in addition to half of the width of the adjacent road (TCPA, 2003; Cheng, 2010). While in Hong Kong and some states in the USA, net residential area includes parcels designated for residential use and excludes internal roads, parks and other public lands (Churchman, 1999; Hong Kong Planning Department, 2003; Cheng, 2010). The measure of gross residential density takes into account the residential area in its entirety; but it is difficult to define the extent of these residential areas, where some developments include lands for serving a wider neighbourhood and others may takes into account non-developable land such as steep slopes (Cheng, 2010). There is also occupancy density and occupancy rate. Occupancy density is the ratio of the number of occupants to the floor area of an individual habitable dwelling, while occupancy rate is opposite of the occupancy density (i.e. ratio of floor area of individual dwelling to number of occupants). The higher occupancy rate the larger the habitable area for individual occupants (Cheng, 2010).

Second: Measuring building density

Building density is measured by the plot ratio (Floor Area Ratio (FAR)), which has been extensively adopted as a zoning ordinance and development regulation to control and regulate building bulk and development densities (Madanipour, 2006; Cheng, 2010). FAR represents, the maximum amount of floor space that can be constructed on a given plot (Cullingworth and Caves, 2009: 96) and is expressed as a ratio (Figure 2.9). The ration is arrived at by dividing the total floor area by the total plot area (Gross Floor Area/Plot Area; 3000 square

metre/1000 square metre = 3) or by multiplying the number of floors by the plot coverage (i.e. No of Floors * Plot Coverage/100; 5 * 60/100= 3). Various zoning categories contain different FAR, specified in the master plan (Cullingworth and Caves, 2009; Cheng, 2010).

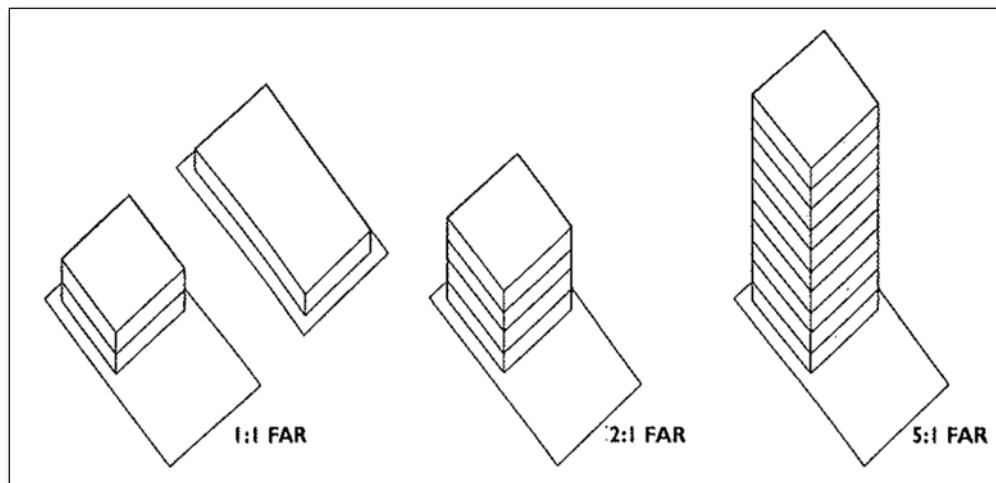


Figure 2.9: The concept of FAR.
Source: Steiner and Butler, 2007: 365.

Site or plot coverage is another zoning regulation standard adopted to prevent over-building and preserve areas for landscaping (Figure 2.10a and 2.10b). It is determined by the proportion of the site area occupied by a structure (Cheng, 2010). According to Steiner and Butler (2007), it is expressed as a percentage of plot area. According to Anju (2007), the two regulations combined (i.e. FAR and site coverage) control building height.

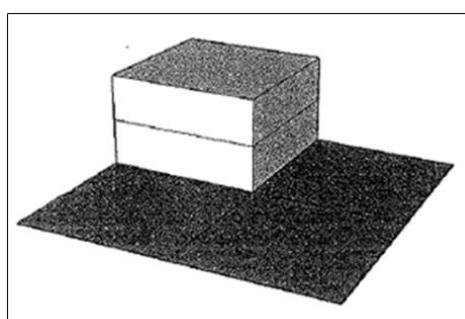


Figure 2.10a: Plot coverage = 25 per cent. Source: Cheng (2010).

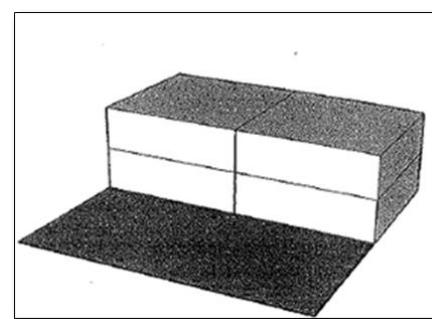


Figure 2.10b: Plot coverage = 50 per cent. Source: Cheng (2010).

The same density can be obtained with different types of building and the same type can be used to gain different densities. Figure 2.11a and 2.11b shows the transformation of a building form from a single-storey building to a multi-storey building, where both have the same FAR but the proportion of site coverage decreases (Cheng, 2010: 9).

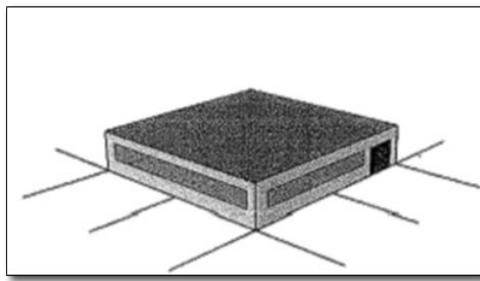


Figure 2.11a: FAR = 1, Site coverage = 100 per cent.
Source: Cheng (2010).

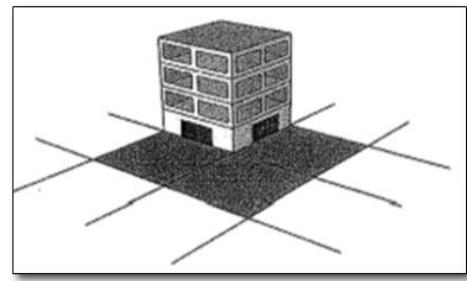


Figure 2.11b: FAR = 1, Site coverage = 25 per cent.
Source: Cheng (2010).

Second type: perceived density

It is subjective and defined as an individual's perception or estimate of the number of people that exist in a specific area (Rappaport, 1975; Cheng, 2010). According to Gunn (2003: 43) Freedman linked density with crowding. According to Cheng (2010: 12) perceived density emphasises the interaction between the individual and the space and/or environment and between the individuals within the space and/or environment. It consists of spatial density and social density, where the former describes the relationship among spatial elements such as building height and spacing, while the latter refers to social interaction, which includes size, strata, nature and socio-cultural norms of the group involved (Cheng, 2010). Generally speaking, the primary problem of high spatial density is too little space, while the main issue in social density is too many people (Cheng, 2010). Therefore, the impact of social density is more significant than spatial density (McClelland and Auslander, 1978; Cheng, 2010).

2.3.3 The impacts of zoning regulations

All planning regulations have pros and cons in their outcomes. According to some scholars, zoning regulations are considered an antidote to planning issues, achieve individual and group interests, aim to promote the community's health,

safety and welfare (Anju, 2007; Baffour Awuah and Hammond, 2014) and meet the development needs of different parts of society and its economy (Payne et al., 2004). Zoning regulations are an important tool to control urban form and control the construction of buildings according to Anju (2007). While zoning regulations provide benefits to the community, they are not without negative impacts.

According to Healey (2006), zoning regulations in particular area can be damaging. The negative impacts of zoning regulations on built environment were realised in the 1950s (Parolek et al., 2008). Early zoning regulations caused land use segregation and urban sprawl, which in turn had negative impacts (Parolek et al., 2008) while others have argued that the regulations imposed restrictions on landowners, such as setbacks hindering fully developing plots precluding any community-level benefits (Payne et al., 2004; Jaeger, 2006). From the social perspective, zoning regulations in the USA have created social segregation, socio-economic distinctions and excluded people who do not fit a certain group from neighbourhoods (Berry, 2001; Healey, 2006). Therefore, there is a need for an impact analysis to measure the impact of a proposed use on public facilities so that the new development will not overwhelm a community's resources (Salsich and Tryniecki, 2003).

Planning regulations have created land and housing market distortion (Rakodi, 2001). The complexity of the regulations and its administrative procedures increase housing costs, making it difficult for the market to meet housing demand (Payne et al., 2004). Ihlanfeldt (2007) conducted a survey of more than 100 Florida cities applying restrictive regulations and found that planning regulations have had significant impacts on the prices of housing.

The critical question in the debate is whether we need zoning or not? Although, according to Berry, "municipal zoning has become one of the most widespread institutions of urban governance in the United States" (2001: 251), not all American cities apply zoning regulations, such as Houston in Texas, where development is based on different ordinances and policies such as covenants (Cullingworth and Caves, 2009). According to Qian (2008) Dyckman states that deregulation, decontrol and market pricing are the new models for land development and delivering public services. However, according to Berry (2001)

Bernard Siegan found that land use outcomes and economic incentives for both zoned and non-zoned cities are more or less the same. The major difference Siegan found is that the cost of multi-family housing in non-zoned cities, such as Houston, is lower than zoned cities such as Dallas. Jaeger believes that without zoning regulations, developers would build anywhere and everywhere without paying attention for roads, school and other community needs (2006). Rakodi (2003) asserts that market mechanisms left unchecked lead to a risk of inequality and inexorably to sprawl, where developers are concerned with profits (Cullingworth and Caves, 2009).

2.3.4 Zoning with compensation

Developers can be compensated for any harm such as the devaluation in the value caused by the government restrictive zoning (Salsich and Tryniecki, 2003: 185). In addition, compensation must be paid to landowners when land use regulations take away a legal right such as interfering with the existing use, deny landowners reasonable use of their land and take the property (Salsich and Tryniecki, 2003; Cullingworth et al., 2006). However, according to Cullingworth et al. (2006) “A planning refusal does not of itself confer any right to compensation”. In some cases, planning permission was refused and no compensation was payable for the loss of development value.

2.3.5 Discretion

The discretionary approach is a notable feature of the UK system which is often contrasted with continental zoning approaches (Wu and Cho, 2007). It allows more flexibility in interpreting the public interest and the British system is highly regarded because it allows different requirements, challenges and issues to be addressed (Cullingworth et al., 2006). In addition, discretionary decisions can be made when specific development proposals arise in opposition to the policy of a generalised plan. The planning system in Canada also has more discretion in interpreting zoning regulations than in the USA, but this is balanced by the fact that zoning bylaws are themselves very detailed and specific, thus reducing the danger of bureaucratic abuse (Leung, 2007: 226).

2.3.6 Zoning enforcement

Zoning administrators enforce regulations by granting or rejecting building permits (Salsich and Tryniecki, 2003). In addition, they are required to stop violations and impose fines following civil enforcement proceedings. According to Payne et al. (2004: 111) zoning regulations must be enforced to achieve desired results as in the example below:

the Court of Appeals of New York upheld a decision by New York City to revoke an erroneously issued building permit after a building was constructed that was 12 stories higher than permitted by the applicable zoning district regulations. The developer argued to no avail that it was the city's mistake rather than the developer's that caused the problem. "Reasonable diligence by a good faith inquirer would have disclosed the true facts and the bureaucratic error...." In setting the case, the developer, the mayor, and a neighbourhood group agreed that the top 12 stories of the building would be removed, but the developer would be allowed to construct another (conforming) structure nearby, and both structures would be allowed property tax abatement (Salsich and Tryniecki, 2003: 214).

Although administrators have significant power to interpolate the vague and fill in gaps in local zoning regulations, they have no discretionary power to permit activities that do not align with the ordinance or to waive the literal terms of the regulations

2.3.7 Transferring and transplanting policies from one country's context to another

In a good city there should be a framework of governance including planning, which speaks to and considers the culture and values of the people. In this thesis one of the issues is to explore how planning policies which are rooted in a very different culture and values system are imposed on other countries, specifically, planning regulations developed in Western countries such as the USA being adopted in Islamic nations and in respect of this thesis in the city of Jeddah.

According to Hoyt (2006: 223) policy transfer or policy borrowing is a widespread practice, it is simply a term that describes the way that policies, ideas and practices in one context are used in other settings. Policies according to Tipple (1994: 429) "transferred across the world to an extent hitherto unknown". Policies have been transferred between developed countries and from developed to less developed countries. For instance, the USA imported the idea of a national income tax from the British and Europeans borrowed the concept of skyscrapers

and cloverleaf intersections from the USA (Hoyt, 2006). Through colonisation many planning policies and practices have been imposed upon developing world cities, such as Ibadan in Nigeria and Kumba in Cameroon (Njoh, 1995; Arimah and Adeagbo, 2000). Example of British based planning system such as the 1946 Town and Country Act can be found in many countries of the former British Empire, such as Nigeria (Arimah and Adeagbo, 2000).

Thus, policies that are transferred were designed for a society with a different historical, socio-cultural, economic and political context (Hoyt, 2006). Many policies have transferred from one context to another and have been adopted hurriedly instead of analysing the legislative, economic and political differences of the recipient country (Hoyt, 2006). In Nigeria most of urban policies during the colonial period were adopted without modifications by successive governments (Arimah and Adeagbo, 2000). Transferred policies do not necessarily impact in the same way in every country. Harloe and Martens (1984; from Clapham and Kintera, 2007: 157) ask: how policies can be transferred from one nation to another without considering differences in the economic and political context? Therefore, any attempt to transfer a specific successful policy across national borders, without considering all these different kind of elements, might fail or aggravate urban problems that it was intended to resolve (Clapham and Kintera, 2007).

In 1960s Britain imported a housing policy “Housing Co-ownership” from Scandinavia; however, it was found that the latter policy was inadequate because of the political and economic divergence between Britain and the policy origin countries (Clapham and Kintera, 2007). In the American city of Boston the Canadian concept of the business improvement district (BID) for urban revitalisation failed owing to local public resistance and dissonant legislative environment (Hoyt, 2006). Thus, resistance is considered another reason for transfer failure because what is suitable for some communities it might be a poor fit elsewhere (Healey, 2006).

In developing cities in Africa zoning ordinance was first introduced by colonial administrations without alteration and adaptation (Njoh, 1995; Arimah and Adeagbo, 2000). The imported regulations have failed to consider the norms and

values of developing countries and generally failed to respond to peoples' needs (Eben Saleh, 1997; Arimah and Adeagbo, 2000; Tipple, 2000, 2001; Al-Hemaidi, 2001). In addition, the foreign land use controls have a negative impact on socio-cultural, economic and development aspects of these nations. For instance, in Kumba land use control led to rising land prices within inner areas which in turn led to urban fragmentation that created increases in the distance between residential areas and places of work. In addition, it encourages informal sector employees providing informal housing (Njoh, 1995). According to Arimah and Adeagbo (2000) since the regulations are not responsive to people's needs, there will be a low compliance with the regulations. Thus, there is a general consensus among planners that the content and spirit of the foreign imported planning regulations are simply irrelevant to people's lives which in turn breeds contempt.

In Islamic cities, especially, in the Arab region the traditional buildings that harmonize with the culture have been replaced by foreign-designed regulations with tenuous links to Arab society (Moustapha, 1985: 143). For instance, North Americans prefer to arrange dwelling units in a row along straight streets, while in Arabic designs units must be arranged to form a circle, square or rectangle shape around a common area, the courtyard (Njoh, 1995: 348). Because the planning regulations are inconsistent and antithetical with the cultural orientation of the Islamic societies they have failed to consider the cultural norms and values such as privacy and failed to provide orderly and sustainable urban development (Moustapha, 1985; Arimah and Adeagbo, 2000; Tipple, 2000; 2001). Therefore, a successful implementation of a policy is more likely when the policy principles harmonise with those of the prevailing host culture and responsive to people's aspirations (Dimmock, 2000: 191).

It is important to know what people value and where values differ from culture to culture, city to city (Cullingworth and Caves, 2009). Although zoning regulations are concerned with privacy, the importance of privacy differs from culture to culture. For instance, it has been agreed that privacy is an important human need and that a lack of it often leads to behaviour than can be seen as anti-social, but within an Islamic context privacy is considered a crucial and important matter based on religious and cultural values (Eben Saleh, 1997; Arimah and Adeagbo,

2000). Therefore, Western zoning regulations are inappropriate for application in Islamic cities because they inadequately address issues of ‘privacy’ (Eben Saleh, 1997; Al-Hemaidi, 2001).

2.3.8 Factors leading to noncompliance with zoning regulations in developing countries

It seems that ignoring development controls is one of the attitudes or characteristics of developing countries (Angel, 2008). Baffour Awuah and Hammond (2014) believe that the success of land use planning depends on the level of compliance with its regulations. If developers and inhabitants do not comply with the regulations then it has a negative influence on their effectiveness. Arimah and Adeagbo (2000) assert that there are three factors that have caused low compliance with planning regulations: institutional context of urban development; the administrative machinery for plan implementation and the nature of the general public.

The institutional factor is the rigid top-down approach planning process that serves only the interest of a specific group and excludes the public from consultation or participation. In terms of administrative machinery, the level of compliance depends on the capacity of local planning authorities to enforce the regulations which is dependent on financial condition, the level of staff and the availability of necessary equipment to carry out activities such as monitoring of development and detection of violations. The costs associated with seeking permission and the time-consuming approval process and low violation fine results in some developers choosing to bribe officials or accept the low fine in preference to going through the correct procedures (Arimah and Adeagbo, 2000; Baffour Awuah and Hammond, 2014). In terms of the general public, Arimah and Adeagbo (2000: 291) conclude that poverty, illiteracy and apathy are factors that cause low compliance with planning regulations.

There is a general consensus among planners that the content and spirit of the foreign imported planning regulations are simply irrelevant to people’s lives which in turn breeds contempt. The regulations are rejected by actors in the urban development process because they either restrict what people feel to be their rights to freely use and profit from private property or because the regulations are

inadequate to their needs and values (Arimah and Adeagbo, 2000; Rakodi, 2001). Baffour Awuah and Hammond (2014) comment that the lack of awareness of the aim of the existing regulations constitutes another factor for low compliance with planning regulations.

2.3.9 Achieving effective planning regulations

To make planning regulations effective and acceptable to the public, it is important that planning regulations become more consistent and responsive to the prevailing country's socio-economic milieu and that they are not unduly restrictive (Arimah and Adeagbo, 2003; Payne et al., 2004). One way of achieving this would be to ensure that the zoning regulations go through a process of public participation and public hearing before adoption and implementation (Healey, 2006). Rakodi (2001: 216) suggested simplifying development control procedures, introducing more appropriate zoning regulations and increasing enforcement capacity.

2.4 Good Urban Governance and Good City

According to Davoudi (1995: 225) "City" has been associated with governance, where politicians and administrators manage and organise the city by expressing and translating their political philosophies into programmes of action. To ensure that planning institutions at the local level are willing to implement and enforce planning regulations there is a need for an adequate system of governance, where according to the former UN Secretary-General, Kofi Annan, governance is a key element in promoting development (UN, 1998). This section provides an insight about the variety of perspectives into governance with respect to its definitions, indicators and models for assessing the performance.

2.4.1 The role of planning institution

Local planning authorities usually provide two types of urban services: benefactor and regulatory services. Benefactor services are provided to improve the living condition in cities, which include basic infrastructure such as water supply, garbage collection and disposal. There will also be services such as educational, recreational and cultural facilities. The regulatory services enforce laws on all kinds of behaviour to ensure order and protect the general public (Garba, 2004).

In the context of urban planning, local planning authorities are basically the essential agencies that have the power, responsibility and resources to undertake planning function such as implementing and enforcing planning regulations (Arimah and Adeagbo, 2000; UN, 2006). According to Elliot (2008: 87) usually local governments have an interest when zoning to carry out the “will of the people”, interest in achieving planning goals for a “good city” and general interest in “good governance”. According to Gordon Brown (2003; from Cullingworth and Nadin, 2006: 15) the planning system plays an important role in our life, where it encourages strong vital communities and ensures employment. Local planning agencies therefore must address two questions “Is this development desirable?” and “Who gains and who loses, and by which mechanisms of power?” (Carmona et al., 2010: 335).

2.4.2 Transforming from government to governance

Government means the organisations and procedures of the public sector that include both formal political and executive functions, which dominated citizens that are supposed to be represented (Healey et al., 2002: 10). Governments are the framer of laws and provider of resources for welfare services. However, the challenge by the end of the 20th century was to give more attention to citizen voices concerned about their place (Healey, 2010). In addition, cities in the 21st century are facing serious dynamic fundamental economic, social and environmental challenges with new agendas of sustainability and competitiveness in a globalised economic and ecological system (Boogers and Denters, 2013). All of these have challenged traditional ways of urban management (de Magalhaes, 2002), where traditional city management has proved itself ineffective in responding to new realities (Rakodi, 2001; Healey et al., 2002).

Traditional planning has been judged to have failed to cope with rapid growth, to relate land use regulations to the wide context of urban development, to determine the location of land subdivision and settlements, to ensure that development complies with desirable standards and to respond to the needs of all social groups (Rakodi, 2003: 525). Thus, the ability of governments to deal with economic and social changes has been increasingly questioned (Leach and Percy-Smith, 2001). In response to these challenges, programmes for urban

regeneration, community development and regional territorial development have created new types of different institutional arrangement and adequate systems that allow stakeholders – citizens, organisations, firms and public agencies – to engage in effective collective actions (Lambert and Oatley, 2002; de Magalhaes, 2002; Boogers and Denters, 2013). What has emerged has been a transformation of formalised ways of doing ‘government’ into what is referred to as ‘governance’ (Healey et al., 2002; Coaffee and Healey, 2003).

Table 2.3 illustrates the differences between the traditional government and governance. The term ‘urban governance’ is broader than government, where it focuses on the mechanism and process of administration, management and implementation (UN-HABITAT, 2004). According to Davoudi (1995: 226) “the term “governance” directs attention to the proliferation of service delivery mechanism and regulatory systems which exist to devise and implement policies”. The term governance encapsulates a transformation in the control of formal state power towards shared power (Lambert and Oatley, 2002: 126). Urban governance includes both top-down and bottom-up approaches to support public involvement and collaboration among stakeholders, enhancing the transparency of decision-making and advancing urban policies and strategies (Shafiei, 2011: 13). Rakodi (2003: 524) states that governance “is about the relationships between the state and ‘civil society’”. The UNDP redefined governance as:

the result of interactions, relationships and networks between the different sectors (government, public sector, private sector and civil society) and involves decisions, negotiation, and different power relations between stakeholders to determine who gets what, when and how (2009: 5).

Table 2.3: The shift from government to governance. Source: Leach and Percy-Smith (2001: 5).

Traditional government	Governance
The state	The state and civil society
The public sector	Public, private and voluntary (or ‘third’) sectors
Institutions	Process
Organisational structures	Policies, outputs, outcomes
Rowing, providing	Steering, enabling
Commanding, controlling, directing	Leading, facilitating, collaborating, bargaining
Hierarchy and authority	Networks and partnerships

The World Bank has identified three aspects of governance: the form of the political regime, the process by which authority is exercised in the management of a country's social and economic resources, and the capacity of governments to design, formulate and implement policies and discharge functions (Weiss, 2000: 797). Good governance is the “effective implementation of policy and mechanism that are responsive to citizen needs” (World Bank, 1992: 6). Decisions and policies in good governance depends on the interactions of different stakeholders, where citizens have a voice and decision-makers are obliged to hear them (Shafiei, 2011).

The term governance has been criticised by scholars for its complexity and failure. According to Healey et al. (2002: 13) “Elander and Blanc conclude that governance does not replace government. Rather it is complementary and should be subsumed under representative democracy”. Their view is that decision-making in governance is not as open and transparent as the way that traditional government decision-making is now expected to be and crucial decision-making often take place behind closed doors.

Leach and Percy-Smith (2001) and Shafiei (2011) consider the new local governance is more complex than the conventional system of local government. This can be attributed to the fact that decisions are made based on complex relationships between many actors with different priorities (UN-HABITAT, 2002). It is also the case that urban governance is dynamic in nature and that it embraces e-governance, civil society and decentralisation. So the definition of governance is not straightforward nor is there hard and fast rules by which it should work (Shafiei, 2011). However, Sorensen states

The challenge for urban governance is to ensure that urban policies, public investments, regulations, and plans have positive impacts on quality of life for the majority, and produce a more equitable distribution of the costs and benefits of urban life (Sorensen, 2011).

The success or failure of governance is a relative issue that differ from place to another regarding political and cultural context. Thus, there is a need to evaluate governance. However, to evaluate governance processes there is a need to know the configuration of governance, how far the evolution of governance processes seem likely to sustain and restrict the opportunities available for flourishing in

civil society and what makes differences (Healey et al., 2002). Thus, a set of methods is needed to assess the performance of urban governance (Gunn, 2003).

2.4.3 Approaches to assess local governance

This section considers different models suggested and supported by various international aid agencies such as the UN-HABITAT, World Bank, Institute for Democracy and Electoral Assistance (IDEA) and UNDP to assess and measure the performance and capacity of the governance to govern and achieve policy goals with the aim of improving the quality of that governance and identifying gaps and obstacles in local policy implementation. As a result, a great number of indicators have been developed. Table 2.4 summaries significant methods that can be used to assess the local governance to improve our understanding of deficits and weakness in the local governance.

Table 2.4: Indicators of good urban governance by international agencies.

UGI	UNDP	World Bank	IDEA
<ul style="list-style-type: none"> • Effectiveness • Equity • Participation • Accountability 	<ul style="list-style-type: none"> • Strategic vision for the city • Legitimacy and leadership • Positive and active relationships between stakeholders • Appropriate institutional capacity • Participation • Human development 	<ul style="list-style-type: none"> • Public Administration • Public spending • Quality and quantity of delivering services 	<ul style="list-style-type: none"> • Citizens participation • Authorisation • Representation • Accountability • Transparency • Responsiveness • Solidarity

The challenge is to identify and select a comprehensive assessment approach that can be used to assess and measure urban governance mechanism, performance and capacity. To identify the capacity of local institution there is a need to assess urban governance principles which can be: effectiveness of economic facilities, equity of social opportunities, freedom to participate and accountability to guarantee transparency (Figure 2.12) (Nargan, 2005; Moretto, 2007). In addition, the approach must be tested, ensured to focus at the local level, compliance with the purpose and compromised both quantitative and qualitative methods (UNDP, 2009).

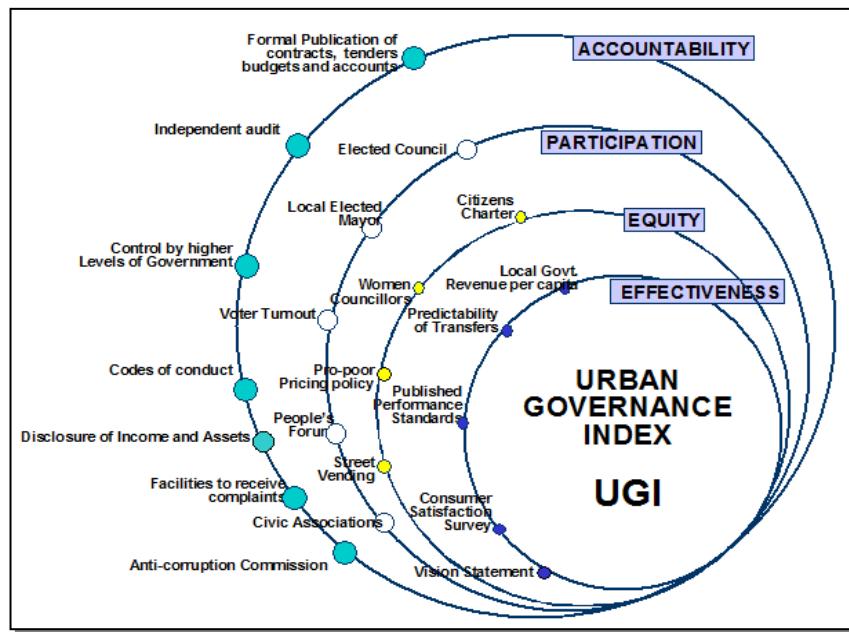


Figure 2.12: The main and sub-indicators of UGI.

Source: UN-HABITAT (2004)

Thus, cautiously considering different assessment approaches conducted by diverse institutions, this research will employ the UN-HABITAT approach – UGI – for assessment. This approach considers a holistic approach and help in identifying specific capacity-building needs and capturing gaps and constraints in policy implementation (Narang, 2005; Moretto, 2007; Shafiei, 2011). The justification and explanation of the UN-HABITAT model will be presented in detail in the methodology chapter (Chapter 3).

2.4.4 Institutional capacity

According to de Magalhaes (2002: 45) the evidence that some institutions have done better than others has led to a focus on issues of 'institutional capacity'. Healey (1998: cited in Lambert and Oatley: 2002: 126) defines institutional capacity as the "capacity to create new relationships for engaging in purposeful, collective action", while Adamolekun (1989: 14 from McGill, 2007: 141) states that the term was used to refer to the ability of an institution to make effective use of available financial and material resources to achieve its aims. According to Healey et al. (2002: 10) the quality of urban governance capacity and its ability to act as a collective actor is important for the future of its inhabitants, economy and

ecological relations. Figure 2.13 shows that management capacity and resources availability are two important aspects for building institutional capacity.

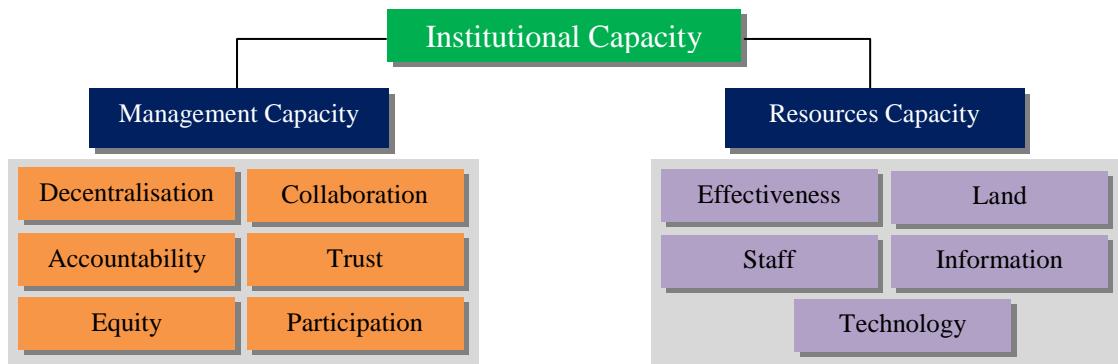


Figure 2.13: Components of institutional capacity.

Source: Author

First: management capacity

According to Repetti and Prelaz-Droux (2003) there are some conditions that guarantee the function of urban management system which include participation of all stakeholders, communication and negotiation with the public, the skills of each of the stakeholders, accountability and transparency and coordination of different sectors at different levels. It is also linked to decentralisation, collaboration and trust.

Decentralisation

According to Rondinelli (1990; from McGill, 2007: 122) decentralization can be define as transferring responsibilities for planning, management and allocating resources from central government to regional and local levels. However, transforming responsibilities for provision and maintenance of urban services and infrastructure will require local governments to increase their revenue. Rakodi (2001: 217) and Gilbert (2006) believe that decentralization will provide a great efficiency in service provision, more appropriate decisions and increase accountability and less corruption. However, bottom-up alone cannot ensure the formation of governance without top-down decision-making (Shafiei, 2011).

Coordination and collaboration

According to McGill (1998) and Repetti and Prelaz-Droux (2003) urban governance is a complex process, which requires horizontal and vertical

integration and coordination between the actors who are managing the city. Collaborative planning has been attracting attention in the field of spatial planning because it offers the possibility of mediating among the concerns of multiple and various actors and building place-based institutional capacity (Healey, 2006). According to Healey:

The discourse of 'collaborative governance' has been spreading across the UK public policy circles, while new forms of partnership have been appearing elsewhere in Europe. Forms of collaboration and partnership in community development and environmental management have also been expanding in North American and in many other parts of the world. (2006: xi)

Trust

Shafiei (2011: 29) states that trust in government is influenced by the quality of services that citizens receive and the extent of openness and honesty in the performance of urban institutions.

Accountability

According to Rakodi (2003: 532) “Accountability mechanisms in the public sector are essential to hold to account those [elected politicians] who hold the public trust and ensure quality control and probity”. In good urban governance people who are affected by decisions or actions should be able to hold elected officials and government responsible and accountable for their decisions (Shafiei, 2011). The UN-HABITAT defined accountability as:

Accountability implies that mechanisms are present and effective for transparency in the operational functions of local government; responsiveness towards the higher level of local government; local population and civic grievances; standards for professional and personal integrity and rule of law and public policies are applied in a transparent and predictable manner (2004: 4).

O'Donnell (1999; from Shafiei, 2011: 33) state that there are horizontal and vertical types of accountability with horizontal accountability being the capacity of public institutions to monitor and assess the activities of other urban institutions, which expresses the power of state institutions to check abuse of office and excesses. Vertical accountability is where public officials are held accountable by citizens and civil society to implement the principles of good performance. One of the greatest threats to a good governance is corruption, thus, there is a need for sanction, performance standards and disclosure laws (UNCHS,

1999). However, accountability cannot be enforced without transparency and responsiveness.

City government must respond to all residents including poor and minorities within a reasonable timeframe (Payne and Majale, 2004). Elliott (2008: 91-92) point out that “The ‘time’ question is whether to be responsive to short-term or long-term interests; the ‘place’ question is whether to be responsive to the interests of one neighbourhood or of the city as a whole”. However, in some cases officials need to take time to respond, where immediate respond to some citizens’ wishes in a certain neighbourhood may undercut programs that promote the long-term good of many others (Elliott, 2008).

Equity

UN-HABITAT defines equity as:

inclusiveness with unbiased access (be it for economically weaker sections, women, children or elderly, religious or ethnic minorities or the physically disabled) to basic necessities (nutrition, education, employment and livelihood, health care, shelter, safe drinking water, sanitation and others) of urban life, with institutional priorities focusing on pro-poor policies and an established mechanism for responding to the basic services (2004: 4).

The Global Campaign on Urban Governance (2002) recommended that both women and men should have equal access to the decision-making process, that women should be represented in local authorities and have the opportunity to be promoted to higher management positions. According to Payne and Majale (2004) a good urban governance is based on the principle that all urban citizens regardless of their religion or ethnicity should not be denied access to urban life necessities including adequate shelter, public safety and security, safe water, sanitation and clean environment. In addition, planners have an obligation to treat all people equally and to view problems objectively.

Participation

According to Fagence (1977: 17) “The term ‘participation’ has become fashionable in the continuing debate on the quality of modern society”. This wide debate, and specifically its continuous focus on the systems of decision-making in many areas of activity that have bearing with the community’s social welfare, is perhaps indicative of the increasing realization that significant section in the

community have been denied an effective role in decision-making. According to Healey (2006) some planners claim that there is little point in consulting citizens owing to the lack of citizens understanding of planning strategies. However, planners and designers must work alongside people to identify alternatives, discuss consequences of different alternatives and state opinion about the alternatives (Silberstein and Masser, 2000). In addition, public participation has the added benefit of helping planners to measure public satisfaction with specific policies (Song, 2012), as planners alone cannot make the sustainable city a reality (Burton et al., 2010). According to Dahlan (1990: 134) “a citizen is not only part of the community but also is greatly affected by the policies, programs and decisions made regarding his [sic] needs and welfare”. Shafiei (2011: 24) concludes that “citizens prefer the decisions they made themselves to decisions that have been imposed upon them”. According to Steiner and Butler (2007) built and natural environment work better if citizens involved in decisions and management instead of being treated as passive consumers. In addition, public participation is an essential ingredient of good governance (Gilbert, 2006: 392). Arnstein (1969) considered that public participation is the cornerstone of democracy. In planning, public participation is a cornerstone of effective implementation of planning regulations and management growth (Arimah and Adeagbo, 2000; Bengston et al., 2004). The UN-HABITAT has reflected the role of participation in good governance as:

Participation in governance implies mechanisms that promote strong local representative democracies through inclusive, free and fair municipal elections. It also includes participatory decision-making processes, where the civic capital, especially of the poor, is recognized and there exists consensus orientation and citizenship (2004: 4).

The purpose of public participation is to make citizens involve in planning and design decision-making processes, give citizens voice in decisions and promote the sense of a community (Steiner and Butler, 2007: 32). Therefore, local planning authorities should ensure the involvement of neighbourhood residents from the starting to the finish of the plan process in order to ascertain their needs and expectation (Alshuwaikhat, 1999). Citizens should not be involved just to influence the plan but to shape it, where they should have the sense of ownership of the plan (Duerksen et al., 2009). It engenders the feeling of belonging and the sense of ownership promotion of transparency and accountability in the planning process

(Arimah and Adeagbo, 2000; Tipple and Ebooks Corporation., 2000). In planning, it ensures that there is no economic loss to both applicants for building permission and neighbouring property owners when zoning applications experience “surprise endings” late in the process (Elliott, 2008).

Arnstein (1969) classified citizen participation or ‘citizen control’ as she called it in her work ‘*A Ladder of Citizen Participation*’ to a typology of three categories (non-participation, degrees of tokenism and degrees of citizen power) with eight levels (Figure 2.14). This has been reframed by Barton, Grant and Guise in their work to include spin and bluster, though tokenism, two way information, genuine consultation, partnership and delegated power.

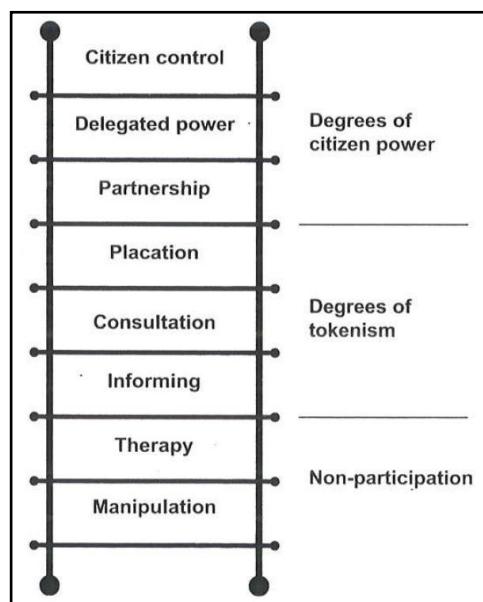


Figure 2.14: Arnstein's ladder of participation (Image: redrawn from Arnstein: 1969).
Source: Carmona *et al.* (2010: 334).

According to Shafiei (2011) the factors that play a main role in the level and quality of participation are the quality of the existing structures of administration and socio-economic factors such as wealth, education and class. Citizens can be empowered to participate by:

- Promoting strong democracy at the local level through free and fair elections;
- Establishing the legal authority for civil society to participate effectively through municipal councils and neighbourhood advisory committees;

- Making use of mechanisms such as surveys and public hearing;
- Promoting an ethic of civic responsibilities among citizens through city or neighbourhood watch groups; and
- Understanding city referenda on important urban development alternatives (Shafiei, 2011: 29).

Second: Resources

Adequate and available resources are essential for institutional capacity, where weak enforcement of planning regulations is attributed to lack and inadequate resources of local planning authorities (Baffour Awuah and Hammond, 2014). Therefore, municipal authorities are looking for new ways to generate resources (UN-HABITAT, 2013). The resources include, land, money, staff, information and technologies. Land is an important and crucial resource for local governance for planning and development. One of the main issues that local governance is facing is land scarcity, where local governance must identify land to cope with the increase of population that leads to an increased demand for housing and facilities (Leach and Percy-Smith, 2001: 131).

Effectiveness can be defined as the extent to which organisation can achieve or exceed its predetermined objectives without diminishing its resources and the quality of the provided services to fulfil and meet people's needs and expectation (Aazam, 2004). According to UN-HABITAT:

Effectiveness of governance measures the existing mechanisms and the socio-political environment for institutional efficiency (through subsidiarity and effective predictability) in financial management and planning, delivery of services and response to civil society concerns (2004: 4)

Money is an important resource for all public authorities with executive functions for hiring, training, retraining staff and providing equipment (Leach and Percy-Smith, 2001). According to Elliott (2008) if the city does not have available money, then even the best zoning tool will be ineffective. The main sources of local revenues are direct charges and property taxes, other sources of local government funding include central government transfer, income and market fees or international aid (Rakodi, 2001). Therefore, the UN-HABITAT recommended

that cities are supported in raising and improving their revenues through advisory technical help and capacity building (2013).

The quality of human resources is an important factor in determining the ability of local government to provide services. Currently, citizens expect a lot from public officials, thus, local authorities are obliged to hire well trained, qualified and skillful staff to formulate, enforce and explain planning regulations and to respond to citizens and developers. According to Elliott (2008) if the city does not have trained and qualified staff, then even the best zoning tool will be ineffective.

Lack of data and information is an indicator for weak governance (Repetti and Prélaz-Droux, 2003). Data should be updated, transparent, freely available and directly accessible in an understandable language and format to allow planners and decision-makers to take quick decisions and to those who will participate in decisions and will be influenced by such decisions and their enforcement (UN-HABITAT, 2004; Abdulaal, 2009).

Local planning authorities should develop ways to apply and use technologies to work more effectively with the public. Elliott (2008) cites computerized maps, aerial photography, satellite images and Geographic Information System (GIS) as important developments that aid more effective planning and support planners understand the intricacies of the urban process, enhance their productivity and lead to better quality decision making.

2.4.5 Urban governance in developing countries

It is important to note as Sorensen (2011) states that there are profound differences between the conditions in the developed and developing countries. Scholars noticed that urban governance in developing countries are characterised by the lack of planning capacity. Arimah and Adeagbo (2000) discuss the dearth of finance, shortage of skilled personnel, lack of the necessary equipment and political interference that hinder the ability of the local planning authorities in Nigeria to meet the urban challenges and ensure sustainable development. Repetti and Prelaz-Droux (2003) state that the lack of finance means, poor quality and quantity in the number of staff, which makes city management in developing countries more difficult. Developing countries according to Clarke (1991) may

suffer from out-dated information related to land properties and infrastructure meaning that the ability to develop a digital parcel map as a basic infrastructure for future GIS applications is difficult to achieve (Bishop et al., 2000).

Developing countries also suffer from the lack of public participation, equity, coordination, weak accountability, centralised system (Rakodi, 2001; McGill, 2007). The lack of public participation, stems from an assumption among planners in local planning authorities that they hold expert knowledge about the society's land use requirements and act in that society's best interest (Baffour Awuah and Hammond 2014). Centralisation is the main feature of the planning system in developing countries, where local government relies on central government for funding support. Decentralisation processes in Latin American countries were successful to some extent, while in contrast the processes failed to launch practical local institutions and governance practice in African countries (Clarke, 1991). The level of corruption in developing countries is much higher (Angel, 2008) while the lack of accountability is attributed to centralisation and an endemic lack of transparency.

Therefore, owing to the weak institutional capacity it becomes difficult for local planning institutions in developing countries to manage, monitor and control urban growth. Egyptian municipalities were seen to be incapable of monitoring or managing city growth that amplifies the adverse impacts of high-density and compact urban setting, while, according to Gilbert (2006: 392) "cities in Latin America [Curitiba] provide much evidence of good governance".

An increased attention has started to be paid to improving the capacity of the planning institutions in developing countries, where there is a need according to McGill (1995: 343), Arimah and Adeagbo (2000) and Rakodi (2001) to review, assess and enhance the whole urban and institutional development process not just the financial status. In addition, local authorities should improve their resources, especially the budget and revenue, where policies and budget should be integrated, also, improve accountability, empowered and support public participation. Therefore, McGill (1998: 469) "suggested that this introduces the concept of governance to urban management", where according to Acioly Jr

(2009: 136) proper urban governance and increased public participation give sufficient support to urban management practices in Curitiba.

2.4.6 Urban governance in the Middle East

Arab countries share some common culture, where the majority are Muslims, speak a similar language and have more or less the same architecture and education, however, they differ from each other in the position of women and economic conditions. The overall quality of governance in Arab countries is low which makes local planning governments in Arab countries weakened in the managing of high population growth and massive urbanisation (Almarshad, 2011).

The dominant issue in the urban governance of Arab countries and specifically Gulf States is centralisation, where a top-down approach is considered an obstacle to an effective performance and good governance. Although, certain Arab governments have delegated some power to the regional and local levels, central governments remain the main source of funding. Owing to the top-down approach, unnecessary bureaucracy is a feature issue of the planning system at all levels which affects the performance and quality of urban governance. There is also a lack of participation owing to deficiencies at the levels of democratic governance, lack of transparency and corruption. The issue of corruption has become a particularly important problem in political discussion and debate in many Arab countries (Almarshad, 2011).

According to Almarshad (2011: 31) some commentators such as Fukuyama (1992) and Lewis (1993) attributed the failure of democracy to Islam, however, other scholars such as Bahgat Korany (1994) in his work '*Arab Democratization – a Poor Cousin*', and Esposito and Voll (1996) in their work '*Islam and Democracy*' emphasise the link between Islam and democracy. Behrooz Kalantari (2005; in Almarshad, 2011: 32) emphasises that consultation is an Islamic principle that encourages participation in decision-making for Muslims. Therefore, according to Almarshad (2011) the issues can be attributed to the fact that management styles have fused a selective adaptation of some western management values and traditional elements. The great challenge to Arab bureaucracy from Almarshad (2011: 45-46) perspectives "is how to reinforce a

new management culture in organizational settings where the old systems, procedures and work habits still predominate”.

Within the last three years the UN-HABITAT has provided support to local governments in the Arab States to improve and empower young people and women in decision making process (UN-HABITAT, 2013: 22). Although, in general the quality of governance in the Middle East is low compared to other developing regions, there is some improvement in the function and performance of the institutions. Mass education in the Arab regions has created new social strata of educated individuals, skilled technocrats and professionals. Since the late 1980s many reforms have been taken in the Gulf Cooperation Council (GCC) countries in an attempt to improve institutional capacity and citizen participation. The GCC citizens participate in municipal elections which became an essential localized political practice in Bahrain in 1996, Qatar in 2001 and in Saudi Arabia in 2005 (Almarshad, 2011).

However, there is still a need for more improvement in the capacity of administrative and public sector institutions. To improve urban governance in Arab countries there is a need to transform from old management approach to a new paradigm which seeks more participatory and innovative management practice. Profound changes need to take place in the political levels as well as the administrative structure to enhance local development, public services and engender accountability and transparency in the government's function (Almarshad, 2001).

2.5 Citizen Satisfaction and Acceptability

Satisfaction and acceptance from the wider community regarding planning and zoning decisions are considered to be an important aspect in the effective implementation of zoning regulations, where according to Duerksen et al. (2009) a good plan reflects the desires and aspirations of the community. The concept of residential satisfaction has been increasingly used to measure the level of people's satisfaction in respect of their physical (including car parking, roadside walkways and open space) and social environment (safety and security). Residential satisfaction has been used to measure the success of housing development and assess residents' perceptions of inadequacies in their current

housing environment. Moreover, it measures the differences between households' actual and desired housing and neighbourhood situations (LU, 1999: 266). It measures the level of performance of policies, where according to Francescato (2002: 17) "high levels of residential satisfaction will indicate high levels of performance of housing policies, programs, implementations".

Regarding acceptability, it is important that people accept planning regulations and decisions that influence their life quality. In terms of planning, there are people who desire to live in sub-urban areas and others accept the concept of intensification (i.e. compact development). However, it is important to realize that each city should adapt the concept that best suits local conditions and makes the best contribution to urban sustainability in an acceptable way (Arbury, 2005).

2.6 Conclusion

This chapter has reviewed the four main factors that deliver a good city: urban form, adequate planning regulations, good urban governance and citizen satisfaction. The chapter has charted the historic background of how cities have developed to respond to human daily requirements, aspirations and economic interests of citizens. It has illustrated two counter urban forms: urban sprawl and the compact city. It has shown that both sprawl and compact city promote benefits and have had their own implications on the built environment. The chapter has shown that there is a massive increase in urban population, especially, in developing countries that demands responsive policies to control urbanization and affordable housing.

The chapter has discussed zoning regulation and its impacts on the built environment and the concept and types of density. It has shown that planning regulations have positive and negative impacts and zoning must be compliant with socio-cultural and socio-economic context. The reality is that in many developing world cities, zoning regulations were imported from overseas and implemented without adaptation. The success or failure of urban form, planning regulations and urban governance differ from place to another. The chapter has addressed the role of urban governance and reveals that local planning authorities with a high capacity are more able to undertake planning functions, such as providing public services and implementing and enforcing planning regulations. It has revealed that the performance of local planning authority in developing countries, especially, in the Middle East is low. Thus, there is a need for continues to review, assess and consider amendments to enhance the whole urban and institutional development process. The chapter has illustrated various recent assessment methods by a variety of international organisations such as UNDP, World Bank and UN-HABITAT. It has illustrated the main indicators for assessment are effectiveness, equity, participation and accountability. The chapter concludes by reviewing the importance of residential satisfaction, acceptability and value on the implementation of zoning regulations. The next chapter will discuss the research methodology used to answer the key research questions.

Chapter Three: Research Approach

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CHAPTER THREE: RESEARCH APPROACH

3.0 Introduction

The purpose of this chapter is to discuss a research design that is able to explore the research questions and achieve the research objectives. It aims to describe in detail the various methodological approaches that were used to collect and analyse the data. This chapter is organised into five sections. It starts by discussing and justifying the research design, the rationale for using mixed methods, case studies and implementing the UN-HABITAT Urban Governance Index (UGI). The second section sets out the methods that were used to collect data during the fieldwork. It gives a rationale for the choice of Jeddah, illustrates various stages of the data collection, provides justification for selecting particular techniques for data collection including sampling and cases used as rich points of learning. Reflections on the different analytical techniques are provided in the third section. The penultimate section explores the ethical dimension of the study and finally, the chapter explains the main constraints that confronted the researcher.

3.1 Research Design and Methodology

This section presents the research design and methodology of the thesis. According to De Vaus (2001) a builder or architect cannot construct a building, order materials, sketch a plan or grant permits without knowing what type of building is required. Similarly, social research requires a good design before collecting and analysing the data. In addition, research design is considered vital “to ensure that the evidence obtained enables us to answer the initial questions as unambiguously as possible” (De Vaus, 2001: 9). The selection of an appropriate research design and methodology depends on certain criteria, which include; the nature of the research topic, the research problem, research objectives that the study aims to achieve, research questions that the study seeks to answer (Creswell, 2003; Alshafiei, 2007). In addition, it depends on the researcher’s experience and ability to use different methods (Creswell, 2003; Yin, 2008).

Figure 3.1 illustrates the process taken in the research from setting out the problem to conclusion and recommendation.

Table 3.1 shows the methods that were used in order to investigate the research questions. The key aims of this study are to explore the rationale of adopting and applying new zoning regulation, to assess the capacity of Jeddah Municipality to implement zoning regulations and to explore the impact of the new regulations on residents and developers. Owing to the complexity of the issue of implementing zoning regulations and urban governance, it was insufficient to rely on a single approach. Therefore, as this study focuses on understanding the factors causing particular phenomena within a real-life context, multiple research methods were used (Creswell, 2003).

A multiple approach is useful to capture the strength of both quantitative and qualitative methods (Creswell, 2003). This study used triangulation as one of the approaches of the multi-strategy research (Bryman, 2004). In terms of data collection the researcher used concurrent procedures to gather both qualitative and quantitative data from primary and secondary sources (Creswell, 2003). While quantitative methods focus on obtaining objective measures and numerical data in order to apply statistical measurements and determine correlation between variables, qualitative methods aim to explore subjective data in order to obtain validity and reliability of the findings from the fields (Mandeli, 2011). In addition, qualitative research methods provide rich data about the contemporary situation (De Vaus, 2001; Alshafiei, 2007). Additionally, the researcher employed the UN-HABITAT – Urban Governance Index (UGI), which combines mixed methods focusing more on quantitative data to assess the local governance in Jeddah. As mentioned in Chapter 2, the UN-HABITAT – UGI Model has been selected because according to Moretto (2007: 9) it is inclusive, while others, such as the World Bank, views governance from economic and financial perspective toward marketization and privatization (Shafiei, 2011). According to Shafiei (2011: 49) the UN-HABITAT model "embraces ideological features as well as theoretical values and principles of governances".

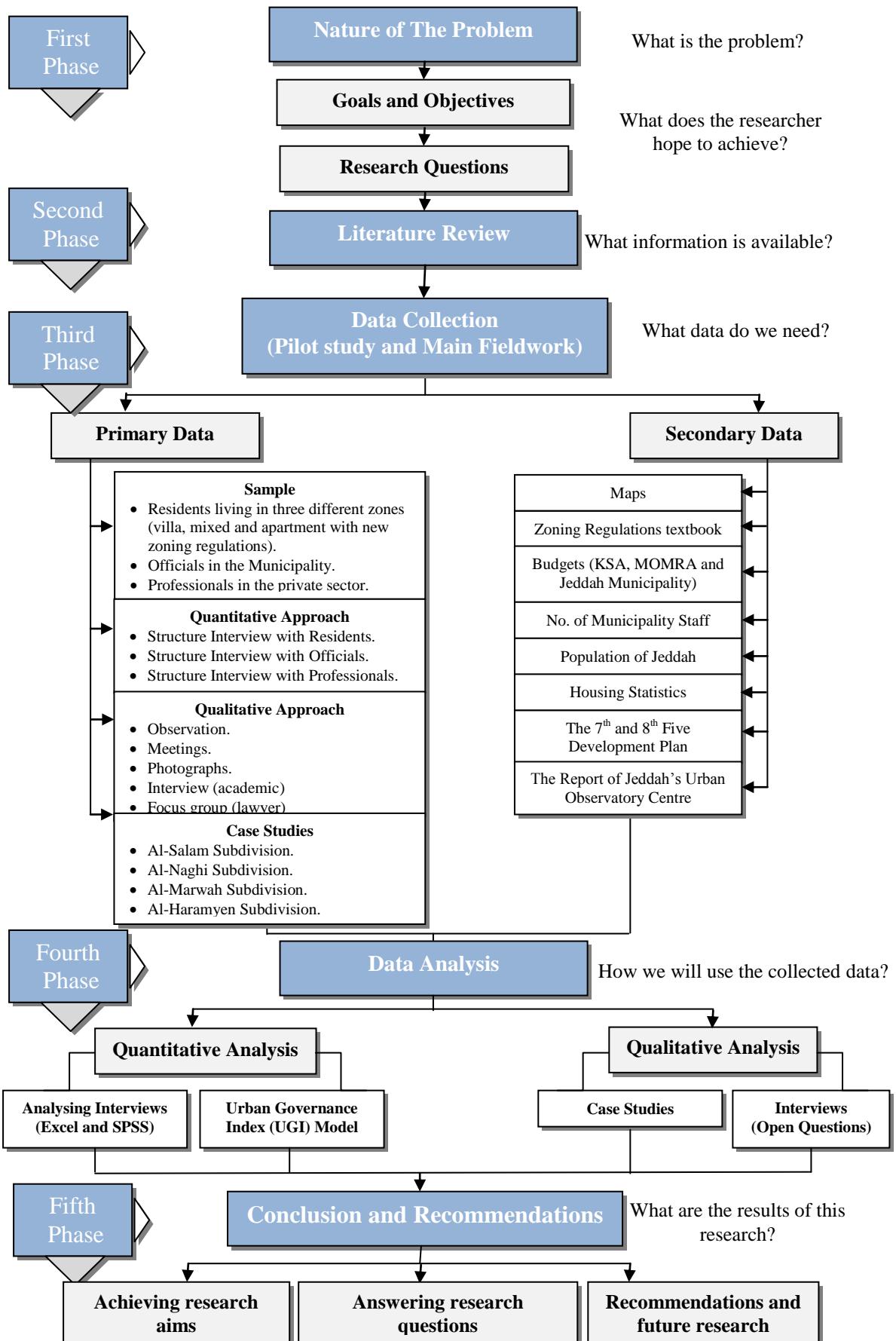


Figure 3.1: Research Methodology

Table 3.1: Mapping the methods to the objectives.

Themes	Objectives	Issues	Methods	Analysis	Output
Adopting a smart growth policy	To identify urban issues which caused Jeddah Municipality to adopt smart growth policy	Increase density Urban sprawl Transition in urban environment Housing affordability Sustainability debate	• Empirical data to project the future population using different methods. • Empirical data to project housing demand. • Empirical data to estimate areas for future residential development.	• Constant annual growth • Linear model • Exponential curve model	• The expected future population. • The future demand on housing. • The reason for adopting new zoning regulations and increasing the density • Transformation of the city urban pattern.
The capacity of the local planning authority	To investigate the aspects of achieving a good urban governance To assess the performance of Jeddah Municipality	What is good governance? Method for assessing urban governance Factors influence on the capacity of Jeddah Municipality Views of professionals and officials about the performance of Jeddah Municipality	• Quantitative data-structure interview (open and close questions) • Secondary data (statistics) • Case studies	• Descriptive analysis (Excel and SPSS) • Charts and tables • UN-HABITAT, Urban Governance Index	• Understanding the planning system in KSA. • The current situation of Jeddah Municipality. • The deficiencies in the planning system at the local level. • Perception of officials and professionals • An analytical framework for assessing the Municipality of Jeddah.

Chapter Three: Research Approach.

Themes	Objectives	Issues	Methods	Analysis	Output
Stakeholders views and satisfaction	<p>To explore the impact of applying the new zoning regulations on modern residential areas</p> <p>To explore peoples' reaction</p>	<p>The impact of zoning regulations on the ground through the eyes of local people, professionals and officials</p> <p>Cultural issues that led to conflict (the important of privacy)</p> <p>Citizens voice in the process</p> <p>Level of residents' satisfaction</p>	<ul style="list-style-type: none"> Qualitative (meeting and focus group) Quantitative data (structure interview (open and close questions) Case studies 	<ul style="list-style-type: none"> Descriptive analysis (Excel and SPSS) Inferential statistics (SPSS) Charts and tables 	<ul style="list-style-type: none"> Level of residents' satisfaction within different zones. The impact of applying the new zoning regulations in residential zones. What is actually happening in neighbourhood Views regarding citizens' participation. Residents have the power and voice to change planning decisions

According to Naragan (2005: 1) the UGI model has been developed to “enable cities to objectively measure the quality of local governance”. Therefore, the purposes of employing the UN model in this study are to assess the performance of Jeddah Municipality and address the strengths and weakness in the contemporary planning system at the local level. Originally, the UGI model was based on five main indices which were recommended by the UN-HABITAT; Effectiveness, Equity, Participation, Accountability and Security. According to the UN-HABITAT, Effectiveness is linked with budget and finance, Equity with social opportunities, Participation with political freedom, Accountability with transparency and Security with crime and natural disaster (UN-HABITAT, 2004). However, the security indicator was not recommended to be part of the index, thus, it was omitted from the UGI framework by the UN-HABITAT following the second survey (UN-HABITAT, 2004; Narang, 2005; Moretto, 2007). Therefore, the framework is made up of four main indicators, which encompass 25 sub-indicators and each sub-indicator is weighted.

This research uses a case study method to explore the real world phenomenon of the impact of implementing the zoning regulations and the experience of residents. A case study method was the most appropriate method since it allows explanatory questions “how” and “why” to be posed (Yin, 2008). The selection of case study design allows the researcher to achieve a fuller explanation and better understanding of the circumstances (De Vaus, 2001; Bryman, 2008), where Yin (2008: 4) stated that:

...the case study allows an investigation to retain the holistic and meaningful characteristics of real-life events such as individual life cycles, organizational and managerial processes, neighbourhood change, international relations, and the maturations of industries.

Although, case study may be recognised as a form of qualitative research, it can employ both quantitative and qualitative research (Bryman, 2008; Yin, 2008).

3.2 Data Collection and Research Fieldwork Strategies

According to Bulmer (1993a) data gathering is a critical phase in social research. It is an essential stage in the planning and implementation of a piece of research. The nature of the research guides the data that are needed to achieve the objectives of the research. According to Hafazalla (2005) the survey objectives must correspond with the research objectives. Therefore, the researcher needs to “specify the type of information to be collected” (Creswell, 2003: 17). The data were divided into primary and secondary data and different sets of data collection approaches were utilised at different stages of the research. This study employed mixed methods approach to collect “both numeric information (e.g., on instruments) as well as text information (e.g., on interviews) so that the final database represents both quantitative and qualitative information” (Creswell, 2003: 20). According to Bulmer and Warwick (1993) data reliability and validity is an important aspect that should be considered at every stage in the research. Therefore, before conducting the main fieldwork a clear fieldwork plan was created to systematically set out the sources of data and to ensure its reliability and validity and these were tested in the pilot phase.

Table 3.2 shows that the fieldwork went through four main phases; started by preparation phase for the pilot study, followed by the pilot study in 2009, then the evaluation of pilot study and preparation for qualitative work followed by the main fieldwork in 2010.

Table 3.2: Summary of the research fieldwork.

No.	Phase Descriptions	Activities
1.	Preparation for preliminary investigation in 2008-2009	<ul style="list-style-type: none"> • Reading literature review about the research themes and different research methods. • Selecting the research approach. • Preparing a list of questions and enquiries. • Preparing face-to-face interviews questions.
2.	Pilot study in 2009	<ul style="list-style-type: none"> • Identifying issues related to the new zoning regulations. • Testing the face-to-face interviews questions with the head of households. • Interviews and discussion with officials, professionals and academic. • Collecting secondary data (documents related to Jeddah and zoning regulations, statistics about Jeddah's population and reports). • Testing other methods (discussion group). • Observation and photograph. • Selecting case studies. • Attending meetings with planning authorities at the local level.
3.	Post-pilot study in 2009	<ul style="list-style-type: none"> • Evaluating the pilot study outcomes. • Checking the missing data that needed to be collected to employ the UGI model. • Reviewing the research methods and strategies. • Selecting the appropriate methods for data collection. • Preparing the face-to-face interviews questions with different stakeholders. • Testing the questions with colleagues in Newcastle, UK.
4.	Main fieldwork in 2010	<ul style="list-style-type: none"> • Attending meetings with planning authorities at the local level. • Collecting secondary data (maps, updated textbook for zoning regulations, documents and reports). • Observation and photograph. • Face-to-face interviews with the heads of households. • Face-to-face interviews with officials and professionals. • Interviews with developers, residents, officials, academic and lawyers. • Selecting the potential case studies.

3.2.1 Why Jeddah?

Jeddah is the second largest metropolitan city in Saudi Arabia after the capital metropolitan Riyadh and the largest city in Makkah Province (known as *Emart Makkah*) in terms of area and population. The city is strategically situated on the

western coast of Saudi Arabia as a seaport and gateway for pilgrims passing through to the two Holy cities of Islam (i.e. Makkah and Medina). Jeddah as a single case study at the macro level which provides examples within it at the meso level (neighbourhood level) and certain development on plots at the micro level from which we can understand the implementation of zoning regulations and something about the process of planning. The selection of Jeddah was based on the following criteria:

- 1- Jeddah is the researcher's home town, and therefore was both familiar and presented easy access to field work;
- 2- The researcher has good contact with academics from the Faculty of Environmental Design (FED) in King Abdulaziz University (KAU) in Jeddah;
- 3- Jeddah is a major Saudi city that has experienced enormous urban growth and population in the past six decades (Abdulaal, 2012);
- 4- As a city Jeddah is unique in applying smart growth but the findings of the case study could be considered by other cities in Saudi Arabia that are moving forward to smart growth, also, in terms of participation and interviewing women; and
- 5- Finally, as mentioned in Chapter 1, most urban research focuses on Riyadh the capital city. Jeddah has been given little attention, especially, in terms of research regarding planning regulations and urban governance. Therefore, selecting Jeddah may, to some extent, fill a knowledge gap.

3.2.2 Scoping the research

The first stage took place from December 2008 to May 2009, where the focus was on scoping the literature about zoning regulations, urban governance, the planning system in Saudi Arabia, and Jeddah urban development and housing. There were also early considerations of appropriate research methodology, preparing a list of questions and enquiries for officials in Jeddah Municipality, academics in the FED at KAU in Jeddah and professionals (architects and

planners in private sector). Also, preparing face to face interview questions for the head of households.

3.2.3 Pilot study

pilot studies can inform us about the best research process and occasionally about likely outcomes (van Teijlingen and Hundley, 2001: 4)

A pilot study was conducted from June to August 2009. At this stage the researcher had no solid data that could be relied on to determine the size of the sample. Therefore a non-probabilistic sampling method, known as convenience sampling (haphazard or accidental sampling) was chosen for neighbourhoods (McCormack and Hill, 1997; Hafazalla, 2005). The sample size for the households to be interviewed was selected randomly from two different zones, which are apartment zones with the new zoning regulations and residential mixed zone that constitute both villas and apartments blocks with the new regulations. The two zones are classified as middle and middle to high income areas. The sample size of this survey was 30 structured interviews and was distributed randomly as; 10 with residents living in mixed zones and 20 with those living in apartment zones with the new regulations (Table 3.3). The sample was not evenly split because the focus at this stage was on the apartment zones with the new zoning regulations. However, this was changed after the pilot study, where the focus became on residential mixed-zones, especially, after the emergence of privacy issues.

Table 3.3: The sample size in the pilot survey.

Zone	The Targeted Sample Size		
	Flat	Roof Villa	Total
Apartment with new regulations	18	2	20
Mixed	8	2	10
Total	26	4	30

During the pilot study the primary purpose was to test out as many methodological approaches as possible on as many people as possible to determine what are the best methods to be used in the main fieldwork? The pilot study also serves to identify key actors who might be gate keepers or knowledge brokers. The preliminary data gathering was divided into two types as follows (Figure 3.2). In the pilot study the researcher used a range of approaches including a case study to collect primary data.

First: Quantitative methods

During the pilot study the researcher used quantitative methods as follows:

The structured interview

The standardized interview as it is called sometimes is the typical method of interview in survey research (Bryman, 2004). According to Overton and Diermen (2003) a questionnaire is deemed more rigidly constructed than a structured interview. The provisional structured interview was composed of 46 open and closed questions. The questions were translated into Arabic prior to use in the field.

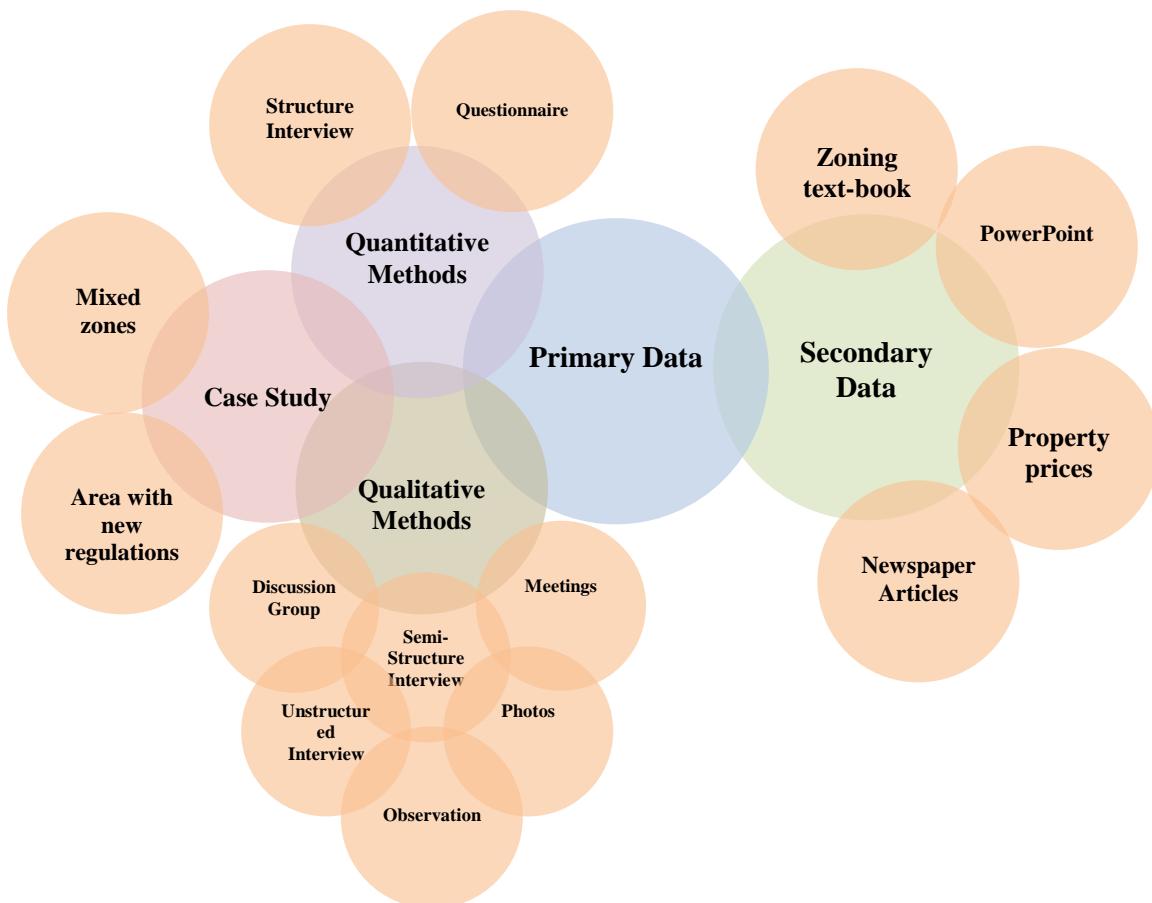


Figure 3.2: Different type of data and methods of collection during the pilot study.

As Bulmer (1993a) mentioned in his work that there may be problems in men seeking interviews with women in Muslim societies and particularly in KSA where cultural norms create segregation between the genders. Although women in Saudi Arabia have an undeniably strong influence on choice of dwellings, it is

not possible to interview women without ‘*Mahram*’ (the consent and then presence of closest male relatives such as her father, brothers, sons, grandfather, uncles, nephews and husband). However, though in a conservative culture like Saudi Arabia it is theoretically possible to have this consent, in practice it would be highly unlikely for it to be granted and, therefore, it is simply not asked. Additionally, it is even difficult for a man to interview a woman that he does not know by phone. The idea of recruiting a woman to interview women was logically problematic and therefore this study rests on the views of men (the head of the household) alone.

During the pilot study the researcher only managed to achieve 10 structured interviews out of the planned 30 owing to the difficulty expressed by some respondents because of the use of technical terms.

The questionnaires

In an attempt to widen the response rate the same questions were set in a questionnaire format and posted to a further 10 people, who were chosen randomly. However, this resulted in only one additional return and this was probably owing to the personal relationship that this person had with the researcher. This indicates that postal questionnaires may be a poor choice in Saudi Arabia. This might be owing to a general lack of awareness of the importance of research or may reflect cultural issues of neglecting.

Second: Qualitative methods

Six qualitative methods were used during the pilot study, which were as follows:

Focus group

According to Powell et al (1996) and Bryman (2004), a focus group is a form of interviewing a group of individuals selected by the researcher to participating, discuss and comment on a specific tightly defined topic that is relevant to the subject of the research. In this study three focus groups were drawn together. This was done with people who were known which, according to Brockington and Sullivan (2003) is the best focus group approach. Discussion groups were held three times with three different groups of professionals in different places. The first group consisted of three architects and one planner - conducted over dinner.

The second group included four planners who were friends of the researcher - gathered at KAU at noon. The third group encompassed three architects and one planner who met in a coffee shop. The idea was to talk informally about issues related to the new zoning regulations and Jeddah Municipality. This resulted in a lot of information being shared though it was costly and not easy to gather people together because of their diary commitments.

Observation

According to Overton and Diermen (2003: 39) “Observations are one of the most crucial tools for researcher” allowing “subjective assessments of what is actually happening”. The researcher drove around different neighbourhoods to form a mental map of the way residential neighbourhoods were developing or have developed and to try to identify those neighbourhoods where new regulations have been applied. The researcher conducted a physical survey in two types of zones:

- **Areas with the new regulations only:** The researcher found that some of the districts or land subdivisions in Jeddah implemented and adopted the new regulations such as Al-Haramyen, Zahrat Al-Faisalyah and the new Al-Naseem subdivisions.
- **Areas with mixed regulation (villas and apartments with the new zoning regulations):** In these areas there are mixed between the old and the new regulations such as Al-Nuzhah, Al-Naaem, Al-Salamah and the old Al- Naseem subdivisions.

The semi-structured interview

This method was used with Al-Beeah Consultancy Office (who prepared the new zoning regulations), the vice-chairman of the Municipal Council and several of the Municipality’s staff at their workplace. The aims of the semi-structured interviews were:

- To understand some of the zoning regulations terms;
- To understand the dynamic framework of the planning system at the national, regional and especially at the local level;

- To understand the reasons for adopting the concept of ‘smart growth’ and the predictable implications of implementing new regulations; and
- To understand the issues arising from the inter play between the new zoning regulations and Municipality’s administration system.

Semi structured interviews proved very useful, where it helped the researcher to gain information about the status quo. This method took much longer than the structured interviews but it was necessary for this stage to clarify some of the issues and ambiguities.

Unstructured interview

Unstructured interviews were held with academics in the Department of Urban and Regional Planning, FED in KAU. A list of informal questions was asked and discussion ranged from the history of urban development and planning in Jeddah to considerations of the planning administration hierarchy in Saudi Arabia.

Meetings

During the pilot survey the researcher attended two meetings (see appendix 2, meetings No. 1 and 2). The first, convened in the Municipality, was with the head of the Local Planning Department arranged by former students who are working there. It was anticipated that the meeting would be general in its discussion but the researcher was asked to attend a meeting in an advisory capacity to discuss issues related to potential amendments to the regulations to make them clearer for both the Municipality staff and professionals. The meeting was useful since it addressed critical issues raised by architects using the new regulations.

The second meeting was a workshop convened in the Municipal Council of Jeddah to which the researcher was invited by the vice-chairman of the Municipal Council along with 30 key actors (famous architects and planners from the private sector and some of the Municipality and Municipal Council staff). The aim was to discuss issues related to the new zoning regulations and the impact of the new

regulations on the built environment. This was useful as it addressed a range of perspectives and critical issues¹.

Photos

Photographs are used as a visual survey method to both illustrate the overall urban form of the neighbourhoods as well as to demonstrate the impact of the new regulations in neighbourhoods with existing villa development.

Third: Case studies

The case studies were suggested by the vice-chairman of Municipal Council and the local newspaper. The vice-chairman introduced the researcher to a case in a mixed residential zone (Al-Marwah subdivision), where the researcher and vice-chairman met the villas owners and listened to their complaint (see in Chapter 8, third case). A local newspaper (*Okaz*) talked about issue of not complying with the new zoning regulations in areas zoned as apartments with the new zoning regulations (Al-Haramyen subdivision) (see in Chapter 8, fourth case).

Fourth: The role of gate keepers

Nine former colleagues were contacted initially (all working in the private sector) to discuss issues related to the new zoning regulations and the local planning authority. The researcher targeted the officials in the Municipality's Department of Local Planning (responsible for formulating and issuing zoning regulations). Serendipitously at the Municipal Council the researcher found one of his university's former academic staff, who was appointed by the Minister of MOMRA and chosen by the Council members as the vice-chairman for the Municipal Council². The vice-chairman of the Council showed a lot of interest in the research and introduced the researcher to the chairman of the Municipal Council, Council members, the Al-Beeah consultant and to critical case studies that were relevant to zoning regulations.

¹ The researcher wrote the comments of the attendances in the meeting as a minute of meeting as it was requested from the vice-chairman of the Municipal Council.

² Dr. Tarek Fadak was an associated professor in the department of Urban and Regional Planning – the Faculty of Environment Design, King Abdulaziz University, former vice-chairman of the Municipal Council from 2007 to 2008, former chairman of the Municipal Council from 2009-2010 and a member of Consultant Council from 2010 to date.

During the pilot study the researcher managed to build a good rapport with some of the officials in the Municipality, Municipal Council and professionals. As the researcher works at the FED in KAU in Jeddah, the researcher found some of his friends and former students in post. Both provided a lot of information and introduced the researcher to key people. A colleague who had been awarded a doctorate from Newcastle University granted the researcher a temporary permission letter to enter the Municipality offices over a three monthly period. This illustrates the importance of having a good network for research in KSA to prosper and this issue will be returned to a number of times in this chapter.

Secondary data

Documentary data offers more insight and in-depth information about the research (Ahmed, 2011). Published and unpublished materials were collected from different governmental sectors, articles from the newspapers about different issues related to the topic such as; people's complaints about the Municipality performance and the new regulations. The zoning regulations text-book was an important and useful secondary data that helped the researcher to gain greater familiarity.

3.2.4 Post pilot study (the outcomes of the pilot study)

Through the pilot study the research became more focused and new ideas were developed. From the pilot survey three different groups were identified as key actors for the research, which are as follows:

- Officials at Jeddah Municipality and Municipal Council, who have duties and responsibilities in implementing and making decision regarding zoning regulations.
- Professionals including (i.e. architects and planners in the private sector), who translate the new regulations into drawings.
- Residents, who have been living with the impact of the new regulations.

The pilot survey revealed that using questionnaire was inappropriate but using structured interviews was the best approach with residents, officials and professionals and more effective for gaining information. However, this was time

consuming and to do this effectively it needs field work assistance. The pilot study revealed that technical words can only be used with professionals and officials but not with residents. Therefore, there is a need to refine and rephrase some of the residents' questions to become clearer. In terms of qualitative methods the researcher found that observation, attending meetings and workshops were useful methods to determine subjective issues about the implication and implementation of the new zoning regulations. The survey could not be conducted during the summer season, where the temperature during the daytime in Jeddah is between 45-50°C. Therefore, to conduct fieldwork in Saudi Arabia time and season should be considered³.

Case studies at the micro level played an important role in developing the research ideas by showing what is happening in reality, which made the researcher focus more on what is happening in mixed zones. Furthermore, the pilot survey helped the researcher to identify and know some of the key people, who will be useful for the main fieldwork. The presentation of the researcher was of critical importance in literally opening doors⁴. In short, the pilot study helped the researcher to build a holistic perception about what methods should be used, what questions should be asked and the issues with the new zoning regulations and with the planning system at the local level.

The third stage took four months from September to December 2009. The focus of this stage was on reviewing the outcomes of the pilot study and the implications for the main fieldwork with the supervisors. It was also clear that more secondary data was needed about zoning regulations and issues such as the Municipality budget if the UGI model was to be used. A list was drawn up encompassing the public sector departments that is needed to be visited to gather the missing data. In discussion the issue of privacy was seen to be of major

³ The pilot survey revealed that the best time to do face to face interview with residents was in the afternoon before sunset as Mandeli (2011) referred to in his work. However, there were some cases where residents prefer to do the interview after sunset because they prefer to take a nap after they finish their work in afternoon.

⁴ If the researcher dressed trousers and shirt he will be treated as foreigner, where he will be exposed to questions by the security and will need permission before entering the Municipality, stopped by the policeman in inspection points when he is driving and residents will not welcome the researcher in their houses. If the researcher dressed only Thawb (Saudi national dress) without headdress (Ghutrah and Agal or Hejazi turban) then he would also be subject to some scrutiny and might be unwelcome to some residents. Dressed in the full Saudi dress was the only way to be completely accepted.

significance in the case study and the meetings that the researcher attended in both the Municipality and the Municipal Council and this was added as a topic to explore.

As an essential step the supervisor gave the researcher two essential letters before the researcher departs to conduct the fieldwork. The first one was to the Saudi Cultural Attaché to obtain official research permission to conduct fieldwork for data collection. The second letter was to request targeted people to assist the researcher with his work.

In designing the structured interviews questions, the researcher started first by specifying the aim of each interview; second, reviewing the questions that were used in the pilot study and modifying them; finally ensuring that the questions would uncover insights into the research questions. The order of the interview was to leave more sensitive questions such as about salary to the end, ensuring that at least the main topic areas were covered.

The interview wording should be comprehensible, simple, unbiased, specific, inoffensive and should follow a sequence (McCormack and Hill, 1997), where according to Bulmer and Warwick (1993: 149) “question wording is more an art than a science”. The use of passive voice was avoided as were colloquialisms, vague phrasing and lengthy questions, so that they fitted the respondents’ own understanding and language (Flay et al., 1993; Moser and Kalton, 1993; Wuelker, 1993). According to Bulmer and Warwick (1993) the issues of misunderstanding create problems of the survey validity. Common technical terms were used with confidence in the structured interviews with the professionals and officials.

The questions were subject to three drafts that were subject to increasing refinement under the guidance of the supervisors. The researcher used a combination of closed (dichotomous i.e. yes/no and ranking questions) and open-ended questions to complete each other and gain the benefits of each type. Some questions were posed in a negative way to deter the respondent from simply ticking the boxes without reading. Some of the questions used the Likert scale with mainly five grades to measure respondents’ degree of satisfaction or

agreement with statements about neighbourhood, housing and zoning regulations or the performance of Jeddah Municipality.

Structured interviews with residents aimed to measure the level of residents' satisfaction within three different zones (villa, apartments blocks with the new regulations and mixed zones), by finding out to what extent the regulations are responsive to residents needs and desires as well as their views on participation in planning decisions. The researcher started by modifying the style and presentation of the pilot questions as in Figure 3.3 and 3.4, where the former illustrates one of the questions in the old form and the latter shows the same questions after modification.

How satisfied are you with the following aspects?

1. V. satisfied	2. Satisfied	3. Neutral	4. Dissatisfied	5. V. dissatisfied
21-1 Parking				
1.	2.	3.	4.	5.
21-2 Size of the dwelling				
1.	2.	3.	4.	5.

Figure 3.3: Examples of one of the questions in the old form.

How satisfied are you with the following aspects?

	1. V. satisfied	2. Satisfied	3. Neutral	4. Dissatisfied	5. V. dissatisfied
10-1 Parking space	1.	2.	3.	4.	5.
10-2 Size of the dwelling	1.	2.	3.	4.	5.

Figure 3.4: Example of modification to one of the questions.

The structured interview for inhabitants was modified to consist of 53 open and close questions and categorised into four main categories (see appendix 3):

- 1- Neighbourhood character and socio-cultural aspects:** The researcher attempted to explore residents' satisfaction with aspects of their neighbourhood. In addition, residents were asked to show their relationship with their neighbours and issues related to incompatible uses and car parking spaces in the neighbourhood.
- 2- Dwelling unit characteristics:** The responders were asked to mark the five grade scale to show the degree of their satisfaction with the

dwellings characteristics and questions related to area, duration of stay, financial aspects and the number of rooms.

- 3- **Municipal affairs:** The researcher wanted to explore the residents' perspective regarding the Municipality performance and the willingness to participate in planning decisions.
- 4- **Socio-economic characteristics:** The researcher needed to collect information about different socioeconomic attributes of the head of the household living within different zones and dwellings (nationality, age, educational level, household numbers, marital status, number of cars and income level).

As there is a correlation and relationship between zoning regulations competence and the Municipality performance, the researcher designed questions that might be used with both the officials and professionals. The aim of the structured interviews with the officials and professionals was to explore their perspectives on the capacity of the local planning authority; the influencing factors on the Municipality performance. In addition, the impact of the implementation of the new zoning regulations; problems related to the Municipality performance in carrying out zoning regulations and their views on regarding citizen participation in planning decisions.

The structured interview for the Municipality officials encompassed 24 questions and focused on three main categories (see appendix 3):

- 1- **Management and performance assessment:** This section asked to mark the five grade scale to show their level of agreement and disagreement with the statements. The aim of the first section of the interview was to explore more generally the factors that had an influence on the Municipality's performance from their perspective and to know about the current situation of the Municipality.
- 2- **Zoning regulations:** Officials' and professionals were asked to give their views on the implications of the new zoning regulations using a Likert scale. However, some questions were posed only to the officials in the Department of Local Planning.

3- Personal information: This section inquired about level of officials' education, job role and years of experience working for/with the Municipality.

The structured interview for the professionals encompassed 29 open and closed questions and classified into the categories listed above but also included open questions related to the performance of the Municipality, the new zoning regulations and their understanding of the concept of land use regulations to gain richer views (see appendix 3). Generally, each structured interview began with a formal cover letter, which explained who the researcher is, the purpose of the survey and a declaration that the material was only for research purposes. According to McCormack and Hill (1997: 101) this "give an assurance of confidentiality" to the respondents. In addition, the researcher added his mobile phone number to facilitate appointment changes.

After designing the three structured interviews the researcher tested them by interviewing Saudi colleagues and friends. Their comments on structure, language, order and content helped fine tune the material. Eventually, a timetable and fieldwork plan was drawn up.

3.2.5 Main fieldwork

The main period of fieldwork, took place from January to March 2010. The aim was to collect primary data and the missing secondary data to gain a holistic insight into the Municipality performance, its impact on the implementation of zoning regulations and residents' satisfaction with their neighbourhoods and dwellings.

First: Documents

In addition to the letter from Newcastle University, a letter in Arabic was obtained from KAU for those respondents who cannot read English informing them about the survey. Further letters were obtained from KAU to allow me to take photos without raising concerns with the local police⁵. The letter was not accepted and I determined to apply directly to the main police centre (Makkah

⁵ It is illegal in Saudi Arabia to take photos without permission, which can expose the researcher to be questioned or possibly be jailed for a day.

Region Police Centre) for permission to take photos. After sitting there for a long time the police refused to grant permission to take photos and asked me to apply to the Province of Makkah (known as *Emart Makkah*)⁶. This was done and after a week *Emart Makkah* approved and sent the permission to the police headquarter in Jeddah. However, the main police station denied that they had received the approval letter. After some heated confrontation, the police officer admitted that he had the letter and knowing that I worked for the University requested help in his application to study there. This shows how somebody will bend the rules for you, where there is an expectation of a favour.

The researcher made contact with friends in the public sector and private sectors and through them arranged for meetings and interviews. The original interviews' questions were written in English and needed to be translated into Arabic. The difficulties in translation were as Bulmer and Warwick (1993: 152) mentioned "How can one render the question as asked in the original language in the same words when asked in a different language?". One of the issues in translation is the term 'zoning regulations', where latterly in Arabic translates as '*Andhemt Almanateq*' but in the Municipality are known as '*Andhemt Albenaad*' which, if translated into English, means 'construction regulations' which suggests building regulations. In addition, how to ask the question in the Arabic context by considering cultural norms, where some of the questions were posed in a courageous way in English, such as questions related to corruption. Another difficulty was how to nail down the words in Arabic without losing the meaning. The translated draft version for the three interviews were checked and reviewed by a staff at KAU.

The researcher then tested the translation version by interviews conducted randomly with residents, officials and professionals. One of the questions regarding corruption caused anxiety among officials and was omitted, where it was understood as asking an official to accuse those working in other departments. Copies of the three interviews were prepared after editing.

⁶ The justification for rejection was owing to security concerns that come from terrorists attack.

Second: Sample size

According to Bryman (2004: 97) “The decision about sample size is not a straightforward one: it depends on a number of considerations and there is no one definitive answer”. In addition, the researcher needs to consider constraints such as time limitations, costs and lack of resources (McCormack and Hill, 1997; Bryman, 2004). Therefore, to conduct any survey for data collection a sampling technique and appropriate total population should be first determined (Hafazalla, 2005). This task is made more complex in developing countries, owing to the lack of updated census, therefore, the targeted population cannot be correctly determined (Bulmer, 1993b; Ward, 1993).

The lack of recent census data about number and condition of dwellings continues to be a serious constraint for researchers in Saudi Arabia (Al-Nowaiser, 1982; Mandeli, 2011), therefore, the research had to rely on statistics published in 2007. The sample size was calculated through the Raosoft (2004) website, which showed that the needed sample size was 382 with a confidence level of 95 per cent, a margin error of 5 per cent and a response distribution of 50 per cent. In addition, the researcher tried to apply statistical calculations about random sampling. The researcher conducted 25 structured interviews randomly with residents within the three different zones, where the researcher interviewed 14 (56 per cent) residents living in mixed zones, eight (32 per cent) residents within the apartment zone with the new regulations and three (12 per cent) residents living in a villa zone in order to determine an appropriate sample size by using the following formula (McCormack and Hill, 1997; Bryman, 2004):

$$n = \frac{Z^2 \sigma^2}{E^2}$$

Where:

n= the minimum sample size.

Z= Acceptable level of confidence (1.96).

α = Estimate of the standard deviation.

E= Acceptable level of random sampling error.

It was found that the size of the sample would be 96, however, the researcher decided to increase the sample size to decrease the sampling error, to ensure the validity of the data and gain more information.

However, as it seems difficult to conduct a survey successfully based on probability sampling techniques, owing to indefinite population and lack of time, non-probability sampling considers common in social science (Bulmer, 1993b). Despite the disadvantages of the non-probability sampling method, it tends to reduce financial and times constraints by choosing the most accessible and easiest samples from the population of interest (Hafazalla, 2005).

In the main fieldwork, the researcher employed purposive (judgmental) sampling where, according to Bryman (2004: 333), most research based on interviews should use purposive sampling. According to Ritchie and Lewis (2004: 80), purposive sampling is used when there is a gap in knowledge about the study population. McCormack and Hill (1997), state that this method requires the researcher to target particular people who are most likely to represent particular interests.

After deciding the appropriate sampling approach, decisions about size have to be made. The decision of the actual sampling number was based on the researcher choice, where the researcher decided to conduct 380 face-to face structured interviews with residents owing to the heterogeneity of the population in the three zones, 20 with officials and 40 with professionals.

Third: Assistants

Research assistants (RAs) were used as an extension of the researcher in order to conduct face to face interview survey with residents owing to the time and number of interviews that should be conducted and to make the most benefit of the fieldwork. According to Ritchie and Lewis (2003: 92), owing to the time involved, researchers will rarely be able to administer and conduct interview themselves. Therefore, the researchers will need to recruit interviewers locally or through specialised agency in such work to do it on his behalf. The researcher contacted one of the academic staff members in the Department of Urban and Regional Planning to co-opt excellent students from the same department who are

familiar with interviewing residents⁷. However, the researcher undertook all the interviews with the officials and professionals and collected the missing secondary data.

According to Ritchie and Lewis (2003) research assistants need to be fully briefed about the work and study requirements. Therefore, before launching into interviews the researcher invited the students for a coffee, believing that it is important for successful fieldwork to build a good professional relationship with the research assistants. The researcher explained the nature of the research, the importance of the interview with the residents and what is expected from them. The students asked for time to read the interview questions and then suggested that they divide themselves into two groups⁸. The first group would consist of three to four students who would be responsible for doing the interviews and the second group would have one to two students, where their duties would be to review answers of the residents and to check the validity of the sample.

In addition, the researcher explained how the students should introduce themselves to the respondents, how to meet the residents either by going to the mosque and asking the *Imam* (a person who leads the Muslims in their prayers) for help or to go direct to residents' houses, but in a certain time. The researcher emphasised on calling him in case something wrong happened, interviewing the residents must be done face to face to ensure of the data accuracy, validity, reliability and consistency and stressed the confidentiality of the information. The final Arabic version from the interview questions were given to the assistants and asked to make copies from it. By the end of the meeting the researcher agreed to meet with the students once per week and to call the leader of the survey team from time to time to check if there were any problems.

⁷ The selected student had experience with interviewing residents, where they worked to Jeddah Urban Observatory Centre.

⁸ The students gave a quotation of four dollars (15 Saudi Riyals) per interview.

Fourth: Data collection

In terms of data gathering, the data was divided into two types of data, primary and secondary data, as follows (Figure 3.5):

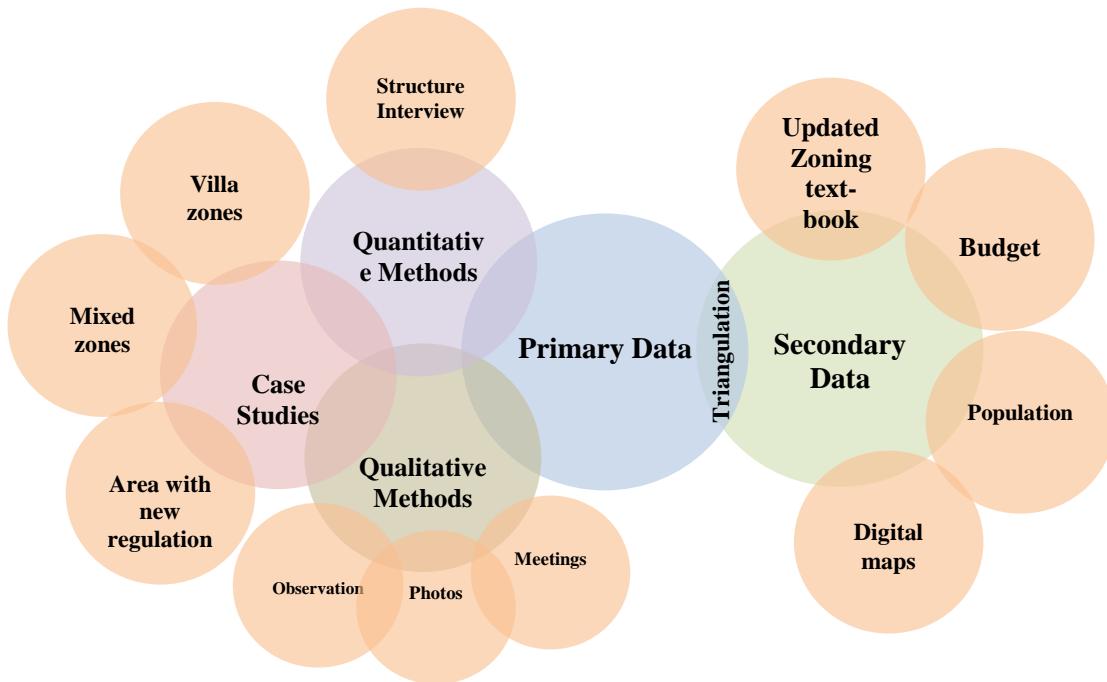


Figure 3.5: Different types of data and methods of collection during the main fieldwork.

Primary data

In this main data collection period a range of methods were used to collect primary data.

1. Quantitative methods

In the quantitative part of this research the researcher employed face-to-face interviews to collect data from the targeted stakeholders (residents, officials and professionals) as follows:

The structured interview with residents

The researcher divided the city into three residential zones in an attempt to compare them in terms of housing and socio-economic characteristics and the level of residents' satisfaction with their neighbourhoods and dwellings (Figure 3.6):

- **Apartment zone with the new regulations:** The subdivisions are; Al-Haramyen, Zahrat Al-Faisalyah and the new Al-Naseem subdivisions, which were to be built with the new zoning regulations. One case study was selected from this category: Al-Haramyen which is located in Al-Marwah district because half of the buildings do not fully comply with the new regulations and it was also easy to access.
- **Villas zone:** In Jeddah there are some districts which are dedicated as villas only or low density development such as Al-Muhammadyeah and Obhor. Al-Basateen subdivision, which is located in Al-Muhammadyeah, was selected because the researcher knows residents who live there, and it was accessible and secure.
- **Mixed zones:** In these areas there is a mix between villas built under old regulations and more recent apartments built under the new regulations such as Al-Naaeem, Al-Salamah, Al-Marwah, Al-Ayen, Al-Rabwah, Al-Salam and Al-Naghi neighbourhoods. These cases were selected because of the objections to the Municipal Council and the Municipality from the residents who live there.

The selection of the neighbourhoods was based on the following criteria:

- The neighbourhoods must represent the contemporary urban pattern of residential neighbourhoods.
- Neighbourhoods with problems in mixed zones, were selected from cases suggested by the Municipal Council.
- Neighbourhoods zoned as apartments with the new regulations.
- Neighbourhoods that were allocated for villas.



Figure 3.6: The selected neighbourhoods. Source: Google Earth (2012).

Although, the aim was to conduct 380 face-to-face structured interviews with residents living within different zones, 250 interviews were conducted or 66 per cent. The focus was more on those residents living in mixed zones, and within this zone the focus was on residents living in villas where they might be overlooked. Table 3.4 shows the spread of interviews between the dwelling types and the gap between the anticipated sample size and the achieved. Few residents living in roof villas in the areas of mixed and new zoning regulations development were interviewed owing to the vacancy of this type of dwellings. The assistants conducted the interviews in the participants' dwellings, where the interviews lasted between 35 to 45 minutes.

Table 3.4: The differences between the targeted and actual sample size.

Zone	The Targeted Sample Size				The Actual Sample Size				
	House				House				
	Villa	Flat	Roof Villa	Total	Villa	Flat	Roof Villa	Total	
Villa	40	-	-	40	34	-	-	34	85
Apartment	-	115	25	140	-	25	6	31	22
Mixed	140	50	10	200	101	83	1	185	92.5
Total	190	170	40	380	135	108	7	250	66

The structured interview with officials

This group was interviewed by the researcher to investigate the performance of the Municipality and their perspective on the new zoning regulations. The selection of the Municipality's officials was based on their role in departments that are relevant to the research topic, where the researcher targeted four departments. The researcher started with the Local Planning Department (LDP) which is responsible for preparing, formulating, editing and issuing the zoning regulations text-book and the master plan. The second department was the Building Permissions Department (BPD) that deals with part of the implementation of the regulations with architects by granting building permissions. The third department was the Department of Monitoring and Inspection (DOMI) that is responsible for monitoring and enforcing the law during the implementation phase. The fourth department was the Land Titles and Dimensions Department (LTDD) that ensures that the deeds of the plot belongs to the owner, the dimensions of the plot are consistent with the deeds before sending the drawings to the BPD for building permission.

The researcher had the chance to interview 15 officials involved in the different stages of dealing with the zoning regulations. All the interviews were conducted at the officials' offices. The researcher explained to each interviewee the purpose of his study and asked for permission to digitally record the interview, however, only few officials agreed to this even after some persuasion. The rest of the respondents refused to be recorded.

The researcher succeeded in interviewing five staff members from the first two departments, while the other two departments DOMI and LTDD were not cooperative. However, two of the researcher's friends were working in the Municipality and they helped in making connections with two officials from the DOMI and three staff members from the LTDD. Some of the officials asked the researcher to give them time to read the questions before the interview and although the interview was to be conducted face to face, four officials had already answered the closed and open questions. After reviewing them it was necessary to call back and clarify some of their responses.

The structured interview with professionals

Interviewing this group enabled the researcher to grasp the professionals' perspectives on the Municipality performance and the new zoning regulations. The researcher decided to interview 40 independent private architects' offices and developers, who are involved in designing dwellings and seeking permission from the Municipality of Jeddah. All the interviews with the professionals were conducted in their place of work. The researcher explained the purpose of his study and most of the professionals asked for time to read the questions. Some of the professionals were happy to do the interview, while others would not answer all the questions and some refused because of sensitive questions that might lead to criticism of the Municipality. As quite a number of professionals were uncomfortable about answering particular questions we can surmise that this is likely because there were suspicions about the researcher's intentions. Permission to record interviews was universally refused so all interviews were noted. Owing to the lack of time 20 professionals were interviewed, which constituted half of the targeted sample.

2. Qualitative methods

This research also used qualitative data in order to gain in-depth and detail information and evidence concerning the contemporary zoning regulations and the Municipality performance:

Observation

The researcher used participant observation at the Municipal Council's meetings. During the meetings, the researcher observed people's body language, particularly when issues of women's participation and attendance at the Council's meetings was discussed (see appendix 2, meeting No. 8). During the survey, the researcher spent time in the neighbourhoods to observe the differences between the three zones in terms of neighbourhood characteristics and main dwellings types and class of people living there. In addition, the researcher formed a clearer idea of the internal layout of the apartments in the new zoning regulations districts by entering flats that were up for sale. This helped to decide in which neighbourhoods to focus on.

Unstructured interview

A list of informal questions were asked and discussed with academics in the Department of Urban and Regional Planning, FED in KAU regarding the cases in Chapter 8.

Focus group

The researcher held a focus group with a group of Saudi students (Master and PhD) studying law in Newcastle University regarding the cases in Chapter 8.

Meetings

The researcher attended ten meetings (see appendix 2). Two of these were held in the Municipality and eight were convened in the Municipal Council. Two out of the eight were official meetings, where the researcher was invited to attend by the chairman of the Council.

The first meeting at the Municipality was held by the LPD for architectural offices to illustrate the changes in the zoning regulations, answer questions and clarify any ambiguity in the new regulations to the architects. The second

meeting at the Municipality was with the consultant (Al-Beeah Consultant Office). Although the consultant was cautious in his answers and tried to show the positive side of the new regulations and the role of the Municipality initially, he became more relaxed and cooperative after the researcher was introduced to the consultant by the chairman of the Council. The aim of the meeting with the consultant was to discuss the reasons for increasing the number of floors; the differences between the previous and the new master plan; the anticipated implications of the new regulations; the reasons behind the issues that emerged after implementing the new regulations and issues related to the performance of the Municipality.

The third meeting was convened in the Municipal Council. The meeting was between the Municipal Council and the LPD from the Municipality to discuss issues that emerged after applying the new zoning regulations in two neighbourhoods, Al-Ayen and Al-Salam without informing and updating the Council. Complaints were made by residents living in villas against developers who were building apartments under the new regulations. The complainants stated that their privacy would be compromised.

At the fourth meeting the researcher received an official invitation from the Municipal Council to attend another meeting. This was to include the Mayor and the head of the LPD from the Municipality and the chairman of the Municipal Council as well as some of the Council members to discuss and provide temporary solutions for the aforementioned problems. The researcher was asked to give his opinion and commented on the lack of understanding about how the zoning, building and subdivision regulations should work together and the implementation of the new regulations. Two days later the chairman of the Municipal Council wanted the researcher to work as a part time consultant for three months to the Municipal Council while the mayor wanted the researcher to work as a consultant to the Municipality. While these invitations were very flattering and confidence boosting, it was, of course, impossible to accept either.

The fifth meeting was conducted at the Municipal Council with villa residents and developers setting out their perspectives and exploring the solutions that

were proposed by the mayor. This meeting was the first public hearing in Saudi Arabia. The researcher received an official invitation from the Municipal Council to attend.

The sixth meeting was a monthly meeting held every last Thursday of the month with Jeddah's male and female residents. It was convened at one of the KAU's halls where women were seated in a separate room from the men but were able to watch, listen and speak⁹. One of the issues that was posed was the issue of the impact of the new zoning regulations on the city.

The seventh meeting was held to discuss a request from a group of residents who wanted to change the use of a local street from residential to mixed-use (residential and commercial use). This meeting included the chairman of the Municipal Council and some of the members in the Council. The chairman of the Council asked the researcher to give his opinion which was accepted by the Municipal Council.

The eighth meeting was convened in the Municipal Council. The meeting was to discuss the issue of applying the new zoning regulations in Obhur district, which was zoned for villas and occupied by wealthy people. A tower of 15 floors was under construction. This meeting included the chairman of the Council and two residents as representatives of the residents. In addition, the researcher and the chairman of the Council and some of the Council members discuss the issue of the new zoning regulations in another district named Al-Rabwah, where the apartment blocks with the new regulations were erected and compromised the privacy of the villas owners. One of the apartments was occupied and the other two were nearly finished. A decision was made by the chairman of the Council to stop the construction of these.

The ninth meeting was considered as another credit to the Municipal Council of Jeddah as the first to take the initiative to involve foreign residents in one of

⁹ This kind of meeting used to be held in the head quarter of the Municipal Council. However, this was changed since women attended one of these meetings and sat with the men, where the Council do not have a hall for women. This caused the men to complain and some rejected the idea of women attending these kind of meetings.

their meetings. At this meeting the Council met with the Palestinians as they represent the majority of foreigners.

The last meeting (the tenth meeting) was dedicated to discussing the issue in Al-Naghi. The complaint was that 90 per cent of the built neighbourhood are villas but the Municipality granted developers and residents building permissions to construct apartment blocks with the new zoning regulations.

Photographs

Some photographs were taken, especially, in the mixed zones for some of the cases as a source of evidence.

3. Case studies

In addition, to the two case studies from the pilot survey another two targeted case studies have been suggested by the chairman of the Municipal Council. The chairman of the Council requested the researcher to meet one of the apartment owners in the Al-Salam subdivision, to listen to his request. The researcher met the developer and went together to the site. On the way to the site, the developer talked about his situation in some detail. The researcher took some photos of the site and asked the developer to take a short and quick survey together in the neighbourhood. The researcher wrote a report for the chairman of the Council, (see Chapter 8, first case).

The second case study was in Al-Naghi neighbourhood, where the Chairman of the Council asked the researcher to go with one of the Council's members to meet the residents who complained about the new regulations and to observe the status quo of the neighbourhood especially in terms of building heights and housing types. Most of these new apartments are under construction but one of the obvious issues was an apartment which was already occupied and whose windows overlook a girls' school. The researcher reported what he saw to the chairman of the Council, where the latter went to the field promising to find solutions that would suit both parties (see Chapter 8, second case).

Using Secondary data

The statistical sources included census data and housing statistics for Saudi Arabia and Jeddah, from the Central Department of Statistics and Information (CDSI) at the Ministry of Economic and Planning (MOEP), the budget of Municipality from Jeddah Municipality and the budget of MOMRA and Saudi Arabia from the Ministry of Finance (MOF). The non-statistical sources including the zoning regulations manual, literature and documents held by the Municipality and MOMRA, which explain Saudi Arabia's structure and hierarchy, the urbanisation process and the transition of the urban morphology of Jeddah. However, collecting statistical and non-statistical data was not an easy task, and it was necessary to rely on contacts to provide access. For instance, obtaining statistical data for Jeddah, which consists of mean, median and standard deviation, from the Jeddah Urban Observatory Centre Jeddah (JUOC) was impossible without contacting four friends¹⁰. Access to information about the budget of Jeddah Municipality was important to apply the UGI model. Although official channels seem not to be opened, access to budgetary information was finally granted simply by a chance meeting with an official who took an interest in the research.

Even access to the simplest and seemingly non-controversial information was often difficult to obtain. For instance, the researcher requested the number of people who are employed in the Municipality from the Head of Human Resource Department (HRD) who angrily refused to divulge the information. The officer believed that there could be no relationship between the requested data and the research topic¹¹. However, persistence on the researcher's part resulted in the officer agreeing and the data being provided. Access to information regarding

¹⁰ The Observatory Centre has been asked not to publish this information without permission from the Mayor or his deputies. According to the head of the Urban Observatory the reason behind this is that the authority of Census and Statistics complained and appealed to the former Prince of Makkah Province (HRH Prince Khalid Al-Faisal) and they claimed this job is their responsibility not that of the Urban Observatory Centre. So the prince asked the Centre not to publish anything until they solve this problem.

¹¹ The news mentioned that the number of the staff at the Municipality of Jeddah is 3,200 and 88 per cent have high school qualifications. Also, less than 5 per cent are engineers (in KSA architects, planners, landscape architects, civil and electrical are all called engineer). The HR claimed that what was published in the newspaper was wrong. However, some of the employees at the Municipality emphasised that what was published in the newspaper is true. The data that was obtained proved the newspaper was correct.

digital maps was also so difficult, where the researcher needed to explain the purposes of the digital maps and went through a long process of inquiries¹². Although, the researcher obtained the maps on a CD he found later that there was missing data about land uses. So the researcher went back to the GIS Department but was asked to bring another letter which was not possible because of time constraints. Thus, the research used the provided maps on the Municipality website and Google Earth maps. On the other hand, accessing other data such as the number of building permissions was easy to obtain through the IT Department, where she (the head of the IT Department) requested from the male staff members to support the researcher¹³.

3.3 Making Sense of the Data

The previous section has described the methods that were used to collect various types of data from both primary and secondary sources. According to Overton and Diermen (2003), once the researcher had collected the data several techniques can be used to analyse and present the data. Therefore, this section provides explicit perception about the methods that were utilised in this research to analyse and present both quantitative and qualitative data.

The researcher kept the “so what” question in his mind when reviewing the data and this led to some of the data not being used. In addition, analysing the data was aimed to explain and describe the current situation of the Municipality and the new zoning regulations. The researcher reviewed certain research to have an idea about the most appropriate statistical techniques that can be used in this research to analyse the data and how to present the data in different format.

Therefore, as Creswell (2003) mentioned the researcher decided to employ descriptive and inferential analysis to analyse the quantitative data and description and thematic text to analyse qualitative data. The analysis strategy in this research is divided as follows (Figure 3.7):

¹² The researcher was asked to bring a letter from the university specifying in detail what maps are needed.

¹³ Very unusually for Saudi Arabia to have a woman who is the head of department that includes men in the Municipality. Actually Jeddah Municipality is the first Municipality in the Kingdom which promoted a woman to this kind of position.

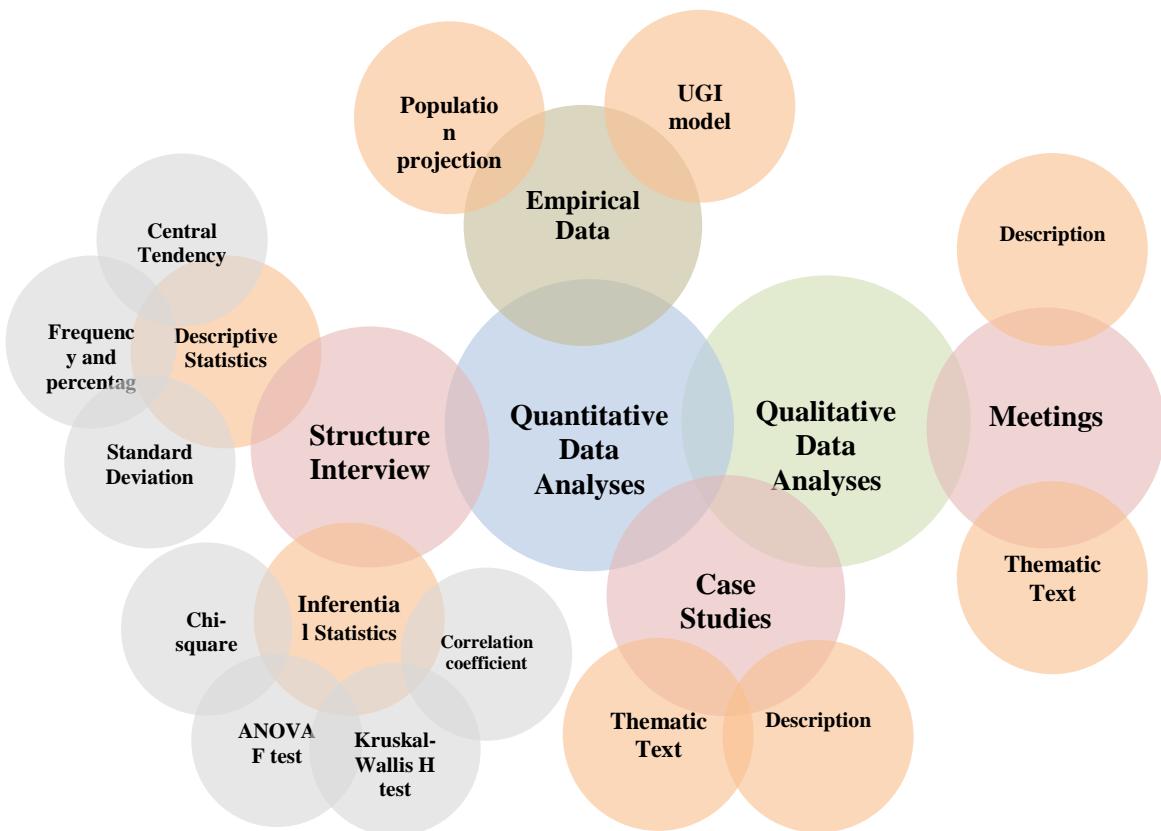


Figure 3.7: Different techniques of analysis.

First: Quantitative data analysis

The researcher used tables and different types of graphs (linear and vertical and horizontal bar charts) to illustrate the findings. In addition, quantitative analysis divided into two sections, the first section discusses the analysis techniques for interviews (presented in Chapters 7 and 9) and the second section analyses the empirical data (presented in Chapters 5 and 6), as follow:

Interview analysis

The raw data of interviews was entered as Microsoft Excel for creating charts and SPSS (Statistical Package for Social Science) for analysis. In addition, the researcher rectified the coding for some questions that were asked in a negative voice. A five-point Likert scale was used, where one is 'strongly disagree' all the way to five which is 'strongly agree' were fused to a three-point scale (1. disagree, 2. neutral and 3. agree). Similarly, five-point Likert scale was used to gather information about residential satisfaction, where one is 'very dissatisfied'

all the way to five which is ‘very satisfied’, the final analysis uses a three-point scale (1. dissatisfied, 2. neutral and 3. satisfied). This process of data checking and entry for three interviews took time. Though the researcher had personal experience with Microsoft Excel, it was very helpful to learn SPSS software. Once the data entry was finished, analysis and producing charts and tables were easy to present. However, the challenge was which type of analysis method for quantitative data should be used and what useful forms of results would serve the purpose of the research.

The researcher employed descriptive and inferential statistical measurements to analyse and represent the quantitative data. The descriptive statistical measurements included; central tendency (mean and median), frequency and distribution that show the frequencies and percentages of the variables, dispersion measurements (standard deviation) (McCormack and Hill, 1997; Pallant, 2005; Acton et al., 2009). However, in the context of this research, looking at each variable alone, which is known as univariate data, would provide a limited amount of information and would be not sufficient for the research objectives and questions (Alshafiei, 2007). Therefore, the researcher used bivariate data and employed inferential statistical measurements. This included bivariate cross tabulation to provide frequencies and percentages and to examine whether or not there is a significant association between two variables through chi-square test, which provide the probability (P) value (less than 0.001 is high significance, 0.01 to 0.05 is moderate significance and above that is less significance) if P value is not significant then the variables are statistically independent.

In addition, the researcher used a non-parametric test known as Kruskal-Wallis or H test was used to compare the mean rank for each group, in another word, which variable has ranked the highest and lowest mean. Correlation coefficient is another inferential statistical measurement that was used to determine whether or not there is a significant correlation between two variables (see Chapter 9). If the direction is positive (as one variable increase the other one does as well) or negative (as one variable increase the other one decrease) and the strength of the relationship by using Pearson (r) measurement (McCormack and Hill, 1997; Pallant, 2005; Acton et al., 2009). The researcher tried to use regression analysis

to measure the level of residents' satisfaction. However, if one variable has no value in data, the whole case must be excluded. Thus, the researcher employed equations that were used in Mohit et al. (2010) work to measure the overall residential satisfaction with their dwellings and neighbourhoods (see appendix 5b).

Analysing the empirical data

Statistical data that was collected was used to estimate the projection of the future population of Jeddah and housing demand, where the researcher used three robust techniques to estimate the future population. In the first method, the researcher used a constant annual growth rate, the second method is the linear model and the third technique is the exponential curve projection model (see Chapter 5). Data was also collected to assess the performance of Jeddah Municipality through employing the UN-HABITAT "Urban Governance Index" (UGI) model (see Chapter 6).

According to UN-HABITAT (2004) two alternative sets of indicators have been suggested for the UGI model. The first alternative consists of 18 sub-indicators. The second alternative included indicators with high and moderate ranking, which consists of 25 sub-indicators. According to Narang (2005) the UGI may not always be the best mode of judging the quality of governance given the diversity of contexts. Although, altering the indicators to suit a specific context can lead to a loss of universality and reduce comparability of data, the UGI was not a best fit to cities in Saudi Arabia, because the UGI model looks at the whole governance and this study focuses on spatial planning. Therefore, driven by the desire to obtain a better understanding of context and looking for a robust ways of being able to assess the quality of the local government, the model might need to be altered in this study.

Most of the issues that needed alteration were concentrated in the "Effectiveness" indicator, where one of the main issues that I faced was in understanding three sub-indicators: local government revenue per capita, ratio of actual recurrent and capital budget, and local government revenue transfer. After discussion with the second supervisor (Dr. Graham Tipple) I was advised to write to the UN-

HABITAT (see appendix 4). However, no response was forthcoming, therefore, Dr. Tipple and I, agreed to re-identify the terms and modify the equations (Table 3.5). The researcher modified the “Effectiveness” indicator to draw on consumer price index (CPI) to measure the inflation over time and calculate more accurate figures.

Table 3.5: Re-identifying some of the terms and equations in the Effectiveness indicator.

Code	Equation	
	According to the UN	Modification according to the Saudi context
Ratio of recurrent and capital budget (RRC)	$RRC = R/C$	$RRC = R/T$
Local government revenue transfer (LGT)	$LGT = T/R * 100$	$LGT = T / (TB) * 100$

According to the UN; R= Recurrent budget includes income derived on a regular basis, C= Capital including fixed income, that is derived after allocation of funds from internal or external sources, T= Income originating from higher levels of government and R= Total local government revenue (transfers and non-transfers. According to the Saudi context; R= Municipality revenue, T= Transfer income or Budget from the Central Government to the Municipality and TB= The Municipality total budget.

Looking at the indicators from the lens and context of Jeddah as a place, some indicators would seem to be more important if they moved and changed to give a sharper picture about what is happening. However, the difficulty was to identify what and which of the sub-indicators or alternative should be used for the model. The researcher recast the UGI looking only at 20 sub-indicators that matter most to planning and subtracting those factors which do not and then reweighting the indicators that remained (Table 3.6) (see Chapter 6).

Table 3.6: UGI, selected indicators for three alternatives.

Index	Alternative 1: Only high ranking	Alternative 2: High and selected moderate ranking	Alternative 3: Selected high and moderate ranking
Effectiveness	<ol style="list-style-type: none"> 1. Local government revenue per capita 2. Local Government transfers 3. Ratio of mandates to actual tax collection 4. Published performance standards 	<ol style="list-style-type: none"> 1. Local government revenue per capita 2. Ratio of actual recurrent and capital budget 3. Local Government transfers 4. Ratio of mandates to actual tax collection 5. Predictability of transfers 6. Published performance standards 7. Customer satisfaction survey 8. Vision statement 	<ol style="list-style-type: none"> 1. Local government revenue per capita 2. Local Government transfers 3. Ratio of mandates to actual tax collection 4. Predictability of transfers
Equity	<ol style="list-style-type: none"> 4. Citizens charter 5. Proportion of women councillors 6. Proportion of women in key positions 7. Pro-poor pricing policy 	<ol style="list-style-type: none"> 9. Citizens charter. 10. Proportion of women councillors 11. Proportion of women in key positions 12. Pro-poor pricing policy 13. Street vending 	<ol style="list-style-type: none"> 5. Citizens charter. 6. Proportion of women councillors 7. Proportion of women in key positions 8. Existence of pro-poor policy for violation and fees
Participation	<ol style="list-style-type: none"> 8. Elected council 9. Election of Mayor 10. Voter turnout 11. People's Forum 12. Civic Associations (per 10,000) 	<ol style="list-style-type: none"> 14. Elected council 15. Election of Mayor 16. Voter turnout 17. People's Forum 18. Civic Associations (per 10,000) 	<ol style="list-style-type: none"> 9. Elected council 10. Election of Mayor 11. Voter turnout 12. People's Forum 13. Vision statement
Accountability	<ol style="list-style-type: none"> 14. Formal publication contracts, tenders, budget and accounts 15. Control by higher levels of government 16. Anti-corruption commission 17. Disclosure of personal income and assets 18. Regular independent audit 	<ol style="list-style-type: none"> 19. Formal publication of contracts 20. Control by higher levels of government. 21. Codes of conduct 22. Facility to receive complaints 23. Anti-corruption commission 24. Disclosure of personal income and assets 25. Regular independent audit 	<ol style="list-style-type: none"> 14. Formal publication of contracts 15. Control by higher levels of government. 16. Facility to receive complaints 17. Customer satisfaction survey 18. Anti-corruption commission 19. Disclosure of personal income and assets 20. Regular independent audit

Source: Adapted from (UN-HABITAT, 2004: 6)

The score value of the UGI indicators ranged between 0 to 1, where 0 means poor performance and 1 means excellent performance. In addition, all the dichotomous variables (yes or no) transformed into quantitative data and expressed as ‘No’= 0 and ‘Yes’= 1. Each sub-indicator has a detailed formula to calculate the final score of the sub-indicators. The final score is converted from ratio to percentage. The UGI is conducted through the following formula (UN-HABITAT, 2004: 83):

$$\text{Urban Governance Index} = \text{Average of (Effectiveness sub-index} + \text{Equity sub-index} + \text{Participation sub-index} + \text{Accountability sub-index}).$$

The researcher applied the UGI formulation for both the 25 sub-indicators and the recast 20 indicators. The results of the original and recast sub-indicators of Jeddah Municipality were then compared with 24 selected cities from both developing and developed countries that were analysed by the UN-HABITAT. It should be noted that the results for the 24 selected cities were not recalculated during this research.

Second: Qualitative analysis

Grounded theory (inductive approach) was used to identify the key themes of the research (Bryman, 2004). According to Bryman (2004: 398) grounded theory “is probably the most prominent of the general approaches to qualitative data analysis”. However, one of the difficulties of qualitative research is managing the richness of the data, which includes interviews, meetings and case studies (Bryman, 2004). Therefore, the researcher started by transcribing the recorded tapes and notes after the interviews, meetings and case studies, that were conducted in Arabic into Arabic text then translated them into English. The researcher was cautious during the translation not to change the meaning. Following the translation and transcribing stages the researcher applied a thematic analysis approach and developed a coding scheme to classify and organised the data into specific relevant.

Sophisticated text management software packages such as NVivo are available to do code-based analysis, categorise the qualitative data into themes, to tag, retrieve data efficiently and maintain complex codebooks (Ryan, 2004; Richards, 2009; Ahmed, 2011). However, owing to the lack of time to learn the software, where

the researcher had already spent a lot of time on quantitative data, it was necessary to search for an alternative, thus, 'Microsoft Word' was used to generate a database to manage and categorise the qualitative data (Sawadsri, 2010 and Ahmed, 2011).

3.4 Research Ethics

The researcher considered the ethical aspects of this study. It was mandatory to design an information letter for the survey explaining the purpose of the interviews and the identity of the researcher and the sponsor. In addition, all the participants who were involved in this study were informed about the research through a short but comprehensive description. The research assistants were also asked to introduce themselves to the residents and give a similar introduction to the research and the purpose of the interview. The researcher, also, made a verbal and written obligation to all of the participants that the information gained in the survey would be used for research purposes. Some of the participants such as the chairman of the Municipal Council and officers in the Municipality were proud to be included in the research. Some employees from the public and private sectors were named in the acknowledgement as they requested according to their contribution to the research.

3.5 Research Obstacles

This section will briefly highlight and discuss a number of key constraints that faced the researcher in this study. The research obstacles were as follows:

- **Bureaucracy and lack of clarity of the system** - The researcher expected to obtain approval within a month or two. However owing to unfamiliarity and lack of clarity of the procedures, it took three months. This caused some delay and changes in the programme of the main fieldwork.
- **Making appointments with officials and professionals** - it was very difficult to make appointments with the Municipality staff and private sector professionals partly because of their busy schedules but also because of an ingrained sense of superiority that led them to cancel

meetings without prior notice. This called for changes in the survey programme.

- **Making appointments with residents** – it was found that the young generation were more cooperative than the older generation. However, it was hard to convince some residents to participate in something that from their perspective would not provide any tangible benefits for them.
- **Recording an interview using a recorder** – the majority of participants from both the governmental and especially the private sector did not want their conversations to be recorded so notes were taken by hand in these instances.
- **Transportation issues, quality of the road and infrastructure issues** – in KSA generally and in Jeddah specifically research would be difficult to do without a car owing to the poor quality of the infrastructure, lack of public transportation and the heat which makes walking difficult. Although, there are taxis and buses as an alternative means of transportation they are not a practical choice. The high dependency on cars causes severe traffic jams and lost time became another serious obstacle. It used to take a half hour to reach the Municipality's office but now it can take an hour. Additionally, the lack of infrastructure and maintenance of some main roads created frustration and difficulty in planning time.
- **Family, relatives' and friends' commitments** – according to the Arab culture and customs, especially in Saudi Arabia, the researcher must give time to sit with the family, meet the relatives and friends. In addition, during the fieldwork, my family sold the old house and, as the eldest son, I had three months to look for a new dwelling. This is a time consuming, which led to increasing stress and caused changes to the plan of the fieldwork.
- **Secrecy of information** – although the level of transparency has increased from that of 10 years ago and data has become more widely available and accessible in KSA, there are still some private and public

sectors who treat information as a confidential matter. Even though the researcher had official letters from both universities, he encountered this problem. This problem occurred in three departments at the Municipality: with the head of the HRD, and the head of the GIS department who was extremely conservative about giving maps and data in a GIS format, even to other departments in the Municipality. The third was at JUOC, where some statistical data was not easy to obtain.

- **Lack of consistent data** – this issue occurred in data about the population of Jeddah in particular periods, where different sources have arrived at different population statistics for the same year.
- **Lack of trust** - the researcher faced some issues with some architectural offices and Municipality officers during his structured interviews. On one hand, the architects were afraid to answer some sensitive questions relating to the performance of the Municipality. Some of the professionals were suspicious about the researcher and apparently thought that the researcher must be spying on them for the Municipality. The officials, on the other hand, were cautious owing to an intensive investigation into corruption that coincidentally occurred during the field work period¹⁴.
- **Taking photos** - the country is under very tight control and taking photos without permission from the province governor and the police is illegal. The researcher suffered until he got the permission from the police.
- **Preparing the questions of the structured interview** - clarifying the questions of the interview was time consuming in English and was also time consuming in trying to render it faithfully in Arabic.
- **Shipping data** – storage and shipping of paper heavy data from Jeddah to Newcastle was expensive.

¹⁴ This is because over 100 people died in a rain fed flood in 2009.

3.6 Conclusion

This chapter has identified and justified the research strategy and methodology that have been used in this study, where mixed methods, case studies and UN-HABITAT UGI model were applied. A justification for selecting Jeddah city was also made. The fieldwork was done through four main phases. The study has used purposive sampling to determine the sample size for the residents, officials and professionals. The chapter has shown that to conduct fieldwork in Saudi Arabia time and season should be considered.

The chapter has illustrated various techniques that were used to collect primary (quantitative and qualitative) data by conducting interviews, observation and attending meetings. Face to face structured interview was the best method with residents, officials and professionals. Research assistants were used as an extension of the researcher in order to cover the ground. They were briefed, trained and monitored by the researcher. Secondary sources data, which included newspaper articles, official documents, statistics and maps, were collected. Case studies were identified and selected through the Municipal Council meetings and residential zones were classified into three categories (villas, apartment blocks with the new zoning regulations and mixed residential zones). It was clear from both the pilot survey and main fieldwork that in Saudi Arabia it is very hard to prosper and do any research without having the right networks and using social capital to open the doors for the researcher.

In terms of analysing the quantitative data, this research has applied descriptive statistical measurements and inferential numeric analysis. The UGI 25 sub-indicators were used initially to assess the Municipality and were recast to 20 sub-indicators that were reweighted. Description and thematic text were used to analyse qualitative data. The chapter closed by exploring ethical dimensions and the research obstacles. The following chapter discusses the planning system in Saudi Arabia at a range of levels.

Chapter Four: The Planning Framework in Saudi Arabia

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CHAPTER FOUR: THE PLANNING FRAMEWORK IN SAUDI ARABIA

4.0 Introduction

To assess the performance of a government agency there is a need to understand the nature of the system of a certain country. Thus, the aim of this chapter is to explain the nature of the political, planning, economic and social transformation since the establishment of Saudi Arabia in 1932. The chapter relies on extensive literature review (both in English and Arabic). This chapter is divided into six main sections. The first briefly discusses the economy of Saudi Arabia which has played a pivotal role in the country's transformation. The second section explores the nature of the political and legislative systems. The third section describes the hierarchy of authority in the planning system. Section four briefly discusses the planning laws. Reflections on the planning system, including its obstacles and challenges, are provided in the fifth section. The last section shows changes in social structure, the origins and evolution of social attitudes, the importance of privacy, as well as the rapid increase in urbanisation levels and the heterogeneity of Saudi society.

4.1 The Economic Status

Prior to the discovery of oil, the Saudi economy was largely based on international pilgrimages to the Holy cities. Secondary micro-economies were supported by activities such as agriculture, fishing and trading. Nowadays, Saudi Arabia is considered a rich country for its natural resources of oil, natural gas and minerals deposits (Shawly, 2007; GHA, 2010). In terms of natural gas, Saudi Arabia possesses approximately four per cent of the world's reserves and is rich in minerals such as gold and phosphate. Since the 1930s, however it is oil that has been the most important natural resource with respect to the nation's revenue (Alkhedeiri, 1998). Saudi Arabia holds approximately one-fifth of the world's petroleum reserves and the petroleum sector in Saudi Arabia constitutes 45 per cent of the GDP and 80 per cent of the national budget's revenue (McGinley, 2011; MOEP, 2011). Therefore, the country's economy depends heavily, and by

extension its urban development, on profits derived from the oil-production, oil-refinery and petrochemical industries.

The economic growth in the country is attributed to the three oil booms: 1947-1956, 1974-1986, and the most recent between 2006-2010 (Salagoor, 1990; Alkhedeiri, 1998; Mandeli, 2008). Owing to the increase in oil production, the country's budget increased from \$49 billion in 2000 to \$144 billion in 2010 - an increase of 192 per cent (MOF, 2011a). The annual GDP per capita increase \$10,000 (37,500 SR) in 2000 to \$16,245 (60,919 SR) in 2010 (MOEP, 2011a)¹.

According to the 2011 Legatum Prosperity Index Report (2012), Saudi Arabia ranked 36th amongst 110 countries economically and 49th in terms of prosperity. According to McGinley (2011), the City Bank anticipates Saudi Arabia will be the richest economy in the Middle East in terms of GDP per capita by 2050, with an estimated individual average wealth of \$98,311 (368,666 SR). In addition, research carried out by the Brookings Institution (2012), entitled "Global MetroMonitor 2011" reports that the increases in average income and job creation rates places Riyadh and Jeddah among the 200 fastest growing metropolitan areas worldwide only surpassed by Shanghai..

In spite of this apparent affluence unemployment rates are slowly increasing, according to MOEP (2011c), 10 per cent in 2008 to 10.5 per cent in 2009 and poverty rates have reached 22 per cent. Moreover, inflation reached 33 per cent between 2007-2011 (Al-Ajaji, 2011).

4.2 The Nature of the Political System

According to Healey (2006), to study politics is to focus on who, what and how to control. Politic takes control over resources and over the power to set rules, laws and procedures. Since the founding of the Kingdom of Saudi Arabia (KSA) in 1932, the Saudi monarchs have developed what is defined by de-Magalhaes and Carmona (2009) as 'State centred model'. In a model of this kind, most of the administrative responsibilities and financial resources are conducted and allocated by the central government. Therefore, the Saudi government is characterised as a centralised government, where circulars, instructions, laws and decisions are

¹ One USA dollar equal 3.75 Saudi Riyals.

issued for the state in an unambiguously top-down approach (Abdulaal and Aziz Al-Rahman, 1998). According to Mashabi (1988) and Aazzam (2004), there are significant differences between the political system in Saudi Arabia and the political systems in Western monarchies such as the UK, especially, in term of democracy, transparency, accountability, public participation, responsiveness, and governance issues. For example, the Saudi system does not allow for political parties and although there is a proto-parliament body the members are not elected.

4.2.1 Legislation and constitution

Saudi Arabia is an Islamic state, with the two Holy Cities for the Muslims (Makkah and Madina) located within its borders and Islam is the official state religion (Federal Research Divisions, 2006). The Saudi government has no legislative assembly and has never claimed the right to legislate. The concept of legislation (*Tashria*) is not accepted generally by Muslims, particularly in Saudi Arabia, as Muslims believe that Allah is the supreme legislator (Aba-Namay, 1993). Thus, Saudi Arabia is governed according to Islamic legislations and the Basic Law which was promulgated in 1992 (*Nizam Al-Hukum*) (Figure, 4.1).

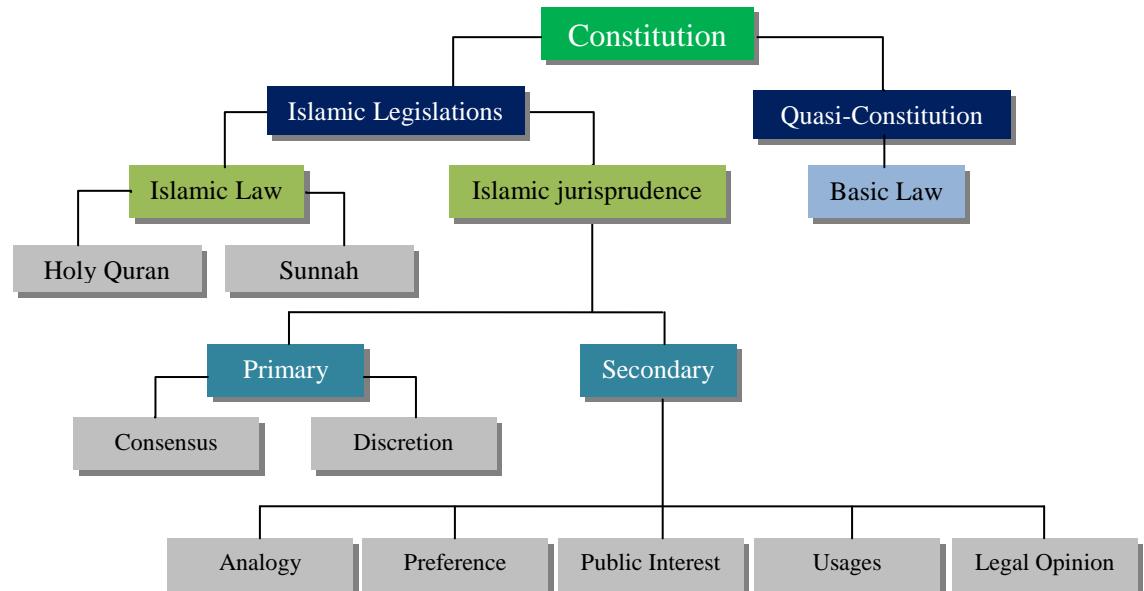


Figure 4.1: The legislative framework forming of Saudi Arabia.

Source: Author.

Islamic legislation consists of two main sources. Islamic Law (*Shariah*) is the primary source, which comes from the Glorious Quran and *Sunnah*². Second, Islamic jurisprudence (*Fiqh*), is the secondary or supplementary source³. *Fiqh* is divided into two main categories. The first includes primary sources: Islamic scholars' consensus (*Ijma*)⁴ and use of discretion (*Ijtihad*)⁵. Secondary sources are gathered from analogy (*Qiyas*)⁶, preference (*Istihsan*)⁷, public interest (*Istislah*)⁸, usages or customs (*Urf*)⁹, and legal opinion (*Fatwa*)¹⁰ (Aziz Al-Rahman, 1985; Mortada, 2003). Islamic law is the source of governing legislation, where civil and criminal law are interpreted through the Quran. Planning law and regulation also follows Islamic law and thus should be adequate to and parallel with the *Shariah* (Aziz Al-Rahman, 1988; Aba-Namay, 1993).

According to Aba-Namay (1993) the term 'constitution' (*Dustur*) is not commonly used in Saudi Arabia, where the government has considered the Holy Quran as the constitution of the country. The Basic Law (also known as the Basic Statutes of Governance) was promulgated in 1992. It considered a quasi-constitution that consists of a series of laws that look to *Sharia* for their guidance (Aba-Namy,

² *Sunnah* or Method is the Apostle Mohammed's deeds, words and approvals. Such an example for the Prophet's deed is when he lays down the idea of urban zoning in Medina, which became the first prototype for a Muslim city (Al-Hathloul, 1981; Mortada, 2003)

³ *Fiqh* is the science of Islamic law (*Shariah*). It is the Muslim scholars' interpretation of *Shariah*, based on their knowledge of Islamic laws (Mortada, 2003).

⁴ The consensus and agreement of the Prophets Companions or scholars in a given generation when tackling a particular problem. A consensus is reached by referring to the Holy Quran and *Sunnah* (Aziz Al-Rahman, 1985).

⁵ Literally, it means 'discretion', 'striving hard' and 'diligence'. This is carried out by *Shariah* scholars, who investigate solutions and set relevant rules to deal with new problems. This takes place for the benefit of all, without prejudice, and is not confined to a certain type of people or ethnic group (Aziz Al-Rahman, 1985).

⁶ Literally means measuring and comparing (Mortada, 2003). Scholars of *Shariah* decide on solutions to new issues or establish new rules based on precedents and study of the *Shariah* (Aziz Al-Rahman, 1985). There are two forms of *Qiyas*: the deductive and the inductive measurement, the latter is most common form, which is based on natural or physical facts and sociological data (Mortada, 2003).

⁷ Muslim scholars may use this to express their preference for a particular judgment and to safeguard public interest based on their knowledge (Aziz Al-Rahman, 1985).

⁸ It gives priority to the community and public welfare taking into account matters on which the law is not specific. It divides into three forms: firstly, al-maslahah al-muatabarah, which it refers to the laws defining principles that preserve people's properties and way of life. Secondly, al-maslahah al-mulghah, whose principles require the obedience to *Shariah* ordinance in order to desist from illegal things. Thirdly, al-maslahah al-mursalah, which is relevant to the cases that appear without evidence to consider as valid or to reject as invalid (Mortada, 2003).

⁹ It is what commonly known and accepted for a society. It is acceptable as long as it does not contradict with Islamic principles revealed either in the Quran or *Sunnah* (Mortada, 2003).

¹⁰ It is the opinion of an Islamic scholar based on *Shariah*, *fiqh* and a review of various judicial practices in the light of objectives of Islam (Mortada, 2003).

1993; GHA, 2010). The Basic Statutes of Governance lays out the line of succession and sets out the powers of the King. It is subject to modification and rectification when necessary and in accordance with country's interests and circumstances. However, the perception is the King is an absolute monarch but nevertheless there is a constitution. Therefore, it is unclear if the Saudi government should be considered an absolute monarchy or a constitutional monarchy government.

4.3 The Nature of the Planning System

It is essential, as Mandeli argues in his work (2010), to establish and exhibit the broader context within which urban management in Saudi Arabia operates. The way that the planning system works in Saudi Arabia is strongly influenced by the political system of the country. Therefore, the planning system in Saudi Arabia is a direct product of the political system. Figure 4.2 illustrates the administrative structure and Table 4.1 shows the various levels and agencies responsible for planning and development, showing the role and importance of each.

4.3.1 National level

At the national level, governments establish the planning framework at different levels and set the duties of the government's agencies. Planning regulators at the national level are enacted in two forms, namely primary and secondary regulators. The King, the 'Custodian of the Two Holy Mosques' is the primary regulator in the country who represents the apex of the political structure, holding supreme power and authority in the country (Alkhedeiri, 1998; Raphaeli, 2003). He acts as the ultimate source of judicial, regulatory and executive authority (Aba-Namay, 1993; Raphaeli, 2003)¹¹. In addition, the King can approve or veto any decision of the Cabinet of Ministers. In terms of planning, the King's authority can extend to the local level, where he has the power to change zoning regulations with a Royal Decree such as building height in certain areas.

¹¹ The King retains the right to hire as well as dissolve the Crown Prince, COM members, CC members, governors of the regions, ministers and mayors (Abdulaal and Aziz Al-Rahman, 1998; Alkhaderi, 1998).

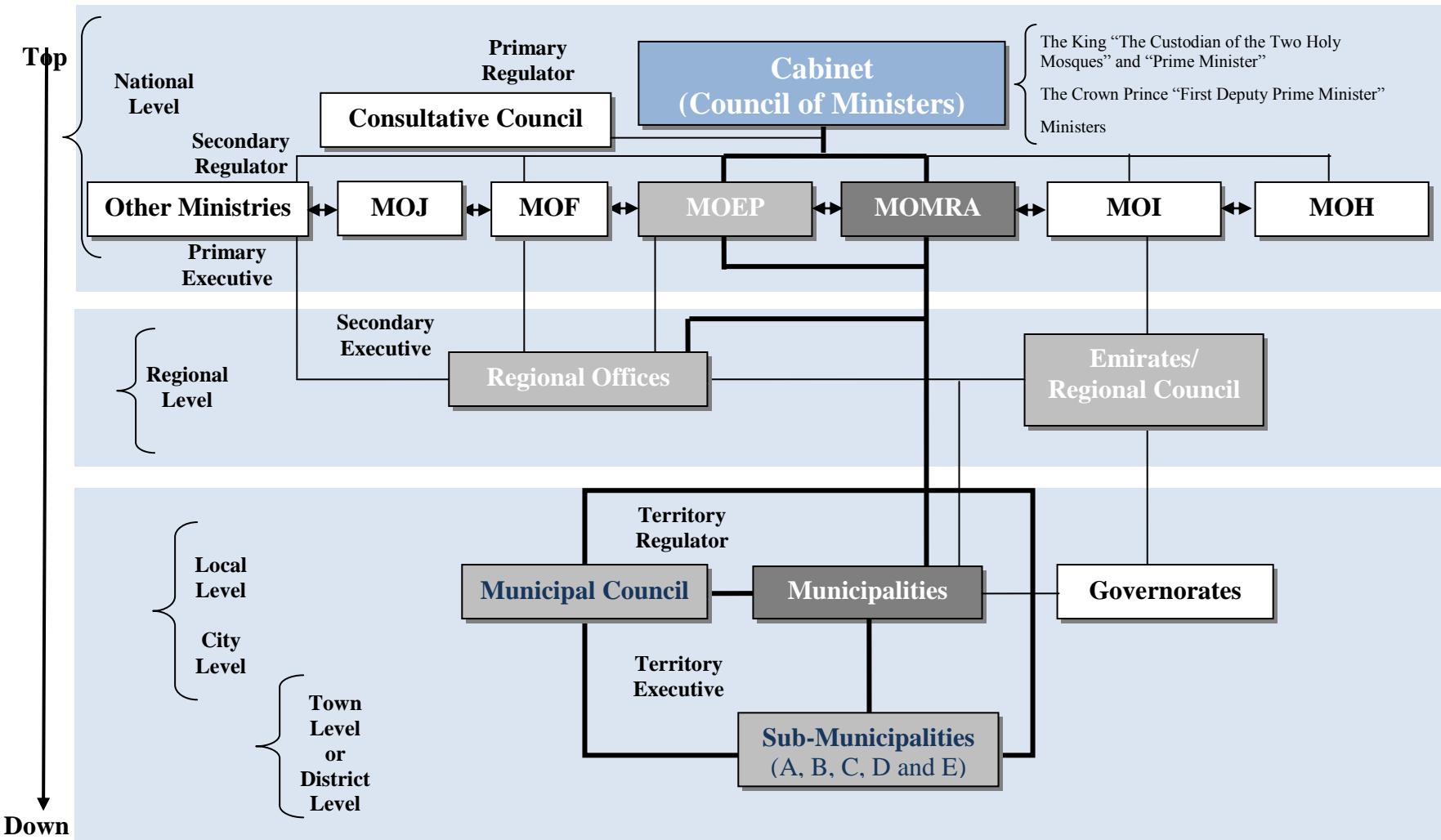


Figure 4.2: The hierarchy of the planning system in Saudi Arabia.
Source: Author.

Table 4.1: The duties of different authority at different scale. Author.

Level	Authority	Role/Duties
National	King	The highest judicial, regulatory and executive authority, approve and veto any decision of the Council of the Ministers and change zoning regulations at the local level.
	Council of Ministers (COM)	Primary executive body In late 1980s it requested from the MOMRA to delineate the UGB
	Consultative Council (CC)	Provide suggestions and recommendations to the central government, question ministers, discuss the budget of the ministries, reports and policies and represent the citizens needs
	Ministry of Interior (MOI)	Responsible for provinces, governorates and security.
	Ministry of Economy and Planning (MOEP)	Prepare the National Five Year Development Plan
	Ministry of Municipal and Rural Affairs (MOMRA)	Planning and development of all cities, towns and villages, formation of planning laws and National Spatial Strategy, approve master plans and zoning regulations, Manage Municipal services, land administration, coordination development and determine the duties of the Municipalities
	Ministry of Housing (MOH)	Prepare housing strategies, land grants, interest free loan and provide affordable housing
	Ministry of Justice (MOJ)	Framing and executing land registration
Regional	Ministry of Finance (MOF)	Prepare the national budget and its allocation
	Provincial Council	Listen to people's grievances, maintain public security and development at the regional scale
Local	Municipality	Planning cities, prepare master plans accompanied with zoning regulations, urban beautification, granting building permission, managing parks and open spaces and land administration
	Municipal Council	Monitor the Municipality performance, review the Municipality's budget, approve amendments in the master plan and zoning regulations
	Sub-Municipalities	Provide Municipal services, monitoring development and managing physical and environmental problems.

The Council of Ministers (COM) was established in 1953 as an executive body (Aba-Namay, 1993; Alkhedaeri, 1998) comprising of the King as the Prime Minister, the Crown Prince as the Deputy Prime Minister, three royal advisers who hold official positions as ministers of the state, the heads of 23 ministries and Province governance (Federal Research Divisions, 2006). In 1980s the COM directed the Ministry of Municipality and Rural Affairs (MOMRA) to prepare the structural and master plans for Saudi cities to guide their long-term growth. The plans were adopted by the COM¹². Additionally, in 1989 the Council of Ministers requested from MOMRA to delineate the urban growth boundaries (UGB) to control urban sprawl and physical development (Alkhedaeri, 1998, Mandeli, 2008).

Another indirect primary regulator body at the highest national level is the Consultative Council (CC) (*Majlis Ash-Shura*), which was introduced by Basic Law in 1992 (Aba-Namay, 1993; Alkhedaeri, 1998). The Council was created to represent the needs and problems of the Saudi society such as low salaries, issue of inflation and housing affordability. It is considered as a proto-parliament. The Council membership has increased from 60 in 1993 to 150 in 2005. In 2013 a Royal Decree was issued to appoint 30 women in the CC, constituting 20 per cent of the total number, which is considered a significant reform in the Saudi political system¹³. All members are appointed by the King (*Majlis Ash-Shura*, 2013). They are not elected and serve a four-year term (Ammoun, 2006; GHA, 2010). However, the King does not chair the CC but it is accountable to him (Aba-Namay, 1993).

The main tasks of the CC are to provide suggestions and recommendations to central authority on the means and methods to improve the development process and the quality of life (Alkhaderi, 1998). The Council has the authority to question and hold Ministers accountable about the performance of their Ministries (Aba-Namay, 1993; Ammoun, 2006). In addition, the Council discusses government policies, plans of social and economic development, annual reports

¹² The Town and Country Planning Act introduced the ‘structured plan’ concept in the United Kingdom in 1968 whereby urban development would be integrated with physical planning at local, regional and national levels (Mandeli, 2008). It is flexible to adapt with urban changes and concern with long term development (Alkhedaeri, 1998).

¹³ About 70 per cent of the CC members are with PhD.

submitted by Ministries and gives feedback on each submitted (Aba-Namay, 1993). The Council's decisions and suggestions are then sent to the COM for final approval. In case of agreement between the COM and CC, decisions, policies and laws at the national level are promulgated on the King's consent. In case of dispute between the two Councils' views, the King takes the final decision (Aba-Namay, 1993; Camille Ammoun, 2006). However, The Council has been criticised for not playing an active role, where critics consider the Council a place for retired elite people.

Below the Cabinet, there are three levels of government administration that have an influence on spatial planning and urban growth management (Daghustani, 1991; Mandeli, 2010). The highest level is the Ministries, or powerful administrative bodies at the central government that deal with policies formulation and the preparation of proposals for the country to the Cabinet (GHA, 2010). The second administrative level is that of provinces, the governorates and regional branches of the Ministries. The lowest is the municipalities (Daghustani, 1991; GHA, 2010; Mandeli, 2010).

The current second planning regulator body consists of two tiers. The higher tier is in charge of national development planning and national economy, undertaken by the Ministry of Economy and Planning (MOEP). Since 1970, the MOEP has carried out nine National Five Year Development Plans to ensure equitable and fair distribution of development and welfare citizenry (Alkhedeiri, 1998; Althabt, 2013). The lower tier is concerned with spatial planning (urban and rural issues) at the national, regional and local levels is the Ministry of Municipal and Rural Affairs (MOMRA). In addition, the ministry determines the administrative duties and roles of the municipalities and the Municipal Councils at the local level (Alkhedeiri, 1998; Garba, 2004; Mandeli, 2008).

In 1953 the government recognised the necessity for establishing institutional framework for urban management to organise and control cities (Mandeli, 2008). Therefore, the Directorate of Municipality was created in the Ministry of Interior, elevated to the Department of Municipal Affairs in 1962, and to the Deputy Ministry of Interior for Municipal Affairs in 1965. As a result of the ministerial reform of 1975, the Deputy Ministry of the Interior for Municipal Affairs has

upgraded to an independent Ministry called ‘MOMRA’ in response to the rapid expansion in the government activities (Mashabi, 1995; Al-Eidiny, 2000; Mandeli, 2008; Ur Rahman and Al-Hatloul, 2011).

Five major responsibilities assigned to MOMRA. First, the planning and development of all cities, towns and villages, including the formation of a higher planning law stratum and preparing the National Spatial Strategy (NSS). The work was adopted by the COM through royal decree. In addition, it approves the master plans and zoning regulations for cities, and any major changes or amendments in the master plan or regulations, must be approved by the Minister of MOMRA (Abdulaal and Aziz Al-Rahman, 1998). Second, management of Municipal services such as providing environmental health and protecting services to all people. Third, land administration such as administrating land in both internal and external urban areas. Fourth, coordination development in rural areas to ensure that many projects and programs being planned to raise the standard of rural life. Last, specify the administration duties of the municipalities (Aziz Al-Rahman, 1985; Mashabi, 1995). The MOMRA consists of six Ministry Deputies (Figure 4.3). Deputy Ministry of Town Planning is mainly responsible for spatial planning activities in the country (Mashabi, 1995).

There are other Ministries which play a tertiary planning role at the national level such as the Ministry of Housing (MOH) prepares housing strategies, grants, interest free loans, and provides affordable housing. The Ministry of Justice (MOJ) is responsible for framing and executing the land registration. The Ministry of Finance (MOF) is responsible for the national budget and its allocation. The Ministry of Interior (MOI) is responsible for provinces and governorates, as will be discussed in more detail in the next level (GHA, 2010).

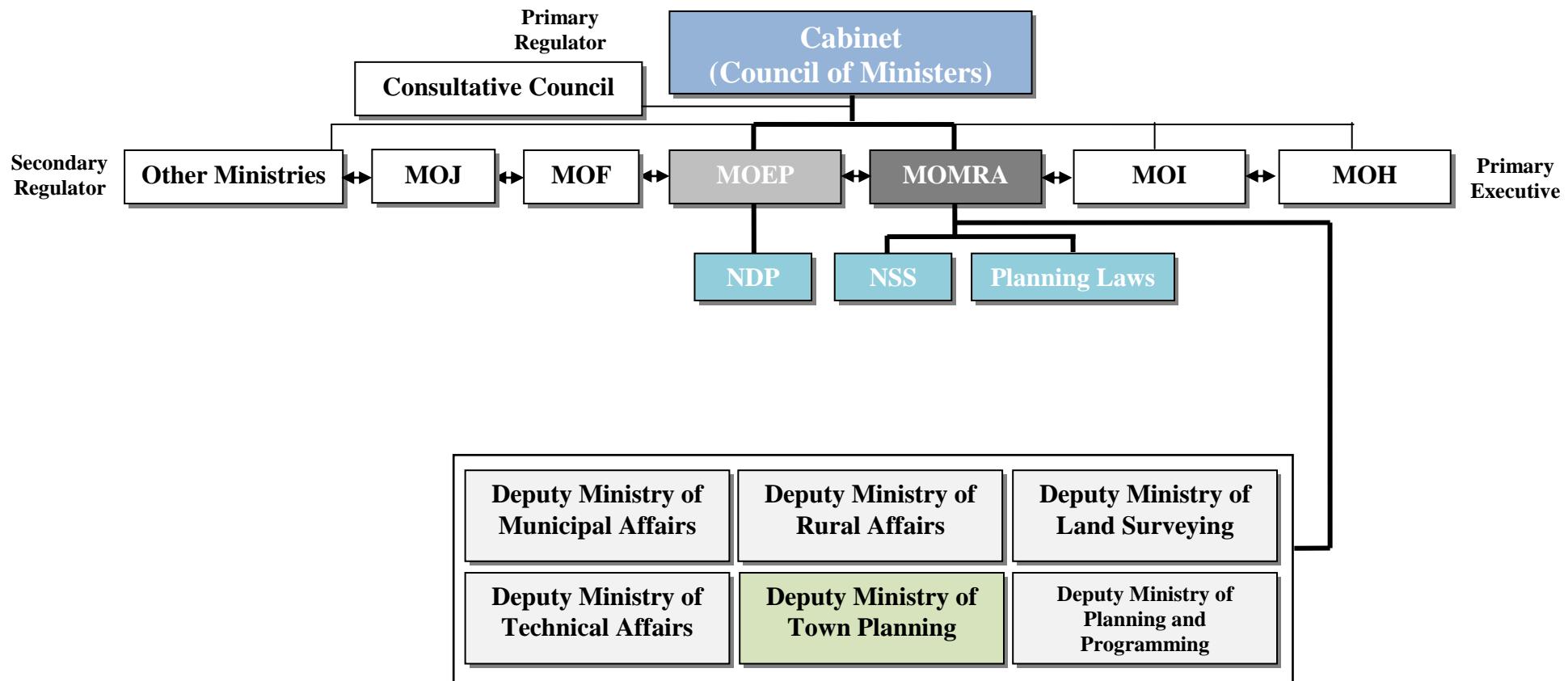


Figure 4.3: The MOMRA deputies.
Source: Author.

4.3.2 Regional level

At the second administrative level there are two secondary executive authorities, namely the provinces and the Ministries' branches. A Royal decree in 1992 divided Saudi Arabia into 13 provinces (Emirates) each one is headed by a member of the Royal family and is divided into governorates which are also largely headed by the Royal family. The provinces and the governorates are accountable to the Minister of Interior and directly answerable to the King (Raphaeli, 2003; Mandeli, 2010).

The provinces and the governorates main objectives are: to listen to people's grievances, maintain public security, order and stability and coordinate activities undertaken by various central government ministries (Daghustani, 1991; Mandeli, 2010, GHA, 2010). However, the prince (*Amir*) needs to refer to the ministries concerned for any directives to be issued to local offices. The 1992 Law of Provinces regulate the regions but does not specify the power or responsibilities of provinces and governorates in relation to planning and urban development (Daghustani, 1991; Mandeli, 2010). Recently, the MOI approved an administrative reform to establish a department in the province for the administration of urban development that acts at the regional and local levels (Mandeli, 2008). However, it is still too early to assess its functionality. According to Mashabi (1995), the regional physical plans are prepared by the MOMRA and the regional socio-economic planning studies by the MOEP. The Provincial Council is chaired by a prince and comprises representatives of government agencies and educated people nominated by the Prime Minister on the recommendation of the Governor and with the approval of the Minister of the Interior. The Council is empowered to submit proposals regarding the development of the province (Aziz Al-Rahman, 1985).

Each Ministry at the national level is vertically integrated with its regional agencies (Alkhaderi, 1998). For instance, the MOMRA regional offices were set up as a mean of decentralising function within their region and to improve the Ministry's response to the needs of towns and villages (Mashabi, 1995) (see Althabt, 2013 for more details about regional planning).

4.3.3 Local level

Two local planning authorities at the bottom of the planning hierarchy, the Municipality and the Municipal Council (MC), have both come under the shadow of the MOMRA. The municipalities are presided over by appointed mayors under the direction of MOMRA and assisted by two deputy mayors: one for construction and projects, and the other for services assigned by the Minister of MOMRA (Al-Hathloul and Mughal, 1999). Each deputy is in charge of various departments that carry out specialised functions (Abdulaal, 2009).

Municipalities at the local level play the role of territory regulator on a national scale and primary regulator on a local scale. They are responsible for organising and planning their cities, establishing and managing parks and public open spaces, monitoring urban development and urban beautification, as stipulated by Planning Laws of 1941 and 1977 (Abdulaal and Aziz Rahman, 1998).

Figure 4.4 illustrates the organisational structure of the municipalities of major cities, such as Jeddah, after the administrative reform of 1977 in handling the Municipality's four main tasks: technical affairs, Municipal services management, land administration and internal administration. Within the Jeddah Municipality, master plan and zoning regulations were conducted by the Planning Department under the Directory of General Planning. In 2009 an administrative reform took place in Jeddah Municipality, which aimed to rearrange the different departments under its management. Different departments have responsibility for preparing and implementing master plan and zoning regulations were conducted by the General Directory for Local Planning headed by the General Directory of GIS, which was placed under the authority of the Deputy Mayor for Projects and Constructions (Figure 4.5). The aim of reform was to avoid conflicts and speed up the delivery of services (Mandeli, 2010).

Municipalities in Saudi Arabia are grouped into five categories A, B, C, D and E according to the city or the town area, location and population size (Mashabi, 1995; GHA, 2010). The number of municipalities in Saudi Arabia reached 101 in 1975 and increased to 178 by the end of the seventh National Development Plan and reached 241 (Al-Eidiny, 2000; GHA, 2010).

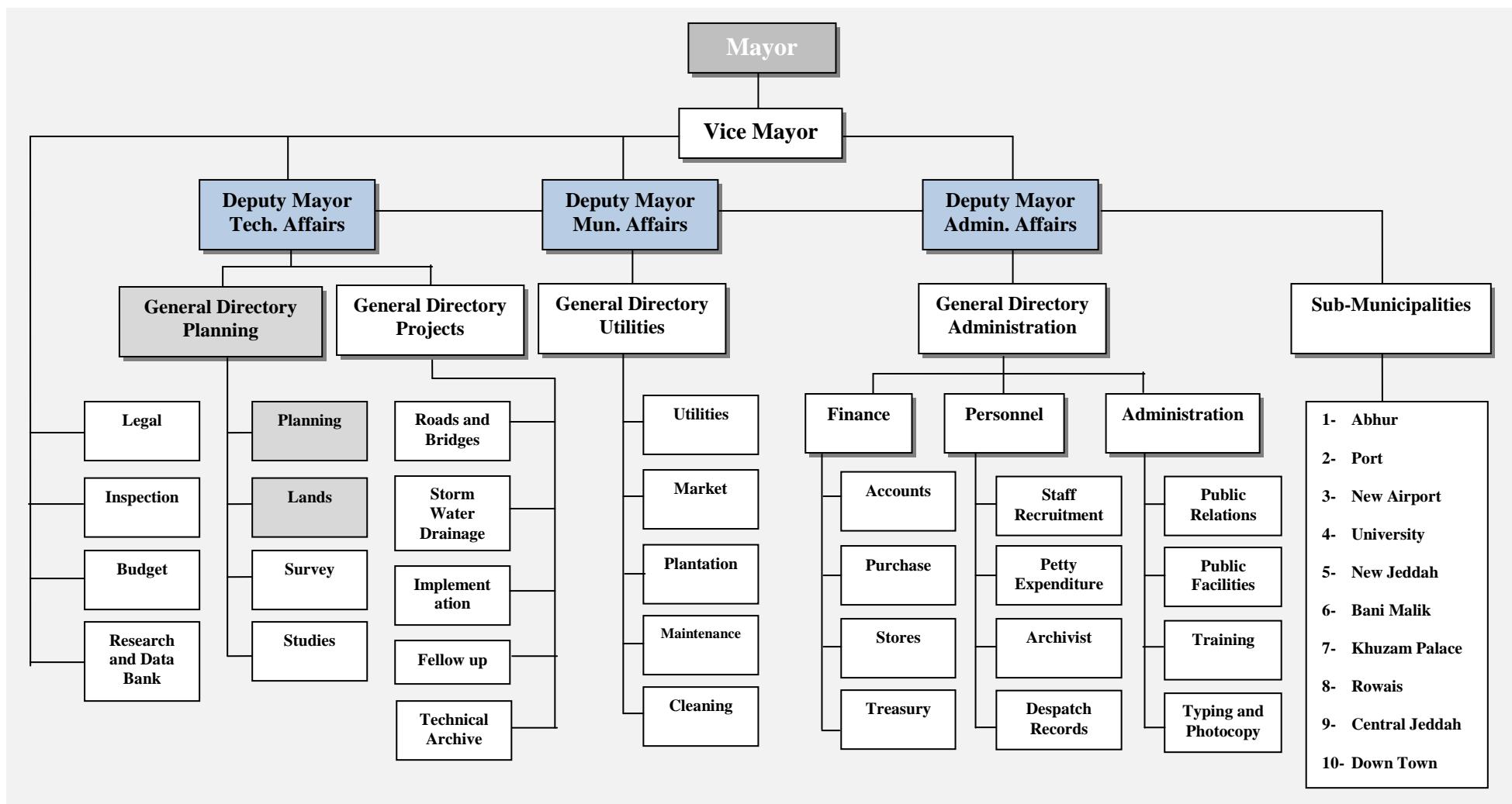


Figure 4.4: The internal structure of the Jeddah Municipality in 1977.

Source: Author.

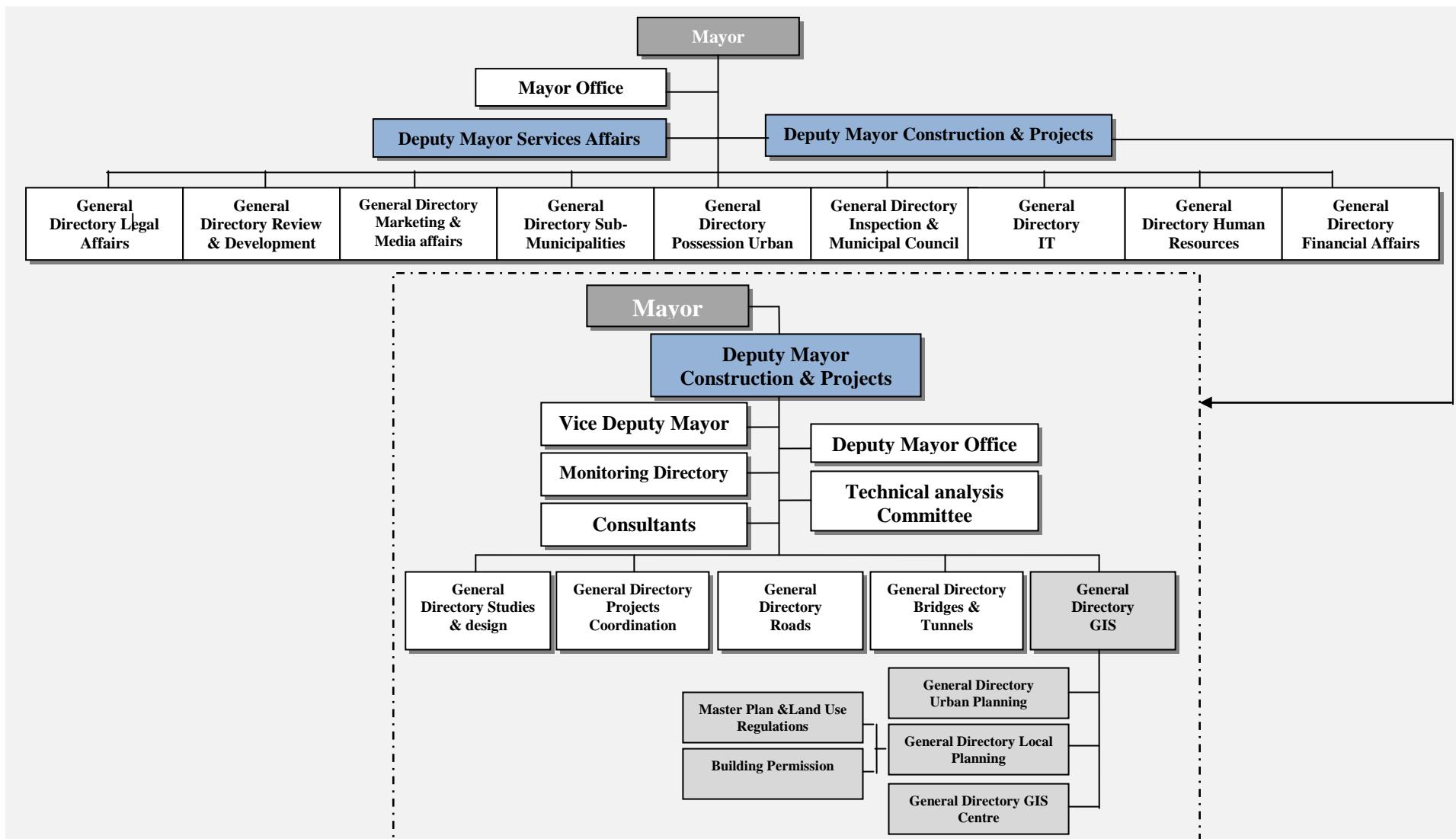


Figure 4.5: The internal structure of the Jeddah Municipality in 2009. Source: adopted from Mandeli (2010).

At the district level each district is served by a sub-municipality responsible for providing Municipal services, managing physical and environmental problems and monitoring development. Sub-municipalities are answerable to the mayor and his two deputies according to their specialty (Abdulaal, 2009). The authorities of the sub-municipalities are assigned and determined by the mayor.

The Law of 1977 established the Municipal Council, however, the Council was activated after the reform of the political system in 2005 (Ammoun, 2006; Mandeli, 2010). The reforms were instigated by Western nations' pressure for reform in the Middle East (Aba-Namay, 1993). The number of members in a Council should not be less than four or more than fourteen, which includes the mayor. Half of the Council members are elected by the citizens, the other half are appointed by the Minister of MOMRA (Mandeli, 2008)¹⁴. The Councillors serve for a four-year renewable term. The Minister of MOMRA has the right to dismiss the councillors. The chairman of the Municipal Council and his deputy are elected by the Council members for two years. If the number of votes for two candidates is equal, then a decision has to be made by the Minister of MOMRA (MOMRA, 1977). The Municipal Council elections are the only public polls in Saudi Arabia. Women are excluded from the electoral experience and are granted neither the right to vote nor to the right to be candidates (Ammoun, 2006). Voting is still considered a new and culturally unprecedented experience in Saudi Arabia, albeit an essential step toward democracy and accountable government (Aazam, 2004; Ammoun, 2006; Mandeli, 2010).

According to the Law of 1977, the main tasks of the Municipal Councils are: to monitor the municipalities performance and expenditures and to review the municipalities budget before reporting to the MOMRA, decide what is necessary to improve the Municipality's performance, and finally, review and approve the master plan and zoning regulations before submitting to the MOMRA (MOMRA, 1977). If the Municipality ignores the Council's decisions, then the latter should note and remind the former, and if this practice continues then the Council should report the deviant behaviour to the MOMRA (Ammoun, 2006, MOMRA; 1977;

¹⁴ The candidate had the right to organise their campaign for electoral purposes in tents and showrooms but not in mosques, public spaces, governmental buildings, and cultural or sports centres (Ammoun, 2006). Both elected and appointed councilors are busy and work as a part-time.

Mandeli, 2008). As discussed later on in Chapter 8, the Councillors have strong influence in decision-making in listening to people's issues and objections during public hearings as well as negotiating with people within their communities (Mandeli, 2008).

According to Mandeli (2008) there are five major reasons that hinder and minimise the role of the Municipal Council: first, the centralisation of the political system; second, the acceleration of urban growth; third, the complexity of urban problems and growth requirements; fourth, the weakness of administrative arrangements; and fifth, the lack of resources.

4.4 Planning Laws

After the Ordinance of Municipal Administration (*Nezam Dairat Al-Baladiya*) in 1927, three laws related to planning have been issued by Royal Decree. They are the Statue of Makkah Municipality and other Municipalities issued in 1937, the Roads and Buildings Statue in 1941, and the Statue of Municipalities and Villages issued in 1977. Primary laws are formulated and adopted by Royal Decree from the Council of Ministers to become the base of planning laws for the country (Abdulaal and Aziz Al-Rahman, 1998). The first law was a step that formally encouraged the emergence of urban planning in the country (Ur Rahmaan and Al-Hathloul, 2011). The law defines the municipalities' functions, duties and responsibilities in Saudi Arabia and strengthens their authorities (Salagoor, 1990; Garba, 2004; Mandeli, 2010). Among the list of duties are the supervision of the town development, monitoring general housing conditions and improving the standards of living (Aziz Al-Rahman, 1985). In addition, the municipalities were given the power to develop zoning and building regulations (Mashabi, 1995; Alkhaderi, 1998).

The second statue was issued owing to the need and pressure of controlling physical development, which is considered an inception of town planning (Alkhaderi, 1998). The law of 1941 dealt mainly with three aspects: planning procedures, building codes and zoning and right-of-way (Al-Hathloul, 1981; Ur Rahmaan and Al-Hathloul, 2011). According to Al-Hathloul (1981), the Statue of 1941 for the first time introduced two important concepts: the minimum lot size and minimum dimensions, where cities were regulated in accordance with the

virtue of the community's traditional adherence. The law of 1941 authorised the municipalities to prepare, implement and enforce structured, local and action area plans in their own cities. In addition, municipalities are authorised to develop land use regulations to control the built environment and to grant building permits for the construction of public and private use (Salagoor, 1990). In addition, the law permitted municipalities in major cities such as Jeddah to draw subdivision plans for undeveloped areas. In 1972 the law was subject to minor alteration regarding land subdivision regulations (Abdulaal and Aziz Rahman, 1998). However, the decision to legitimise the master and land subdivision plans and land use regulations created by the Minister of MOMRA, and any major changes or amendments must be approved by the Minister of MOMRA (Abdulaal and Aziz Al-Rahman, 1998).

The third statue was mainly a set of amendments to the law of 1937. Owing to planning load on the central government the law of 1977 authorised the Minister of MOMRA to delegate some authority and freedom for municipalities and Municipal Councils to plan their cities (Abdulaal and Aziz Rahman, 1998; Mandeli, 2008). The law of Municipalities and Villages is concerned with the functions, duties and power of MOMRA, the municipalities and the Municipal Councils (Aziz Al-Rahman, 1985). The Statue of 1977 is divided into five chapters: first, establishment and functions of the municipalities; second, the power of municipalities; third, financial affairs; fourth, rural affairs; and fifth, general provisions (Alhathloul, 1981; Salagoor, 1990). The first law was abrogated and the last two laws are still in operation and do not counteract each other. However, the laws of 1941 and 1977 have not been reviewed and updated to meet existing conditions.

4.5 The Process of Zoning Regulations Adoption

This section discusses the process of adopting zoning regulations or making amendments in the regulations. Municipalities are authorised to develop land use regulations to control the built environment (Salagoor, 1990). The decision to legitimise the master plans and land use regulations and any major changes or amendments must be approved by the Minister of MOMRA (Abdulaal and Aziz Al-Rahman, 1998). Through discussion with officials and professionals, it seems

that the Municipalities used to send documents directly to the MOMRA for revision and get approval from the COM. However, in 2000 more powers were delegated to the MOMRA from the central government to approve master plans and planning regulations (Figure 4.6). Since the establishment of the Municipal Council in 2005 the Municipality must send the master plan and zoning regulations to the Municipal Council with a request that they make revisions. The Municipality, having received the revised documents, works on the comments, gets approval from the Municipal Council and sends the documents to the MOMRA for final approval. In cases where there are any amendments made by the MOMRA, the Municipality works on the comments and sends the documents to the Municipal Council for approval and then sends the documents to the MOMRA. These processes are also followed for any amendments to existing regulations. However, the Municipality in some cases might neglect the Municipal Council by sending the documents directly to the MOMRA (see Chapter 3, the third meeting, pg. 105). As Figure 4.6 shows citizens have no role in planning decisions, however, as the research will later demonstrate planners in the Municipality have a very weak voice in decision making.

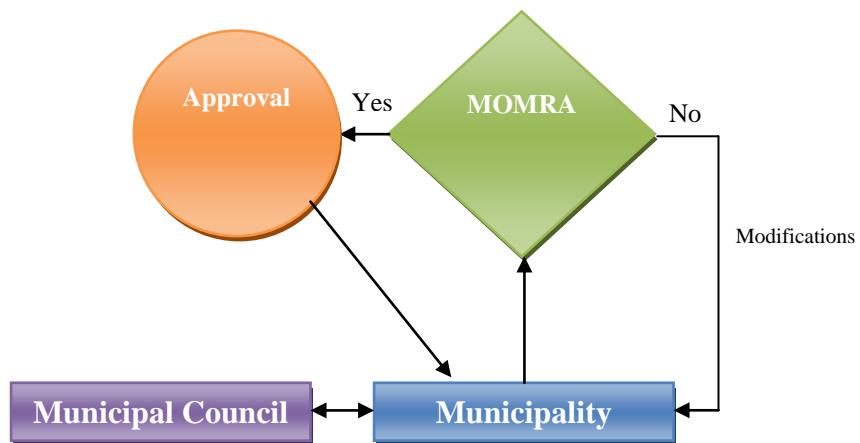


Figure 4.6: The processes of zoning regulations approval.

4.6 The Process of Planning Permission

Municipalities are authorised to grant building permits for new buildings whether for public or private use (Salagoor, 1990). Figure 4.7 illustrates the process of granting building permission, where the developer applies for building permission

through architects. The latter needs to prepare all the necessary documents for the Municipality, specifically application forms, drawings and a copy of the title deed of the plot. The department of Land Titles and Dimensions checks if the dimensions of the plot are in compliance with the plot title, after which the documents are sent to the Department of Building Permission to check if the architectural drawings and dimensions are in compliance with the zoning regulations. This checking is done without any site visits, consideration of the impacts on the neighbourhood or consulting the residents who are living in the neighbourhood. If the architectural drawings do not comply with the regulations then the architectural office needs to do the necessary amendments. In theory if the drawings are accepted the process of granting permission should take 48 hours. As we will see in Chapter 7, in practice this can be very different.

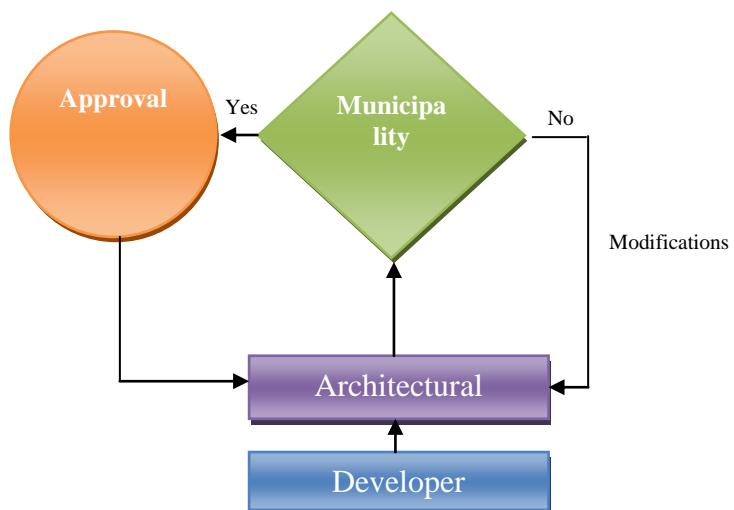


Figure 4.7: The processes of granting building permission.

4.7 Issues within the System of Urban Government

Spatial planning authorities at the national, regional and specifically at the local level have been criticised for their capability to achieve their prescribed aims and respond to citizens' needs (Daghistani, 1991; Mandeli, 2010). The criticism of the urban government system attracted a lot of scholarly attention, who have addressed various issues with the system of urban government that constrains the capacity of planning authorities. According to Daghustani (1992), centralisation is one of the main issues that cause weakness in the planning system. The

centralised approach was part of the government philosophy, especially, in the early years of the existence of the Kingdom to ensure that resources are allocated fairly. Yet, the hypercentralisation of the Saudi government in the decision-making process has hindered the ability of local authorities to implement planning policies and regulations and prevents them from developing their capacity. This was agreed with by Mandeli in 2008 and 2010. Abu-Suliman in his work in (1996) classified centralisation into two parts, first, the centralisation of administrative authority, where actions of local administrative authorities are dominated by the central government. Second the centralisation within the organisation as practiced within the Municipality itself. In addition, according to Abu-Suliman (1996: 63) the American consultant Wilson-Murrow considered in his study that “city autonomy [is] essential for effective city administration”. Therefore, Wilson-Murrow proposed to elevate the administrative status of the municipalities to minimize the state power and intervention. According to Grant (1982), it is paradoxical that the administration of land use planning is considered a matter of local authority and power is at the central government.

Owing to centralisation, bureaucracy or ‘red tape’ process within the system affects the capacity and performance of planning agencies. In some cases it might lead to corrupt activity, in order to avoid some of the strict rules and accelerate the process. It slows planning authorities’ ability to cope with changes, especially in fast growing cities like Jeddah, by delaying important decisions and actions which might waste valuable time (Abu-Suliman, 1996). This was agreed with by Mandeli in 2008.

Mashabi in his work in (1995) talked about the issue of the lack of both horizontal coordination, or cooperation among different local agencies responsible for planning and development, and vertical coordination, or cooperation between the planning agencies at the national level and those responsible for implementation at the local level. In addition, he clarified that in the process of preparing and implementing a master plan a range of actors and agencies are involved over which the Municipality has no influence or power. This was agreed with by other commentators such as Abdulaal and Aziz Rahman (1998) who clarified that there is difficulty coordinating between municipalities

and other government agencies not only during to the plan preparation but also throughout implementation. In addition, Garba (2004) and Mandeli (2010) agreed that there is a lack of coordination, where each of the planning agencies at different levels work independently and disconnected from the others, to the extent that their senior officers were hardly in mutual communication. Recently, the Provincial Council of Makkah has developed various forms of cooperation and coordination with municipalities including Jeddah Municipality. Fragmentation of responsibility within the planning system is another issue that was referred to by Garba (2004) which was agreed with by Mandeli (2008 and 2010). At the local level, officers in the Municipality avoid taking responsibility for decisions affecting the built environment and the people. This will be discussed in detail in Chapter 8.

According to Abu-Suliman (1996: 64) Wilson-Murrow observed in the mid-1960s that the Municipality of Jeddah was very dependent on the central government for its operating budget. Thus, Wilson-Murrow raised a question: “how could the city attain autonomy and control over the city’s domestic issues while most of its budget at that time came from the central government?” This was agreed by Al-Hathloul and Mughal in (1999) and later by Mandeli (2010), where municipalities are subject, to high degree, to the central government for funding, where all financial resources are mainly allocated at this tier. In addition, Mandeli in his work in (2008) mentioned that municipalities suffer from a lack of financial resources. According to Abdulaal (2007) and Mandeli (2008) municipalities are facing financial constraints, because of the expansion of the administrative area for cities and responsibilities, which have increased to much a greater proportion than the annual Municipal budget. This, according to Al-Eidiny (2000), determines the implementation quality for plans and projects. All municipalities in the country are required to prepare their annual budget and send it to the MOMRA. The MOMRA sends the budgets to the Ministry of Finance for approval by the COM, and then the MOF allocates the budget of the MOMRA, which in turn allocates the annual budget for each Municipality according to the MOMRA’s development priorities. The central government allocates approximately four per cent of the national budget to the MOMRA (MOFP, 2011). In addition to the MOMRA fund, municipalities rely on different sources

to improve their revenue such as subsidies, direct donations from wealthy families to fund public amenities, outbidding, penalty fees and building permission fees. The idea of local investment was an innovative step to overcome the shortfalls in funding was taken by the Jeddah Municipality, under the shadow of MOMRA, to maximise Municipal investments (Mandeli, 2010). The move was circulated and adopted by all the municipalities in Saudi Arabia. This will be discussed in Chapter 6.

The concentration of economic and political power at the national level provides opportunities for corrupt practice (Healey, 2006). Abu-Suliman (1996) talked about corruption in the system, where according to him there are different forms of corruption, such as nepotism, favouritism and formalism. In the first two forms of corruption, officers treat citizens with relativism and selective favouritism. In terms of formalism, the officers might become ‘opportunistic’ by relying on the system to weave in the rules and processes needed to maximise their own interests. The existence of corruption is unacceptable and is difficult to prove because it happens behind closed doors, as reported in Abu-Suliman’s work (1996). In terms of accountability the government established the Control and Investigation Board at the national level by a Royal Decree in 1971 to monitor any financial and administrative violations by individuals or organisations and to send those who violate laws for investigation. In addition, the government inspectors in each Ministry conduct investigations to ensure that the regulations have been followed at the regional and local levels. In 2010, a Royal Decree was issued to establish the National Anti-Corruption Authority at the national level after a major flood in Jeddah to investigate corruption. Although, there is duality in the duties of the two national boards, they are independent from one another and both of them exist at the national level. This will be discussed in detail in Chapter 6, 7 and 8.

Personal preference is another issue raised by Abu-Suliman (1996), where he considered personality as an important factor in the Saudi context that influences the mechanisms and dynamics of how successful or corrupted the administrative authority operates. Some mayors prefer decentralisation, others prefer the opposite, and some give more attention to administrative reforms whilst others

give attention to city planning. The personality of some of the mayors weakens the performance of the municipalities, because some administrative policies lead to corruption and tedious and inefficient bureaucracy. Similar to the personality of the chairman of the Municipal Council, where some of them made the Council active others the opposite.

The planning system has been criticised for the lack of public participation by many scholars. According to Mashabi (1995) Garba (2004) and Mandeli (2008), there is a lack of public participation, where citizens are not involved at any stage of plan preparation or in planning decisions and process. In addition, they also feel powerless because they are excluded from planning decisions, making them feel a lack of ownership for or belonging to the place they live in. According to Dahlan (1990), there are some constraints and problems that impede citizens' participating in the decision-making process. On the one hand, some issues are beyond citizens' control, owing to the nature of the system, as there is no institutionalised place for residents' voice in the system. This was agreed on by Garba (2004) and Mandeli (2008), where they agreed that there is not a direct public participation platform for identifying the action priorities for which policy should be adapted to regulate urban growth. This will be explored in greater depth in Chapter 6, 7 and 8.

Abu-Suliman clarified in his work in (1996) that communications between the Municipality's officers and residents provide opportunities to avoid problems and expedite the planning process and especially implementation. This will be explored in greater depth in Chapter 8. People in Saudi Arabia become aware that there are in some countries more opportunity of the layman's voice. Therefore, a reform in the political system was conducted by the government as a means for encouraging Saudis to participate in decision-making through the elections of the Municipal Councils (Ammoun, 2006). On the other hand, some of the barriers against participation arise from the citizens themselves, such as citizens' lack of knowledge of where, how and when to participate as it is happening in the elections of Municipal Councils. Although there are some active citizens, others are apathetic and dependent on the government and simply they do not want to be involved in national or local government affairs (Dahlan, 1990). Women remain

excluded from this platform, but are promised inclusion by 2015. According to Dahlan (1990), citizens of both genders are required to participate, as they are considered primary forces that influence the government in the performance of its activities. According to Mandeli (2008) to address issues related to participation, cultural realities should be considered.

In terms of clarity, the multiple roots of complaint is unclear in the Saudi system where or to whom complaints regarding a planning issue should be directed. This issue might have indirect impact on the capacity of the planning system. According to the Law 1941 Sec. 4/24 (the Roads and Buildings Law) the King is one of the governmental bodies that citizens can appeal to if they have a problem. The Board of Grievance was established in 1955 to receive citizens' grievances against governmental Ministries and agencies such as the MOMRA and Municipality (Aba-Namay, 1993). According to the Law of 1977 (the Municipalities and Villages) Sec. 5/47, the Minister of the MOMRA deals with planning issues. The Municipality of Jeddah established an Appeals Committee to deal with peoples' complaints against any decision. Although, some people go to MC to object against some of the Municipality's decisions, the role of the MC is unclear in the 1977 law regarding complaining. However, the MC members believe that it is part of their job to listen to people's problems based on Sec. 2/2, where the MC gives its opinion on any presented case (see Chapter 8). Eventually, local and appeal courts are other alternatives, where people could go to complain, as happened in Riyadh during the 1970s (Al-Hatloul, 1981). A question can be asked: Which one of these mechanisms are appropriate and most effective? Of course the King could not be bothered with small matters to him but is big and important to others.

There is a system of compensation in Saudi Law to compensate those harmed. However, as much as the mechanism of complaint is unclear, the mechanism of compensation is equally unclear. According to the Law of 1941, compensation is paid if there is an expropriation of properties (land or building). Also, according to the same law compensation is paid if there was any harmful affect (person or private property) coming from government projects. However, it is not clear how

compensation is decided upon, particularly in cases affecting individual people's properties.

Daghustani in his work in (1991) talked about the issue of inexperienced or under qualified and inadequately trained staff for dealing with urban issues and using of technology. This issue was later on agreed by other commentators such as Mashabi (1995), Garba (2004) Abdulaal (2007) and Mandeli (2008; 2010). The absence of skilled and qualified staff has weakened the role of the Municipality in preparing, implementing and enforcing master plans, which inevitably leads to a reliance on foreign expertise (Garba, 2004 and Mandeli, 2010). According to Mandeli (2008), to adopt new set of zoning regulations municipalities are required to improve the capacity of its staff in terms of trade skills and expertise knowledge in order to successfully implement the suggested regulations. In addition, he points out that the continual problem of inadequately skilled officers within municipalities attests to the failure of the centralised system by the MOMRA.

According to Abdulaal (2007) municipalities in Saudi Arabia suffer from lack of useful information, which hinders municipal officers' ability to make decisions and address urban problems and could lead decision makers to take a wrong decision. This issue will be seen in some cases in Chapter 8. This is attributed to three data issues: initial data collection, keeping data up-to-date and data management. In addition, the existing Municipal data suffers from deficiency, complexity and disorganisation (Abdulaal, 2007). Therefore, there is an urgent need to provide adequate and reliable data so that decision makers can obtain the required information to support their decisions (Abdulaal, 2007). Thus, Saudi municipalities are working hard to enhance their performance and increase their effectiveness by using advanced information technology by applying E-government systems, using Geographic Information System (GIS) and creating information centres (Abdulaal, 2007). For instance, municipalities, such as the Jeddah Municipality, are using IT systems to accelerate their working pace and performance standards. There are now online applications for the granting of building permission, GIS is used for data acquisition and analysis, and an Urban Observatory Centre has been established to provide data. zoning regulations

textbook and master plan can be found on the Jeddah Municipality website. Despite the implementation of advanced technologies, the question remains as to how best to harness and utilise the IT system in both the service of the Municipality and the public.

According to Abdulaal and Aziz Al-Rahman (1998) and Mandeli (2010), the mechanism of monitoring and enforcing regulations by municipalities is weak. This is attributed to centralisation in the system and lack of resources, as we will see later in Chapter 8. In addition, the poor coordination among the monitors of an enforcement team has made it difficult for the team to prosecute breaches in planning regulations (Mandeli, 2010).

4.8 Socio-Cultural Landscape

According to Baumann (2006) and Ali (2009), it is important to identify the culture of a society to help establish a comprehensive understanding of the mechanisms in which society function. Although, the term culture is familiar to everyone, it is difficult to determine a universal definition (Baumann, 2006). According to Almarshad (2011: 29) a culture of a society is an essential factor that plays a considerable role in determining the structure and effectiveness of economic and political institutions, however, culture itself is subject to changes over time and in turn affected by changes in such institutions. Saudi society, as any society, has its own social framework of values, attitudes, behaviour, political order, economic policy and laws, which should be aligned with Islamic Law and *Urf*. As an Islamic society, Saudis are bound to Islamic Law as a guide in their lives.

The tremendous changes that occurred in the Saudi society have had a strong influence on the socio-cultural and socio-economic landscape of Saudi life. Saudi culture has changed from a nomadic harsh lifestyle – a simple and austere way of life well-integrated culture – into an urbane, complex, flourishing and urbanised society. Also, although Saudis share a common religion and language the Saudi society is undoubtedly heterogeneous.

4.8.1 Traditional culture

Prior to the discovery of oil, most Saudis sustained an acceptable and minimum standard of living that adapted with the harsh environment of the Arabian Peninsula and structures of tribal life. Saudi cultural tradition was characterised by its endurance, simplicity, generosity, hospitality, patience, self-reliance and stoicism (Ali, 2009). According to Adas (2001), the traditional community was characterised by people of various income strata that lived together as neighbours. Moreover, this traditional community was characterised by many habits, one of the fundamental habits was the visits and gathering between neighbourhoods' residents during the Eid ceremonies.

The sense of trust, integration, safety and security were fundamental characteristics of the Saudi traditional society. People in the past used to cover their goods and commodities while at prayer without fearing that their goods might be stolen. They remained confident that when they returned they would find their goods as they left them. Also, people lived in smaller more intimate communities in which they all knew each other and could easily identify strangers in their neighbourhoods. The traditional society was considered a collectivist culture that tended toward looking after one another, preferred group harmony and relied heavily on familial relationships (Baumann, 2006).

In Islamic teaching, the extended family is considered the main unit of the entire socio-cultural structure of the traditional Muslim society (Bokhari, 1978; Adas, 2001; Mortada, 2005). Family is the primary source for reinforcing society structures and values. The traditional lifestyle of Saudi families was structured in the form of extended families, which were composed of several nuclear related families with strong relationships between family members (Adas, 2001). The custom of the tribe members to show loyalty to their tribe, especially to the head of the tribe was considered an important tribal obligation. Traditionally, marriages were arranged by the parents of the bride and groom. The coupling was made between members of the same extended family or the same tribe known as 'consanguinity', often meaning that the bride and groom are extended cousins. Couples were married at a young age (Rashad et al., 2005). The married couple would live with the husband's family. The idea of living together was primarily to

protect and support each other. In addition, family members' responsibilities were determined. Men go to work to earn money to meet and respond to the family needs, whereas women were limited to housekeeping and child rearing (Salagoor, 1990; Adas, 2001).

4.8.2 Urbanisation

According to Ur Rahman (2011a), urbanisation is a worldwide phenomenon and a complex subject in developing countries. Saudi Arabia has experienced high rates of urbanisation from 1950-2010. According to Mandeli (2008), Saudi Arabia is considered one of the world's fastest urbanising countries. Although, citizens in Saudi Arabia consist of urbanites, villagers and nomads, there is a significant transformation from the nomadic and semi-nomadic lifestyles to the modern urbanite lifestyle. In 1950, 20 per cent of the total population was made up of urbanites in the old cities of Makkah, Medina, Riyadh, Jeddah, Taif, Abha, Buraydah, Unayzah, Hail and Hufuf; 40 per cent of the population was made up of villagers (semi-nomadic) in rural areas and the remaining 40 per cent were nomads (i.e. Bedouins) living in tents in the desert (Alkhedeiri, 1998).

Owing to accelerated and rapid economic growth, along with the influx of rural nationals and foreigners into the country's main cities – Riyadh, Makkah, Medina, Jeddah and Dharan – an astonishing level of urbanisation was experienced since the second oil boom in 1973. The percentage of Saudis living in urban areas increased from 48.7 per cent in 1970 to 54 per cent in 1980 (Omar A Mashabi, 1995; Ur Rahmaan, 2011b). The population increased to 77 per cent in 1992 (Alkhedeiri, 1998; Al-Hathloul and Mughal, 1999), and to 81 per cent in 2000 (Ur Rahmaan, 2011b). According to Almarshad (2011), 85 per cent of the national population was classified as urbanites. This was near to what Alkhedheiri (1998) estimated, that numbers of urban dwellers will reach 86 per cent by the year 2020.

However, it seems there is a group of nomadic people who are not ready to cope with urban life. The nomads are irreverent toward administrative orders and regulations that do not correspond to their former way of life. In addition, they resist adaptation to the urban way of life, which has created a clash of values between themselves, the true urbanites and the local government (Aazam, 2004).

Although the level of awareness and education has improved amongst adapting nomads, there remains widespread concern that this group of people have a poorer understanding of and appreciation for an urbane and urban way of life. The assumption is that future generations would adapt with the urban life style and change without any struggle or resistance.

4.8.3 Contemporary society

Remarkable changes occurred in the contemporary Saudi society and life has become more complex (Table 4.2). The contemporary society is currently dominated by capitalist values and practices. In addition, it is more complex than ever before, with displays of more individualist and selfish tendencies, all of which contradict Islamic teaching. According to Silberstein and Maser (2000), capitalism responds more to the flow of money transfer than to human needs. Indeed, Saudi society has become less integrated as a result of individualist values which compromises tightly knit social and moral fabric. Different forces have influenced traditional Saudi society. The oil booms and its revenues were considered the first main driving force of social and economic transformation. The increase in oil revenues have solved some economic problems but created a new set of problems, where the newfound wealth propelled capitalist practices such as rampant materialism.

The Saudi government is considered the second main driving force of the recent cultural changes in the country. The Saudi government has always pushed its society to move forward by supporting education, which influences the country. As a result, Saudi society has moved from a highly illiterate and naive and easily impressionable society to an educated, critically aware and urbanised one (Aba-Namay, 1993). According to Central Intelligence Agency (CIA) (2011), literacy rates increased from 79 per cent in 2003 to 87 per cent in 2009 (MOEP, 2005).

Western imported planning regulations that have replaced the old and have had a significant impact on social contact. The imported regulations have adversely effected the use of outdoor space, ad hoc visits and gathering among neighbours, and segregated residents into classes (Salagoor, 1990; Adas, 2001; Eben Saleh, 2002; Garba, 2004; Ali, 2009). The influx of migration and immigration has caused the cities to become cultural hybridities of different cultures. The new

sub-cultures have had an impact on the Saudi lifestyle, as evidenced by changing clothing fashions, increases the value and level of education and awareness, and changes to the ethnicity of the Saudi society.

Modernising technology was the fifth force that influences the culture, particularly communication technologies as the telephone, mobile phone, internet, television, etc., have had many impacts on the culture and society. Saudi society has moved from a generally closed and isolated society to a more open and knowledgeable one. This is especially true for those living in the centre of the country. These people were geographically isolated and had less communication historically with other cultures than those living in coastal port cities. However, modern technology has produced a significant shift in values, where has weakened direct interaction between family members, allowing the option of sending text messages or emails instead (Ali, 2009). In addition, instead of spending time with extended family, tribe, friends or neighbours people spend a lot of time watching television and surfing the internet.

The contemporary Saudi family structure has changed from extended families to nuclear families, or to what Allan (1985) calls “a modified extended family”. The younger generation prefers private life after marriage, opting not to live with their extended families or tribe (Bokhari, 1978; Al-Omari, 1984; Altorki, 1991). However, regardless of this new found independence, financial and emotional support remains intact as a responsibility among family members (Adas, 2001), especially the nuclear family. Another drastic change in the contemporary Saudi family structure is the average age of marriage. Marriages are occurring later in people’s lives because of the costs of living and the period of education. Additionally, there are trends toward inter-family (outside the tribal family) and intercultural marriages, (outside Arab or Islamic culture). However, traditional marriages from within tribes at younger ages still occur. Divorce rates are increasing, which consider a negative indicator that has had adverse effects on family and community integration and wider social relationships (MOJ, 2012).

		Old society	Contemporary Society
Ideology		<ul style="list-style-type: none"> • Islamic principles and socio-cultural values. • 'Do not harm others and others should not harm you'. 	<ul style="list-style-type: none"> • Capitalism
Society characteristics and customs		<ul style="list-style-type: none"> • Simplicity. • Collaboration. • Hospitality. • Generosity. • Self-reliance. • Various income strata lived together as neighbours. • Trust, safety and security. • Unity and integration. • Privacy and gender segregation. • Privacy amongst neighbours was highly respected. • Strong relationship between neighbours. • Affiliation. • Nomadic. • Endurance. • Integration. 	<ul style="list-style-type: none"> • Individualism. • Complexity. • Selfish tendencies. • Apathy. • Lack of belonging. • Love of power. • Passing responsibility. • Paid servants and drivers. • Racism. • Urbanized. • Privacy and gender segregation remain as custom. • Privacy amongst neighbours became less respected. • Weak relationship between neighbours. • Segregated areas according to classes. • Conflict between generations.
Family		<ul style="list-style-type: none"> • Extended family was the structure of the society. • Strong interaction between the members of extended family. • Emotional support between the members of extended family. • Loyalty and obligation to the tribe. 	<ul style="list-style-type: none"> • Family structure has changed from extended to nuclear families. • Weak interaction between the members of extended family. • Emotional support among the nuclear family. • Fewer obligations to the tribe.
Marriage		<ul style="list-style-type: none"> • People married at a young age (16 for girls and 25 for men). • Marriage was between the same extended family or the same tribe. 	<ul style="list-style-type: none"> • People are marrying late (25 for girls and 40 for men) • Intercultural marriages (Arabs or non-Arabs). • Traditional marriages from the family and within the tribe still occur.
Divorce		<ul style="list-style-type: none"> • Low rate of divorce. 	<ul style="list-style-type: none"> • Increase in the rate of divorce.
Woman's Status		<ul style="list-style-type: none"> • Limited role. • Take care of the house, husband, and children. 	<ul style="list-style-type: none"> • Working professional jobs. • Support the family. • Often has control of choosing the house and its furnishings.
Education		<ul style="list-style-type: none"> • High level of illiteracy. • Lack of awareness especially for those who live in the centre of the country and have less connection with other cultures. 	<ul style="list-style-type: none"> • Increase in the rate of literacy. • Increase in the level of knowledge and awareness.

Table 4.2: Comparison between the traditional and contemporary Saudi society. Source: Author.

Today, women have total control of choosing the house and its furnishings. Moreover, owing to life's complexities and women's education, women are additionally working full time professional jobs to support the family and presumably for their own sense of ambition. As a result, domestic duties associated with household maintenance and childcare, are often given over to a paid house maid¹⁵. Paid servants are now the norm in most households, where servants are responsible for cleaning the house and helping with childcare. Drivers are also commonplace because women are not allowed to drive or ride bicycles in major cities (Knickmeyer, 2013). Women with jobs or with household chores, such as shopping, are dependent on the men of their families or on hired drivers to assist them¹⁶. The life of having servant(s) or a hired driver has become so commonplace that it has had a marked impact on housing design.

As the implications of modernisation continue, new remarkably negative attitudes have emerged in Saudi society that contradicts Islamic teachings. There seems to be a culture of apathy and passing responsibility because people generally expect the government to finance everything, perceiving it as endlessly wealthy. In addition, as is the case in many other countries around the world, it seems to be a cultural characteristic in Saudi Arabia that people in any situation, especially, in positions of responsibility will not admit they are wrong, this is because our nature as human and could be attributed to different reasons weakness, afraid of punishment in case they admit they were wrong or afraid of losing respect or pride which is culturally important. However, this could be an indicator for not being a learning culture.

Although many of Saudi society's traditions and customs have disappeared, some fundamental religious and social principles remain integral. For instance, the concepts of privacy and gendered segregation are considered important obligatory values. The practice of privacy and gendered segregation should be taken into

¹⁵ In the Saudi culture the house maid must be a female.

¹⁶ Saudi Arabia is the only country that prohibits women from driving in the city. However, women are allowed to drive in villages. There is no stipulated verse in Islamic or government law that forbids women to drive cars or ride bicycles. In 2011 and 2013, there was a feminist movement encouraging women to drive as one of their human rights as long as it does not contradict Islamic laws. This movement was met by disapproval from many conservatives and the police were giving orders to stop them and take a pledge from them and their fathers not to drive again. However this is an ongoing protest (Knickmeyer, 2013).

account in design and planning decisions because it remains a religious and socio-cultural obligation of the community.

4.8.4 The importance of privacy in the Saudi context

According to research carried out by academics (Al-Hathloul, 1981; Tipple, 1992; Eben Saleh, 1997; 2004), privacy has always been an utmost concern in Muslim societies. Thus, the aspects of privacy and lifestyle have played a major role in the design of traditional dwellings and neighbourhoods. Individual privacy amongst neighbours was highly respected and well considered. According to Saudi commentators (Al-Hathloul, 1981; Eben Saleh, 1997; 1998a; b; c; Adas, 2001; Al-Hemaidi, 2001), privacy is a more significant religious and cultural obligation in Saudi society than merely protecting against intrusion, as is the case in the West. The Saudi society is strongly concerned with women's privacy. Adjoining neighbours must not compromise family activities, especially those involving women. Thus, neighbours' intrusion is socially unacceptable and has thus become a socially acceptable convention to be respected and considered amongst neighbours (Al-Hathloul, 1981; Adas, 2001).

4.8.5 Heterogeneity of the society

According to Sandercock (2000) and Ali (2009), peoples' environments are diverse in terms of age, ethnicity, social class, gender, dis/ability, culture and religion. Saudi Arabia is nevertheless a heterogeneous community owing to the recognition of diversity in the community (Adas, 2001; Al-Hassan, 2004). In addition, the Saudi society encompasses thirteen regions diverse in terms of cultural diversity,¹⁷ sects,¹⁸ tribes, climates, terrains, education, degree of awareness and ideologies (Al-Sabban, 1990; Adas, 2001; Al-Hassan, 2004). However, this heterogeneity does not necessarily mean that we cannot be integrated or co-exist in a centrally managed country or cities whilst maintaining these differences (Sandercock, 2000; Al-Hassan, 2004). Commentators Al-Hathloul (1981), Aba-Namay (1993), Raphaeli (2003), Baumann (2006), Ali (2009) and Mandeli (2011) categorised the Saudi society into various groups,

¹⁷ The country is a mix of Saudis and foreigners from developed and developing countries.

¹⁸ Although the ideology of the state is Islam, there is denominational diversity, where the majority of the citizens are Sunnis and the minority are Shiites.

where each group has its own ideology, activities, aims and norms. These groups are classified as follow (Table 4.3):

Conservatives: believe the Quran and *Sunnah* provide a total way of life. The group believes that tradition is the optimal way of life. They do not accept anything that comes from outside Islam (e.g. planning concepts or regulations or technologies) especially those ideas and practices from Western countries. They view Westerners as an evil that would adversely affect their belief sitting incommensurably with their traditional values. They believe women should not work outside the house and should stay in the house. The conservatives believe that the liberals intend to obliterate the values of the Saudi Culture (Al-Hathloul, 1981; Raphaeli, 2003).

Moderate Islamists: claims that Saudis have a rich heritage and believe Saudis ought to improve the current laws, in order to cope with the present needs within the Islamic Law. Their view of women's role in the society is limited, because of cultural norms, but they do not object to women's work as long as gendered segregation remains intact. In addition, moderates emphasise consideration of and respect for sensitive cultural aspects such as privacy (Aba-Namay, 1993).

Quasi-liberals: this group bases their arguments on logic and dialogue to achieve their aims. This group sees no contradiction between religion and global trends. They believe in adopting reform, supporting women's rights, holding general elections, allowing public participation, reviving the Municipal Council, as well as enhancing the Religious Police's (the Committee for Propagation Virtue and Forbidding Vice) performance in terms of dealing with people. They believe that the Saudi society should take the beneficial ideas and regulations from more developed and powerful countries as long as they do not contradict with Islamic Law or values. The group could be labelled as liberals or seculars by the first group if they talked about issues such as women's rights. Similarly, they may be labelled conservative by liberals, particularly if they emphasise the importance of preserving traditional values (Baumann, 2006).

Liberals: intends to abolish the Religious Police. According to the liberal perspective, the Quran and *Sunnah* are too general to apply to a sophisticated

modern life or to cope with the social and economic changes that have occurred in the centuries since the Prophet's death. Their antipathy and resistance toward social norms has led them to advocate sensitive changes in the society such as the issue of privacy, as they see it from a Western perspective. In addition, the liberal group feel that there is an extensive need to borrow or import ideas from superior cultures to solve their problems (Al-Hathloul, 1981). Liberals are open to the values of individualism, as well as materialism and consumerism. They see that women could mix and work in one place with men. The liberals view conservative as an ultimately significant constraint against the country's development and general societal improvement (Al-Hathloul, 1981).

Al-Hathloul (1981) has argued that neither conservatives nor liberals deal with problems of the present. He argues both groups' views are too extreme. Although the conservatives and moderates are currently dominating Saudi society, the quasi-liberal and liberals are growing and rising in influence, especially among the younger generation.

Table 4.3: The categories of different groups within the Saudi society. Source: Author.

Group	Believe	Aim	Position and views
Conservatives	<ul style="list-style-type: none"> The Quran and Sunnah provide a holistic way of life. Against modern life. Do not need more innovative rules or regulations especially from the west. Imported ideas would affect their belief and traditional values. Westerners are evil would adversely affect their beliefs. Advocate traditional life called “traditionalist”. The extremist in this group would be called “Fundamentalist”. 	<ul style="list-style-type: none"> To live the traditional way 	<ul style="list-style-type: none"> Liberals are influenced by Western culture. Liberals are a threat to Saudi culture. Liberals intend to obliterate the values if traditional society. Liberals are atheists and quasi-liberals are seculars.
Moderate Islamist	<ul style="list-style-type: none"> We have rich heritage. We ought to improve our old laws to cope with the present. Call for social justices and equality. Call for punishment of corruption without any exception of rank. Call for creating Consultative Council. 	<ul style="list-style-type: none"> Islamisation of all life aspects. 	<ul style="list-style-type: none"> Against extremism in any group. Advocate for moderates.
Quasi-Liberal	<ul style="list-style-type: none"> They have intermediary position. Supporting women’s rights. Call for public participation. Enhance performance of the religious police. Adopt the ideas of other cultures as long as they are not in contradiction with Islamic laws and select cultural values. Revive the Municipal Council. Hold general elections. Justice and punishment within the framework of Islamic law. 	<ul style="list-style-type: none"> Advocate reform. 	<ul style="list-style-type: none"> There is a misunderstanding of the concept of liberty among the Conservatives, Moderates and Liberals. There is a misinterpretation of some of the Quran’s verses especially from the first group and the last group. Considered liberal to the first group and traditionalist to the last group. Use logic and dialogue in their argument.
Liberal	<ul style="list-style-type: none"> The Quran and <i>Sunnah</i> are too general to apply in and cope with a sophisticated modern life. A lot of cultural norms should be changed and move forward. Advocate women’s rights. Banish the influence of the religious police. Like to import ideas and regulations from developed world. 	<ul style="list-style-type: none"> Reduce the power of religious people. Advocate ideas. 	<ul style="list-style-type: none"> Conservatives’ ideas are obsolete and backwards. Conservatives are considered a constraint against any development or improvement. Feel that all their solutions must be imported for the west.

4.9 Conclusion

This chapter has shown that the political system in Saudi Arabia is centralised and governs according to Islamic legislation and the Basic System. However, there is neither a legislative assembly nor political parties. The institutional context of spatial development planning governance and its organisation at different levels was illustrated. The chapter has provided rich points of understanding about some of the fundamental issues and deficiencies in the system. Centralisation was identified as the main problem in the system, where power, financial resources and skilled staff are allocated in the central government. In addition, there is no place for outside consultation or public participation in the system. The mechanism of complaint and compensation are unclear to citizens, and therefore are underutilised. Although, Saudi Arabia is considered a rich country, there is lack of resource allocation especially, in terms of adequately qualified staff and funds designated to the MOMRA and municipalities. Although, Saudi Arabia has accomplished a great deal within a short period of rapid modernisation, there is still much more that remains to be done.

The chapter has traced the transformation and changes that have occurred in the social landscapes of Saudi Arabia. Saudi cities experienced massive level of urbanisation. The Saudi society in general has transformed from a spiritual to materialistic society. People have become less integrated and family structures have changed from extended to nuclear families. Furthermore, the chapter has explained the importance and the meaning of privacy within the Saudi context. The chapter has illustrated that Saudi society could be divided to four ideological groups, each with its own socio-cultural agenda. The next chapter will focus on Jeddah as a case study and discusses the impact of zoning regulations on the form of the city as well as the rationale for adopting smart growth policy through densification.

Chapter 5: From Walled Town to Vibrant City: the Impact of Plans and Zoning Regulations on Jeddah Metropolis

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CHAPTER FIVE: FROM WALLED TOWN TO VIBRANT CITY: THE IMPACT OF PLANS AND ZONING REGULATIONS ON JEDDAH METROPOLIS

5.0 Introduction

This chapter focuses on Jeddah metropolis as a city in Saudi Arabia that has experiencing a massive transition from a small walled town to a great metropolis and from zoning regulations that advocated urban expansion to zoning regulations that encourage densification. It aims to address one of the main issues in this thesis by exploring the impact of master plans and zoning regulations on the city's urban pattern and identifying the rational of adopting the concept of smart growth.

This chapter is divided into four main sections. The first section, describe Jeddah setting, economic status and importance. The second section, illustrates the massive metropolitan urban growth and urban determinants. It also shows the massive increase in population and estimates future population growth. The penultimate section illustrates the morphological transformation in the configuration of urban form of Jeddah before and after applying zoning regulations. It also illustrates the impacts of the master plans and zoning regulations on the metropolitan morphology. Exploration of the rational of the Municipality's decision to densify development in the latest master plan is provided in the last section.

5.1 Jeddah Setting, Economic Status and Importance

Jeddah, known as 'the Bride of the Red Sea', is situated on the Red Sea stretching along the western coast of Saudi Arabia (Figure 5.1) (Bokhari, 1978; Mandeli, 2008). It is located in Makkah Province on a coastal plain.

Since the unification of Saudi Arabia in 1932, Jeddah became the main commercial and trade hub of commerce and business in the country. The strategic location of Jeddah serves as a seaport and essential gateway for millions of pilgrims passing through to the two Holy cities of Islam (i.e. Makkah and

Medina). The increase in the number of pilgrims, contributes to the city's economy (Bokhari, 1978; Salagoor, 1990).

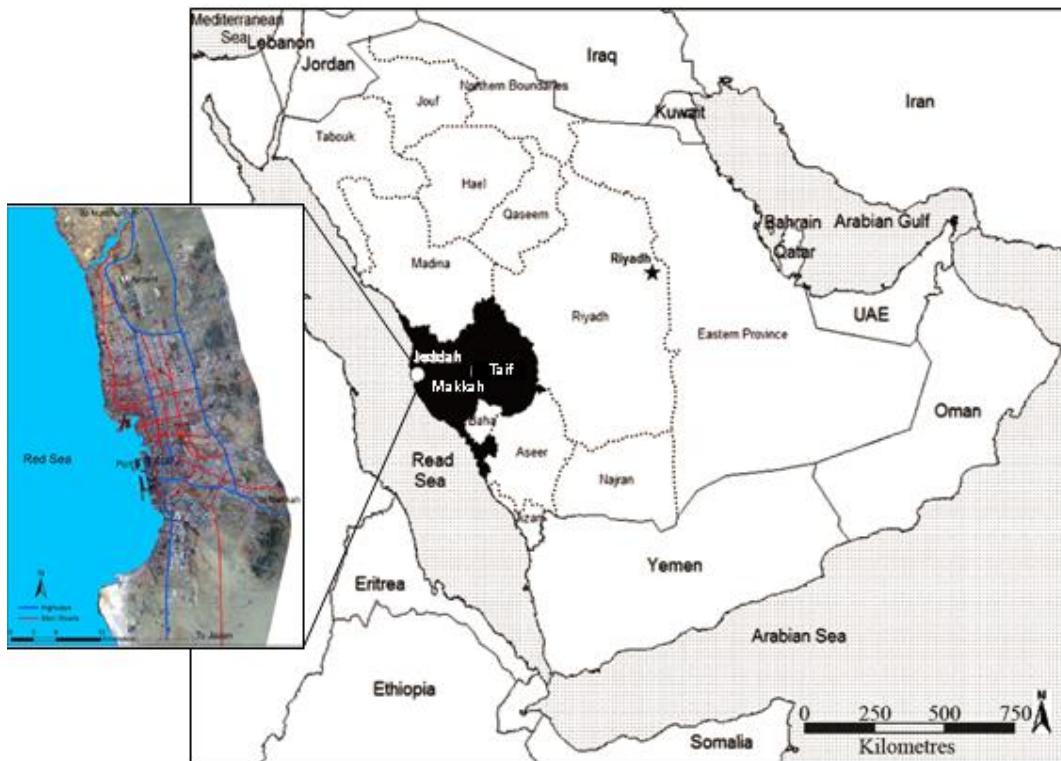


Figure 5.1: The location of Jeddah.
Source: adapted from (DaleelTeq, 2003; Aljoufie, 2012).

Jeddah has experienced unprecedented flourishing economy and urban development since the second oil boom from 1974-1986 and has gained an important role at the international and national level (Daghistani, 1993; Abdu et al., 2002). The city has 320 shopping centres constituting 21 per cent of the total shopping malls in KSA and constituting 38 per cent of the biggest companies in Saudi Arabia. The strong commercial activity in Jeddah supports its position as the chief importer and exporter of goods in the Western Region (Al-Beeah Consultancy Office, 2004). According to the “Global MetroMonitor 2011” Jeddah ranked third among the 200 fastest growing metropolitan areas in terms of average income and job growth (Brookings, 2012).

Although the Holy City of Makkah is the capital city of the Western Region, all ministries were located in Jeddah until 1957, when they were transferred to Riyadh the capital city. However, consulates remained in Jeddah for Hajj and business purposes (Salagoor, 1990; Adas, 2001). Therefore, planners at the

Municipality of Jeddah should deliver regulations that sustain development, improve the overall quality of life, comply with people's culture and respond to their needs and create economic opportunities for investors.

5.2 The Metropolitan Demographic and Urban Growth and Determinants

Like other Saudi cities, Jeddah has experienced massive and unexpected urban and population growth. Although it is difficult to find accurate figures of Jeddah's population prior to 1960, scholars based their figures on travellers who visited the city and found that the earliest statistics on population date back to 1050 AD, where the population was estimated at 5,000 inhabitants (Adas, 2001). The urban area has grown 1000 fold and the population has increased over 100 fold in six decades (Abdulaal, 2012) and more significantly, within the last 10 years, the population have increased by more than 40 per cent with an annual increase of 3.55 per cent (MOEP, 2011b). The population growth can be attributed to natural demographic changes brought about by better medical care, decline in the mortality rate and the pull of the city for those seeking a better life (Aljoufie et al., 2012). Figure 5.2 illustrates the dramatic increase in population since the unification of the Kingdom. The drop in the population in 1991 is explained by the expulsion of foreigners who supported the invasion of Kuwait during the First Gulf War.

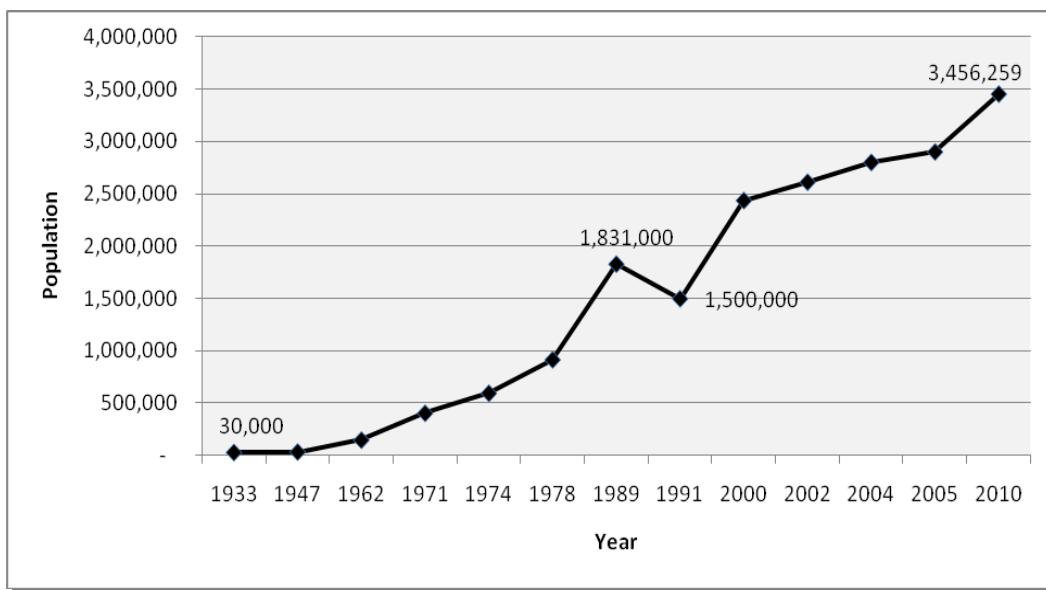


Figure 5.2: The dramatic population increase in Jeddah from 1933-2010.

Source: The author.

The growth of the city area can be attributed to five factors: oil booms, population increase, government policies such as land grants, interest-free loans, planning regulations and technologies such as cars and air-conditioning. This rapid growth in urban area led to the emergence of both formal and informal settlements.

Table 5.1 sets out the changes of the urban area through the annual urban expansion rate -ARU- (see appendix 5a) (Fan et al., 2009). The built area of Jeddah was one square kilometre in 1947 with a population of 35,000 inhabitants. By 1971 the city area had increased to 32.5 square kilometres with a population of 404,650 inhabitants according Robert Matthew Johnson Marshall & Partners Survey (Bokhari, 1978; Salagoor, 1990; Al-Hathloul and Mughal, 1991; Adas, 2001; Al-Otaibi, 2006). By 1978 immigration had resulted in the population of expatriates in being higher than the native Saudi's at 53 per cent and 47 per cent respectively.

Table 5.1: Jeddah area, population growth and density. Source: The author.

Year	Area (km ²)	Increase (%)	Population	Increase (%)	Density (Person/hectare)	Saudi (%)	Non-Saudi (%)
1947	1	-	35,000	-	350	-	-
1951	3.15	215	75,000	114	238	-	-
1956	4	27	121,000	61	302.5	-	-
1961	14.6	265	150,000	24	103	-	-
1971	32.5	123	404,650	170	124.5	58	42
1974	-	-	595,900	47	-	63	37
1978	155.6	379	915,800	54	59	47	53
2001	-	-	2,560,000	180	-	71	29
2004	1,355	771	2,803,600	9.5	21	51	49
2010	1,765	30	3,456,259	23	19.6	50	50

In 2004 the city experienced an enormous expansion in different directions, where the city total area became 1,355 square kilometres with population of 2,803,600 inhabitants and total county area reached to 4,977 square kilometres (Al-Beeah Consultancy Office, 2004; MOEP, 2004). The total population of Jeddah reached 3,456,259 inhabitants in 2010 with an increase of 23 per cent. The total area for Jeddah city has extended to 1,765 square kilometres, while the total area of the county reached 5,460 square kilometres (Jeddah Municipality, 2009a; MOEP, 2011). According to the Jeddah Strategic Plan, the total area of Jeddah is larger than both New-York and Bangkok cities yet both cities have twice the population size of Jeddah (Jeddah Municipality, 2009a).

Figure 5.3 shows that Jeddah metropolitan expanded as a linear city running parallel with the Red Sea, confined by a series of foothills to the west and the rugged Hejaz Mountains located to the east, the seven square kilometres sewerage lake, garbage dump and light industries also to the east and the industrial zone in the south encompassing 600 factories and the airport located to the north (Al-Beeah Consultancy Office, 2004). However, notwithstanding these hindrances the city continues to expand to the east, northeast and northwest. The figure elucidates the remarkable massive urban growth of the city in 1980s to north and south and then in 2000 the infilling in more peripheral locations next to the mountains, where households can find themselves without facilities or services. It seems that increasingly in Jeddah's desire to accommodate its growing population; it has reached the limits of urban growth.

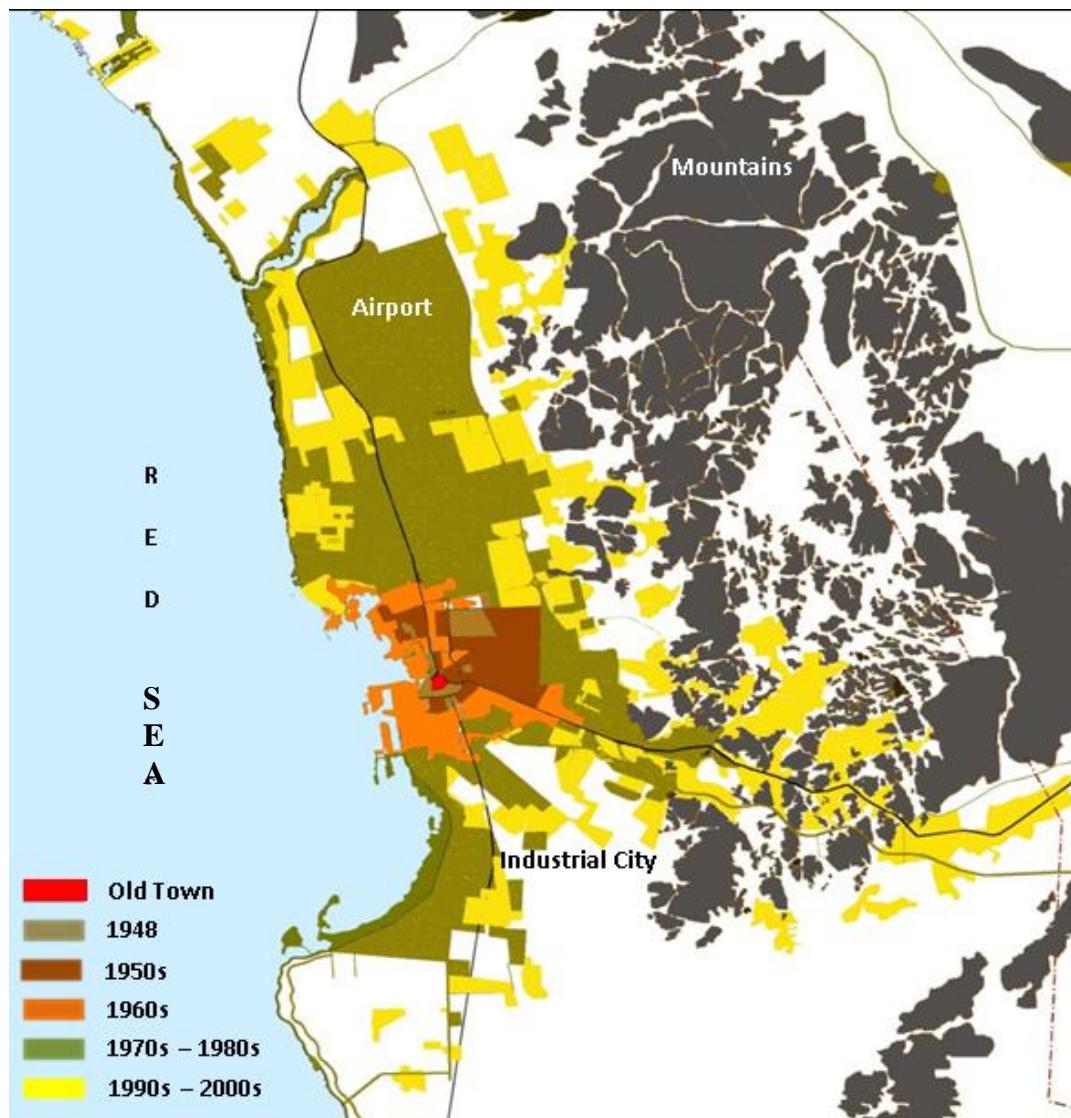


Figure 5.3: Jeddah massive urban expansion.

Source: Al-Beeah Office (2004)

Using the first method the researcher assumed that the annual growth rate of 2010 (3.55 per cent) continue through to 2055, which resulted in the conservative increase 16,252,569 inhabitants in 2055, an increase of 296 per cent in 45 years. The second method using the linear model, estimates an increase of 103 per cent in 45 years and annual increase of 1.8 per cent (Krueckeberg and Silvers, 1974). The third method uses an exponential curve projection model, which forecasts that the total population of Jeddah would increase to 16,609,718 by 2055 with an increase of 304 per cent and an annual increase of 3.55 per cent (Krueckeberg and Silvers, 1974).

Table 5.2: Population projection for Jeddah (2055)

Year	Population Forecasting		
	The same growth rate of 2010	Linear model	Exponential curve projection
2015	4,104,951	3,965,189	4,114,878
2020	4,875,395	4,474,118	4,899,002
2025	5,790,439	4,983,048	5,832,547
2030	6,877,226	5,491,977	6,943,988
2035	8,167,987	6,000,907	8,267,222
2040	9,701,006	6,509,836	9,842,610
2045	11,521,752	7,018,766	11,718,201
2050	13,687,277	7,527,695	13,951,201
2055	16,252,569	8,036,625	16,609,718

5.3 The Metamorphosis of the Built Environment

This section shows that Jeddah has experienced dramatic changes in its urban fabric owing to oil booms, population growth and implementation of master plans and land use regulations. Jeddah has shifted from the concept of form follows function, as human values and beliefs influence the shape of the traditional built environment in the past to function follows form contemporaneously, where people are influenced by the contemporary built environment. Figure 5.4 illustrates the chronological urban transformation of Jeddah fabric.

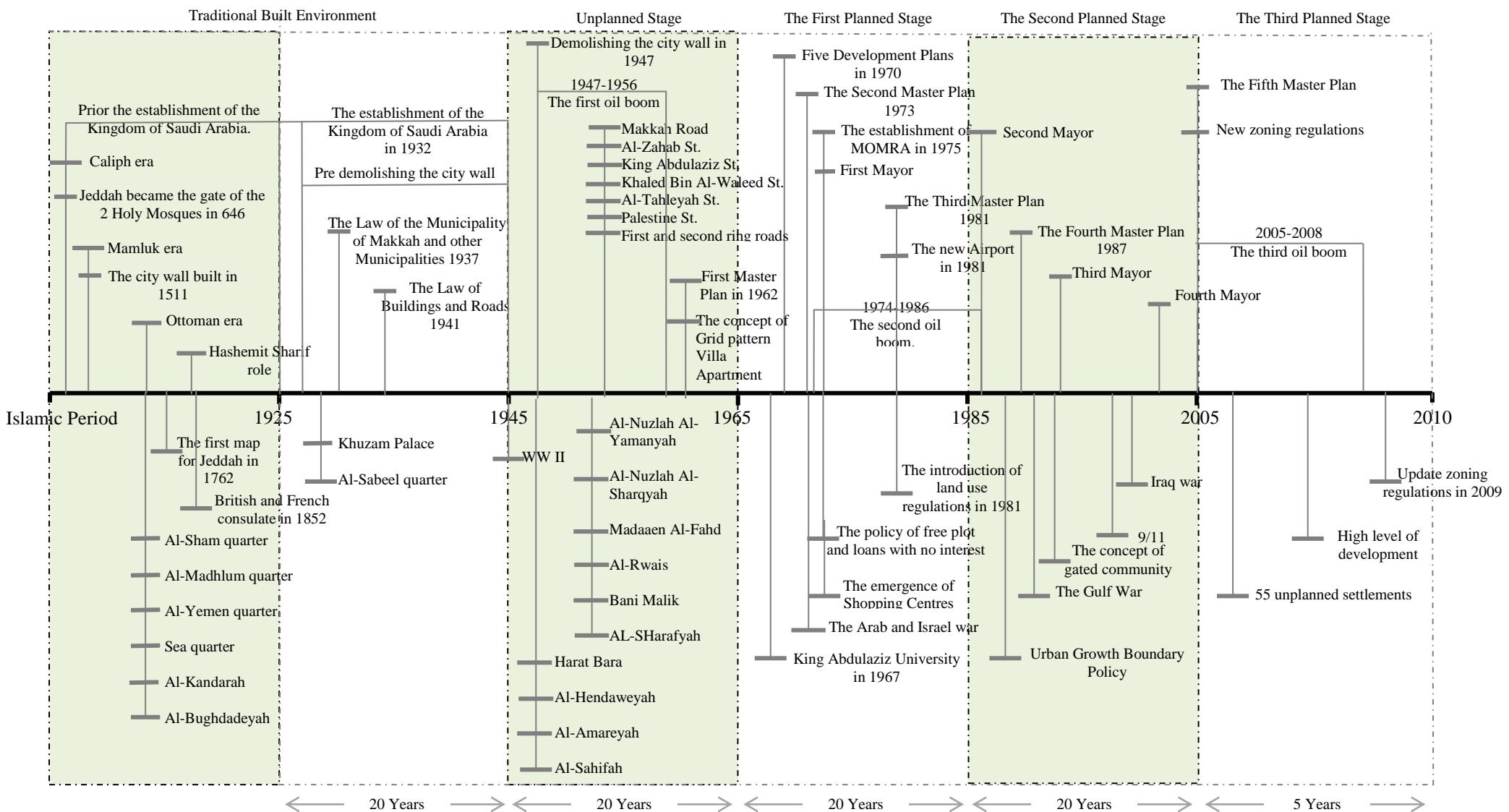


Figure 5.4: Chronological urban development of Jeddah from 646-2010: Source: Author

5.3.1 Climate

The local climate has had strong impacts on urban neighbourhood and building design (Carmona et al., 2010). The location of Jeddah between the Red Sea and the ‘arid zone’ means that the city experiences temperatures between 43 and 47°C in the summer though in 2009 the temperature reached a life threatening 50°C. As a coastal city, Jeddah has a high relative humidity especially in summer. The average annual rainfall is generally low around 40mm (Bokhari, 1978; Aziz Al-Rahman, 1988; Salagoor, 1990) but again in 2009 reached a record 95mm, that was not only a record but caused loss of life (JCC, 2011). The climate has played a major role in shaping the urban pattern, building layouts and the use of specific building materials in the old town area. Jeddah is exposed to pleasant air from north west, sea breezes from the west and the summer ‘Sumoom’ winds from the south east.

The natural climate is uncomfortable and for most of the year too severe for residents to be outdoors. Therefore, this put constraints on planners to develop regulations that respond to the climate and to tackle the energy consumption caused by the reliance on air-conditioning.

5.3.2 The vernacular urban form and building

The old town of Jeddah was divided into six residential quarters that emerged during the Ottoman era. Four quarters were inside the city wall and two quarters outside of the city wall (Figure 5.5). Each quarter consists of houses, big mosques and *Zawayah* (small mosques). The quarters had no clear physical boundaries between these quarters but were connected by public pedestrian routes (Salagoor, 1990; Adas, 2001). The traditional urban pattern of the old town of Jeddah encouraged activity and social interaction between neighbours, thus strengthening the social bonds and increased the level of security within the community (Salagoor, 1990; Adas, 2001).

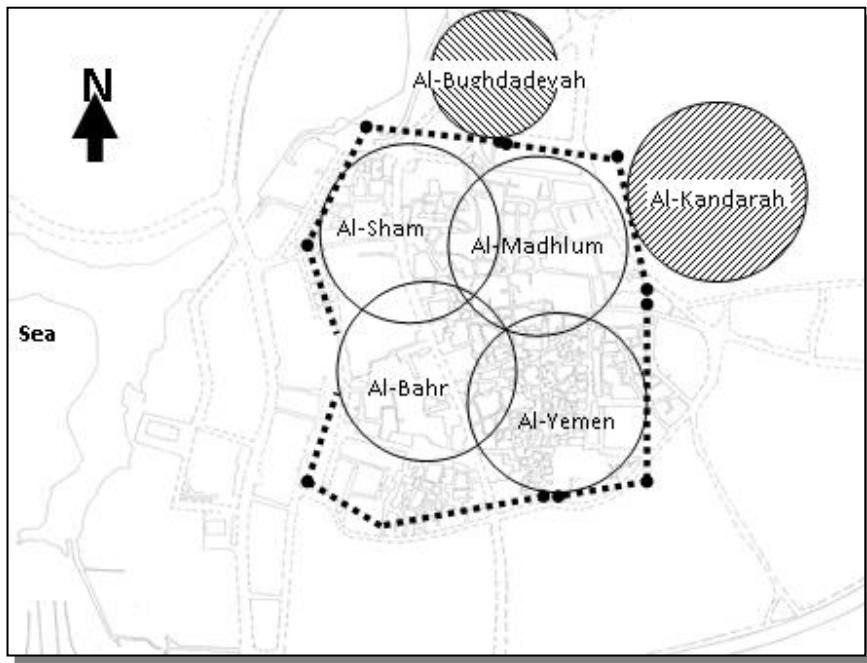


Figure 5.5: The traditional quarters of the old town of Jeddah.
Source: Adapted from Adas (2001).

The old town of Jeddah was based on human scale, animals' height. It was spiritually oriented, where the mosque has historically been an important spiritual, architectural feature of Islamic cities as well as serving as the hub of a settlement. The highest structure in the Islamic cities was the mosques' minarets, whose visibility was not to be obstructed. The old town characterised by organic patterns, comprised of compact residential areas, alleys and winding narrow streets and surrounded by protective walls (Bokhari, 1978; Al-Hathloul, 1981; Eben Saleh, 2002; Mortada, 2003). The wall of the city had a great influence in shaping the urban morphology of the old town, such that with limited ground space, inhabitants had to extend vertically. Vernacular housing was characterised by lofty white-walled buildings, four to seven storeys high with a ceiling height of four metres for each floor on a plot area of 80-100 square metres. These houses were built with coral stone and covered with wooden lattices (*Rawasheen*) to allow through ventilation and light penetration as well as preserve the privacy of occupants (Figure 5.6) (Bokhari, 1978; Salagoor, 1990; Adas, 2001). Vernacular buildings were tall with thick walls, oriented to the north and west to catch pleasant air from north west, sea breezes and to avoid the summer 'Sumoom'

winds from the south east. The significance of privacy will be returned to in the chapters that discuss the empirical findings. Vernacular buildings were based on one of the Islamic principles “Do not harm others and others should not harm you” which is the most important of all Islamic principles (Hakim and Ahmed, 2006) (see appendix 1). Owners in the past had complete control over their properties but were always limited by the condition that any change should not harm anyone (i.e. neighbours and passers-by on the roads) (Salagoor, 1990).

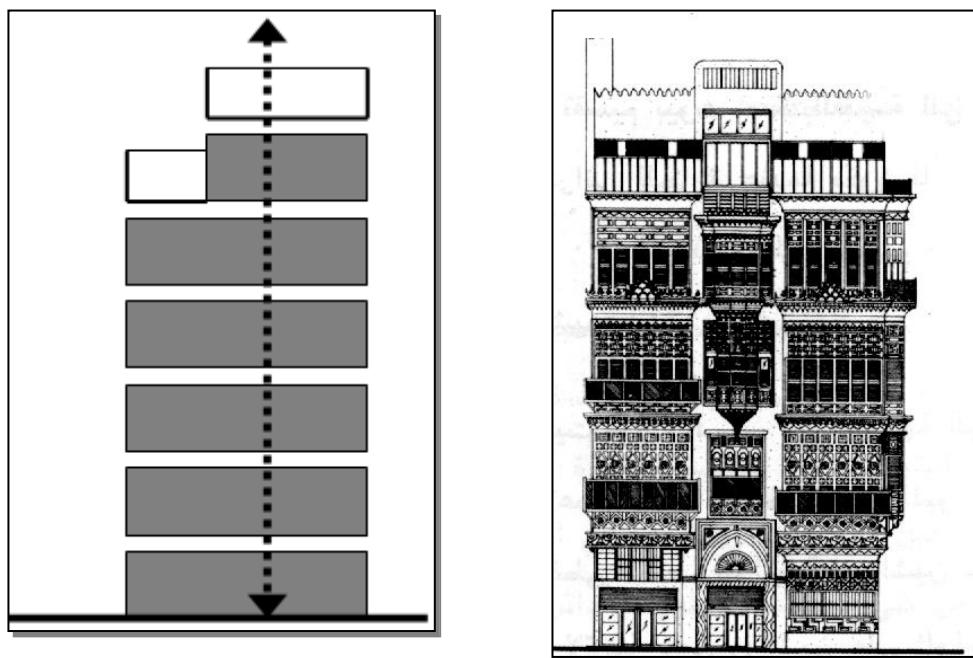


Figure 5.6: The height and building form and facade of traditional houses.
Source: Adas (2001).

Before the demolition of the city wall, there were some scattered settlements emerged outside the city wall, known as squatters areas (*Taddyat*) or the spontaneous developments (Bokhari, 1978). The characteristics of the spontaneous settlements were more or less similar to the characteristics of the old town in terms of organic pattern and irregular shape plots with different heights and size houses (Salagoor, 1990). For more detailed description of the old town of Jeddah see Pesce (1977), Bokhari (1978), Salagor (1990) and Daghustani (1990).

5.3.3 The transformation from tradition to modern built environment

The changes in the built environment started in 1938 when the Saudi government decided to cooperate with the US government to establish - Arabian American Oil Company- known as ARAMCO to drill for oil and conduct oil explorations. Urban development in Saudi cities has always been affected by the fluctuation of oil revenues. Therefore, Saudi cities have witnessed unstable urban development, where high development rates took place during the oil booms in the early 1970s and the middle 2000s and a cessation of development at the time of Gulf War 1.

Owing to the lack of Saudi expertise the American company brought their own architects and engineers and introduced American planning ideas and regulations such as the grid-iron pattern, large-blocks, set-backs and villas, all of which are inconsistent with the Saudi values and climate (Alkhedeiri, 1998). According to Salagoor (1990) the concept of villa was introduced during this period and became the favoured housing type among the Saudi nuclear families of high and middle incomes by the 1950s. In the mid-1950s the ‘apartment’, ‘flat’, or ‘condominium’ appeared and spread in early 1960s across the whole country (Al-Hathloul, 1981; Salagoor, 1990; Alkhedeiri, 1998). The development of villas and apartments in Jeddah introduced alien architecture features into the building facade. New elements such as open balconies and large plate glass windows were a departure from the vernacular architecture and did not comply with the social and cultural norms (Salagoor, 1990; Adas, 2001).

These regulations were imported from what decision makers saw in Western countries, especially, from the US and Europe. Thus, Saudi cities have been affected by planning regulations that do not support the normative social customs of Saudi society, and have thus obliterated or distorted the city morphology in ways that are incompatible with the climate. According to Eben Saleh (1997) imported planning regulations distorted the aesthetics of the townscape and produced a monotonous built environment. Westerners’ planning regulations, changed the urban morphology of major Saudi cities from a traditional urban pattern and housing to a more grid-iron pattern built environment. The modernized Saudi cities are characterised by wide roads and large individual housing made of concrete with exterior surrounding walls or high blocks. The

hub of the cities has changed from a spiritual orientation, with the mosque serving as the centre of Islamic cities on many levels to the Central Business District (CBD) that puts money at the heart of the city (Table 5.3).

The implications of these land use controls within contemporary Saudi neighbourhoods have led to adverse social consequences. The grid-iron pattern encourages the use of cars inside the neighbourhood, which causes families to keep their children off the streets and behind walls in the interests of safety. The arterial road networks has created a superblock system that has created a marked reduction in the interaction between neighbours (Salagoor, 1990; Adas, 2001).

	Tradition	Modern
Regulations	<ul style="list-style-type: none"> Based on Islamic principles and socio-cultural values. 	<ul style="list-style-type: none"> Western planning regulations and ideas (set-back, plot size, plot coverage and grid-iron)
Urban Form	<ul style="list-style-type: none"> Organic patterns. The mosque is the hub. Alleys and narrow streets. Wall surrounded the town for protection. The owner has the right and freedom to act on his property on the condition not to cause harm to neighbours or the passers-by on the road. Semi-private spaces for gathering and playing. Unified building heights. 	<ul style="list-style-type: none"> Grid-iron pattern. CBD is the hub. Wide roads and streets. The owner has limited freedom to act on his property. The owner should be compliance with the compulsory rigid regulations even if they caused harm to others. No semi-private spaces. Mixing different residential buildings with different height. Different residential regulations for each residential zone.
Type of Housing	<ul style="list-style-type: none"> Traditional house. 	<ul style="list-style-type: none"> Villa. Apartment (flats). Shanty.
Housing Characteristics	<ul style="list-style-type: none"> Reflect the identity of the society. Conform to socio-culture, economic and climate. Respect privacy. Inward-looking courtyards or tower houses to catch wind. 	<ul style="list-style-type: none"> Less concern to privacy. Villas are surrounded by fences. Amenities such as swimming pools and gardens. Balconies and air conditioning units. The buildings are in the middle of the plots
Building Materials	<ul style="list-style-type: none"> Mud and stones or coral limestone and wood. Adequate to the climate (according to each region). 	<ul style="list-style-type: none"> Concrete, cement, brick and steel. Marbles. Inadequate with the climate.

Table 5.3: Comparison between the traditional and contemporary built environment in Saudi Arabia. Source: Author

According to Berry (2001), in the US, zoning regulations have created exclusionary zones and segregated people according to class. Similarly in Saudi Arabia, where fixed zoning regulations exist for each residential zone this has

created social class segregation. The plot value increases to more than ten times its original value after planning approval. After planning approval the plots are only affordable to the upper and middle classes. The low income inhabitants live in spontaneous settlements known as “Al-Bayt Al-Shabi” or a semi-traditional or squatter or shanty houses (Salagoor, 1990).

The set-back regulation in villas is an American concept that provides good outdoor private space. The compulsory set-back regulation has resulted in locating the building in the middle of the plot which makes the outdoor spaces directly exposed to sunlight and allows visual intrusion from the adjoining neighbours. It can be easily deduced that residents' privacy has been impaired in these modern residential areas (Ur-Rahman, 2011b). Mixing different height of residential dwellings make the outdoor spaces useless to the family, especially, women in Saudi Arabia (Figure 5.7) (Salagoor, 1990; Adas, 2001). In response to the invasion of privacy, householders take their own precautions by erecting plastic or metal corrugated and panels above the dwelling's outside fences in order to preserve privacy, which reduce the buildings' aesthetic (Al-Hathloul, 1981; Salagoor, 1990; Eben Saleh, 1997). However, the majority of the Saudi citizens would prefer to live in villas as it provides amenities such as swimming pools and gardens (Bokhari, 1978; Alkhedeiri, 1998; Adas, 2001; Al-Hemaidi, 2001).

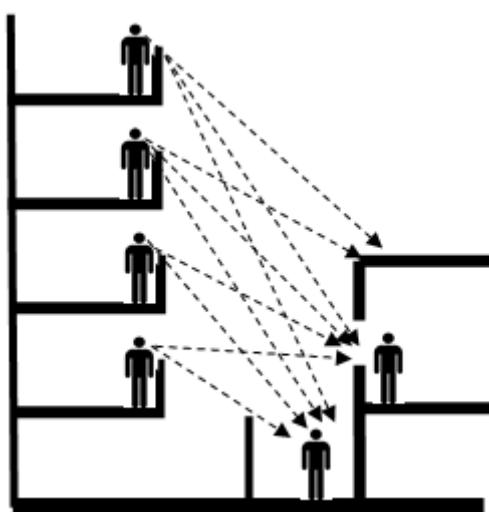


Figure 5.7: The issue of privacy within a neighbourhood with a mixed residential uses and different heights.

Source: Author

The Western planning ideas and regulations and the Law of Buildings and Roads in 1941 introduced the first rudimentary Land Use Controls in Saudi Arabia (Salagoor, 1990; Alkhedeiri, 1998; Al-Hemaidi, 2001). During this period (1947-1956) the city wall of Jeddah was demolished coinciding with the first oil boom and the city began to expand vigorously such that, King Abdulaziz issued a royal decree in 1947, to control un-owned vacant lands in Saudi cities in an effort to exercise control over irregular development (Salagoor, 1990).

5.3.4 Jeddah city's master plans

Since the early 1960s, an array of planning regulations controlled and formed the fundamental physical attributes and urban fabric of city morphology in Saudi Arabia. Five master plans have been enacted and approved for Jeddah metropolitan in an attempt to control urban development, form the city and to meet future needs such as housing, road networks and services. These plans are: the Dr. Makhlof plan of 1962, Robert Matthew plan of 1973, Sert-Jackson plan of 1981, the Al-Sumaitt plan of 1987 and the Al-Beeah plan of 2005. Each master plan has its own objectives and deals with different planning problems and criticisms (Table 5.4).

The city's configuration has transformed from its traditional pattern of small irregular plots, building-enclosing spaces and traditional housing with narrow streets to a modernised city complete with a grid-iron pattern, new housing types with wide roads and superblocks containing big plots (Salagoor, 1990; Adas, 2001). Each master plan contained a specific package of land use regulations that include: zoning, land subdivision and building regulations. Zoning regulations were conventional and more restrictive in the first four master plans. According to Abdulaal (2012) the role of the first four master plans was more focused on controlling and managing existing and future development rather than introducing a new theme of development such as the large or mega urban development. However, the latest plan (the Al-Beeah plan) adopted a 'smart growth policy', to encourage the concept of compact development as guide for future urban development to ensure sustainable development. To ensure application of the smart growth policy, Jeddah Municipality introduced zoning regulations to promote high density and intensive development (Abdulaal, 2012).

Chapter Five: From Walled Town to Vibrant City: The Impact of Plans and Zoning Regulations on Jeddah Metropolitan

Table 5.4: Summary of the five Master Plans of Jeddah. Source: The author

Plan Consultant	Plan Date	Covered Area (Km ²)	Plan Title	Components	Desity	Trend	Objectives	Criticism
First Master Plan Dr. Abdulrahman Makhlof	1962	700	Master Plan (Vision)	Land use map	Inside the built-up area (100-150 p/ha) Proposed density for new areas (50-100 p/ha)	To guide the city direction to the north	- Plan the physical structure of the city. - Create balance between uses. - Create and guide new direction for the city urban growth.	- Ignorance to social planning, environmental and economic planning. - Ignorance to public transportation. - Replacing traditional housing with modern buildings. - Change the urban fabric of the old town. - Ignorance to unplanned settlements. - The generic of the suggested land use.
Second Master Plan Robert Matthew, Johnson-Marshall and Partners (RMJM)	1973	800	Master Plan (Blueprint)	- Zoning map. - Land use map. - Development controls. - 79 reports with detailed plans	The old town (approximately 454 p/ha) The outer central (158p/ha) The southern zone (158p/ha) The Makkah road zone (158p/ha) The Medina road zone (158p/ha)	- Low-density development. - To guide the city direction to the north. - To direct city urban development up till 1991.	- Improve services of public health. - Balance residential densities and housing types. - Encourage business and commercial activities. - Stimulate the development of local industries. - Preserve historical area.	- Ignorance to social and environmental aspects. - Encouraging urban sprawl. - Ignorance for unplanned settlements. - Social segregation.
Third Master Plan Sert-Jackson International/ Saudi Consult (SJI/SC)	1981	1,215	Master Directive Plan	- Zoning map. - Land use map. - Detailed plans - Zoning and land-subdivision regulations.	R-1 low density (less than 75 p/ha) R-2 low-medium density (75-125 p/ha) R-3 medium density (125-175 p/ha) R-4/R-4A medium-high density (175-250 p/ha) R-5 high density (above 250 p/ha)	- Low-density development. - To extend to the north. - To extend to the east. - To extend to the south.	- Create balance among different uses. - Segregate incompatible uses. - Provide services and infrastructure. - Improve social welfare and health services. - Preserve and enhance the historical area.	- Ignorance to car parking space inside residential neighbourhood. - Increased of unplanned settlements. - Not supporting the economic activities. - Not balancing between the present and future needs. - Create social segregation.
Fourth Master Plan Al-Soumaif Engineering Services	1987	1,785	Comprehensive Development Plan	- Zoning map. - Land use map. - Zoning regulations.	Low density (less than 50 p/ha) Low-medium density (50-75 p/ha) Medium density (75-125 p/ha) Medium-high density (125-200 p/ha) High density (above 200 p/ha)	- Low-density development. - To guide the city direction to the north. - To guide the city direction to the east. - To direct city urban development up till 2025.	- Consider the increase in demand for housing. - Provide roads and streets in new areas. - Solve the problems of unplanned settlements. - Provide facilities. - Create balance between the present and future uses.	- Encouraging urban sprawl. - Not considering environmental aspects. - Lack of services to fulfil people's needs. - Zoning regulations do not conform with land-subdivision regulations. - Less attention to car parking areas in neighbourhoods. - Lack of action with unplanned settlements.
Fifth Master Plan Al-Beeah Consultancy Office	2005-2009	2,500	Master Plan	- Zoning map. - Structure plan. - Text book for zoning regulations. - Detailed plan with scale 1:1000 - Strategic plan	Low density (100-300 p/ha) Medium density (300-500 p/ha) High density (500 or more p/ha)	- Smart growth policy. - Compact development. - Increase density. - Create satellite towns. - To direct city urban development up till 2055. - Designate zones for unplanned settlements. - Designate zone for unique development and mega projects. - 4 storeys, parking level and roof villa. - Preserve areas designated as villas.	- Control urban sprawl. - Reduce the cost of infrastructure. - Make the city sustainable and a better place. - Encourage development. - Provide affordable housing - Maintain the best use of land.	- Not based on a critical profound study. - Pressure on infrastructure. - Zoning regulations do not conform with land-subdivision regulations. - Applying zoning regulations before having zoning ordinance. - Compromised neighbours privacy. - Issues between neighbours. - Noise pollution. - Increase in land and housing prices.

The first master plan of Jeddah: Dr. Abdulrahman Makhlof, 1962

After the first oil boom from 1948-1956 Jeddah extended beyond its wall without any plan or guidance. Therefore, in 1959 the Saudi government, represented by the Ministry of Interior, asked for assistance from the UN to prepare a master plan for Jeddah. The UN appointed Dr. Abdul-Rahman Makhlof¹, who later on established the planning principles in Saudi Arabia. The plan was approved in 1962 as the main base for Jeddah's subsequent master plans (Figure 5.8)². The plan of 1962 visioned a city of 700 square kilometres, based on the grid-iron pattern and suggested that the city growth should develop northward and designated the current location for the King Abdulaziz International Airport and the *Al-Cornich* road which is parallel to the coast.

However, Makhlof's plan was criticised for focusing on physical planning with a disregard for social, environmental and economic considerations. In addition, the plan was criticised for focusing on the car ignoring any need for public transportation and for not considering the maintenance and protection of the old town. In fact, the plan proposed to obliterate the old town by replacing traditional houses with modern buildings (Daghistani, 1990; Salagoor, 1990).

¹ An Egyptian expert in the field of city planning.

² During the preparation stage of the master plan, Dr. Makhlof relied upon the maps done by the Paktel Company in 1951 and an aerial map prepared by the Air Services Corporation in 1956. 500 maps were produced for Jeddah to plot the existing conditions of the built up areas and to illustrate and predict future growth

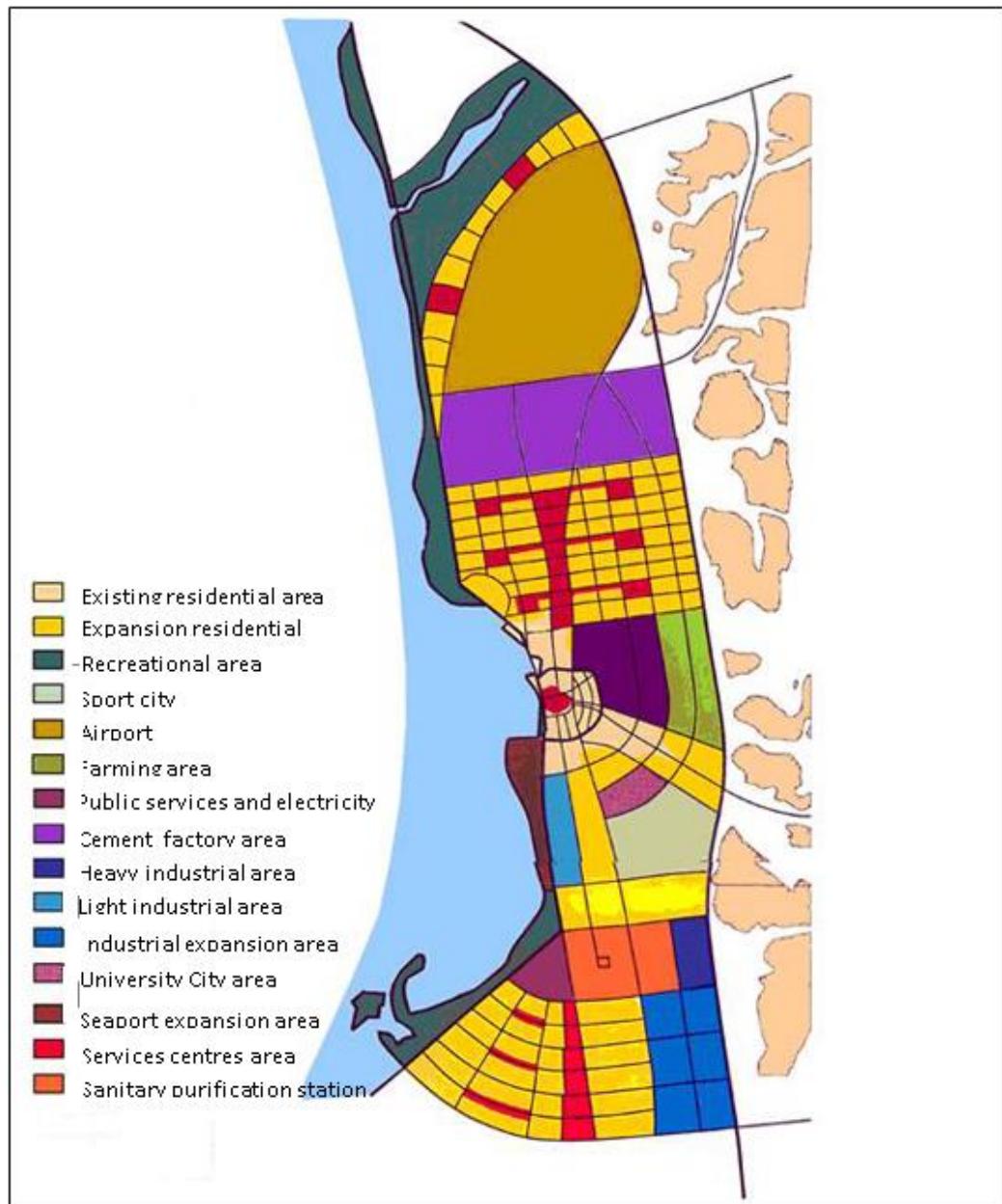


Figure 5.8: The first Master Plan of Jeddah – Dr. Makhlouf's Plan in 1962.
Source: Adapted from Jeddah Municipality (2012a)

The second master plan of Jeddah: Robert Matthew, Johnson-Marshall and Partners Consultants (RMJM) 1973

In 1969 the UN formed a committee that included the Deputy Ministry for Municipal Affairs (DMMA) to prepare master plan and reports for major cities of the Western Region: Makkah, Medina, Jeddah, Taif, Yanbu and Tabuk (Salagoor, 1990; Abu-Sulaiman, 1996). The committee agreed to select a British consultancy group named 'Robert Matthew and Johnson Marshal and Partners (RMJM)' (Abu-Sulaiman, 1996). The master plan of Jeddah was approved in 1973 (Figure 5.9).

The scheme planned to cover an area of 800 square kilometres. The Matthew's plan established the elements of the city's future structure, introduced development controls, linear grid pattern and confirmed the northward linear growth to the north. The master plan consisted of a land use and zoning map accompanied by development controls (Abu-Sulaiman, 1996). In 1973 the industrial city was located to the south of the city chosen to be in the opposite direction of the prevailing winds to avoid air pollution.

The plan of 1973 was difficult to implement and apply owing to the unpredicted population growth as a result of the second oil boom from 1974-1986. Therefore, there was a need to update and review the master plan to cope with unforeseen changes (Salagoor, 1990). The plan of 1973 was criticised for encouraging low-density development and failure to make accurate prediction and provision for the increase in spontaneous settlements that continued to spread. Development controls led to social segregation according to income (Daghistani, 1990; Salagoor, 1990; Abu-Sulaiman, 1996)

In an attempt to achieve stability in the regions' development, to develop government sectors and provide affordable housing the Saudi government adopted the Five Year National Development Plans that set responsibility for planning policies at the national level in 1970 (Althabt, 2013). In order to promote affordable housing the Saudi government had been distributing thousands of free residential plots around the cities' peripheries and/or giving loans \$80,000 (300,000SR) with no interest through the Real Estate Development

Fund (REDF) during the mid-1970s. These two policies and the 1973 plan helped to solve the issue of housing affordability to a certain extent, where thousands of houses and apartments blocks were constructed (Mandeli, 2008). However, they also led to a new urban problem known as “urban sprawl”.

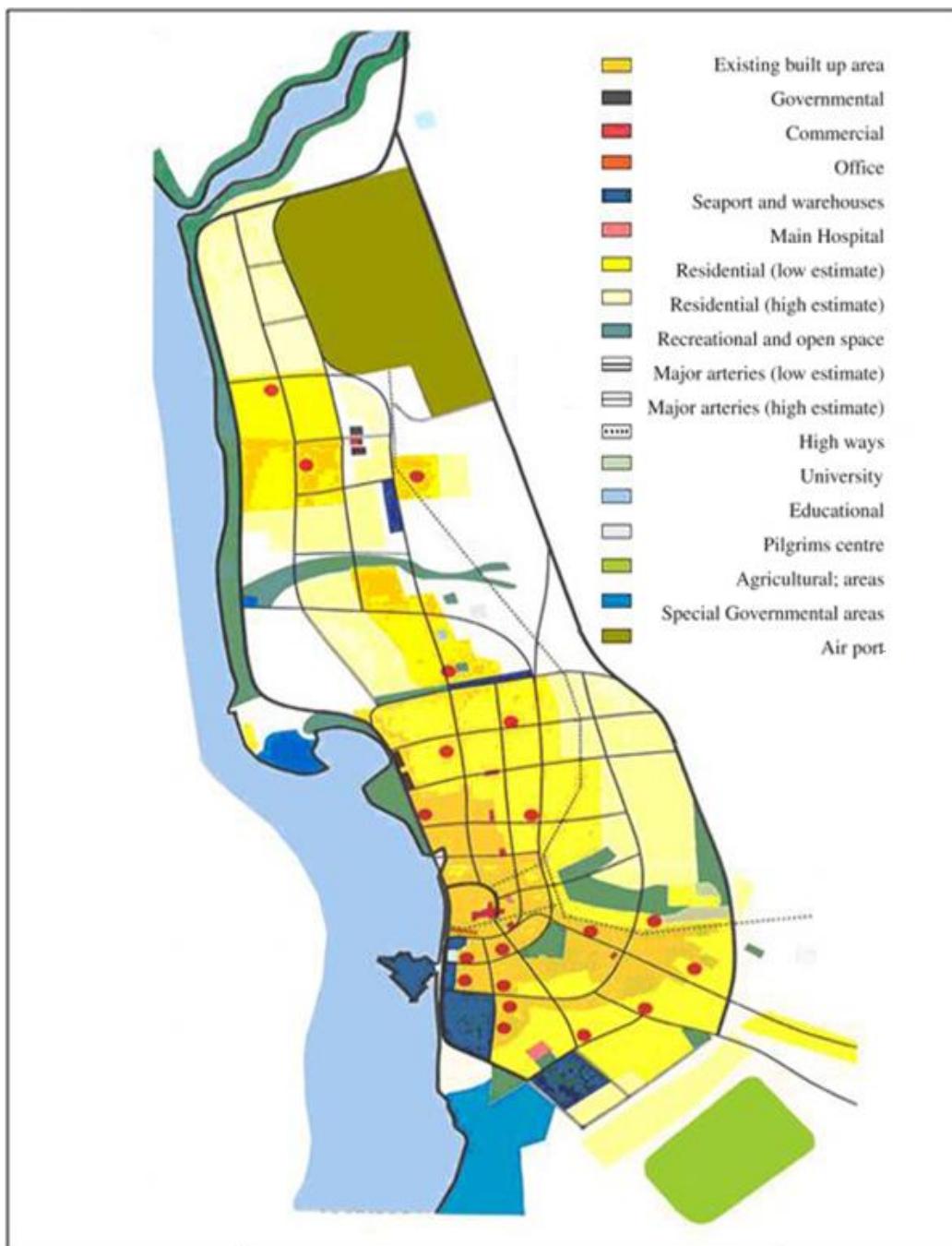


Figure 5.9: The second Master Plan of Jeddah – Matthew's Plan in 1973.
Source: Adapted from Jeddah Municipality (2012a)

The Third Master Plan of Jeddah: Sert-Jackson International/Saudi Consult (SJI/SC) 1981

The Saudi government requested Sert-Jackson International Saudi Consult (SJI/SC) in 1977 to revise, the 1973 master plan and to prepare action area plans at various scales to show the actual location of the proposed land uses. The scheme entitled ‘The Jeddah Master Directive Plan’ was approved in 1981 by the Council of Ministers (Salagoor, 1990; Abu-Sulaiman, 1996). The scheme introduced planning by-laws which contain zoning, building and subdivision regulations (Figure 5.10).

The 1981 plan again relied on northward expansion. The scheme visioned a city of 1,215 square kilometres, with reduced density in existing and proposed residential areas to create balance among different uses, segregate incompatible uses, improve social welfare and health services, provide different services and infrastructure, and preserve the historical area (Salagoor, 1990; Abdulaal, 2012; Jeddah Municipality, 2012).

The 1981 plan provided sets of regulations in detail and ensured that land-subdivision regulations were in agreement with zoning regulation (Salagoor, 1990). However, the absence of laws that prevent land-subdivision owners from blocking development resulted in fragmented development. The scheme of 1981 divided the city into three types of zones: residential, commercial and industrial zones known as ‘the conventional zones’ (Salagoor, 1990; Jeddah Municipality, 2012a). Each zone is sub divided into sub zones with their own specific regulations to control urban development by determining minimum plot area, maximum permissible ground coverage, maximum numbers of floors and set-back.

The SJI/SC plan was criticised for not considering car parking at the neighbourhood level, not balancing present and future needs, as well as not supporting economic activities and investments. The scheme, also, was criticised for ignoring the increase of spontaneous settlements and for encouraging urban fragmentation leading to urban sprawl.

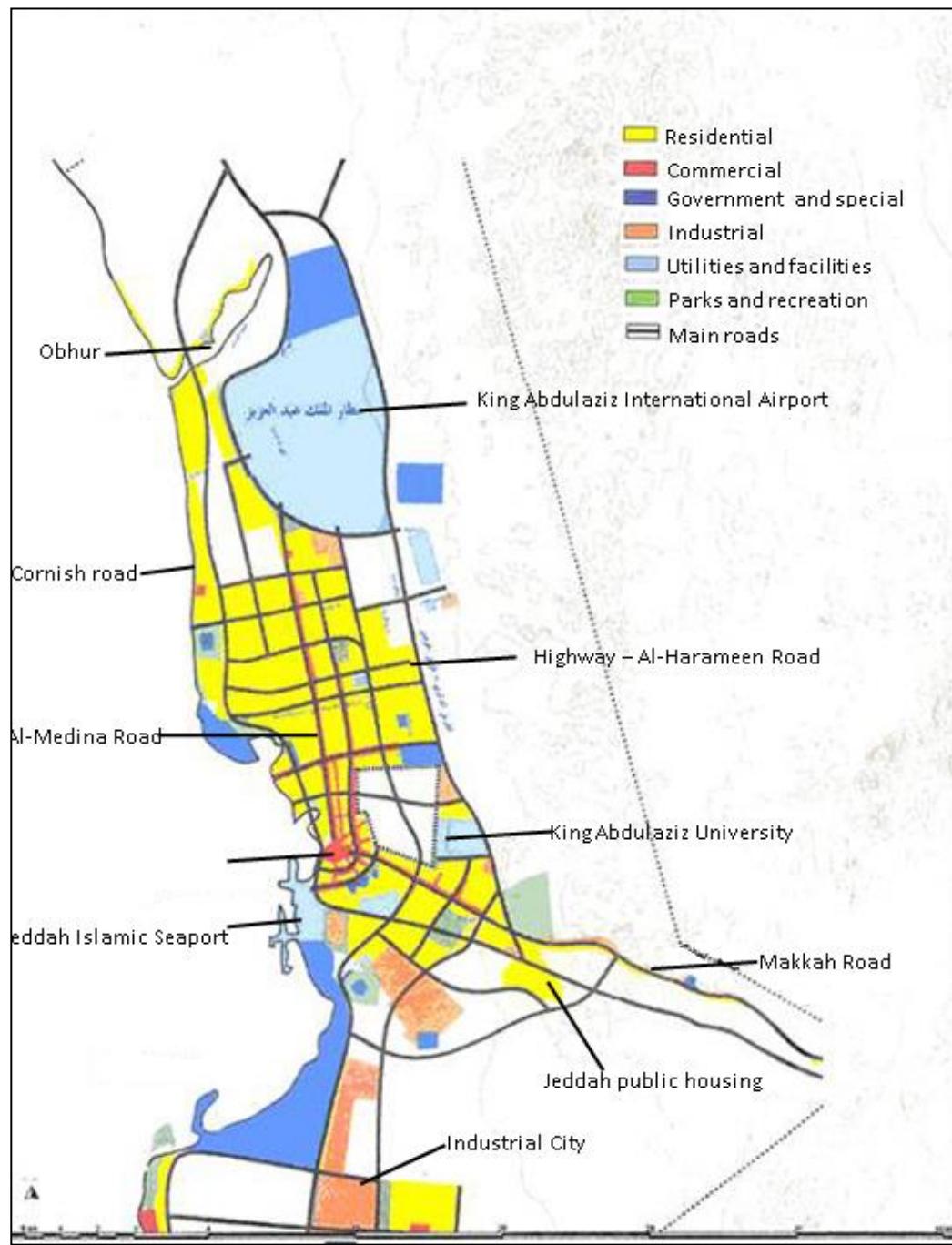


Figure 5.10: The third Master Plan of Jeddah – Sert Jackson Plan in 1981.

Source: Adapted from Jeddah Municipality (2012a)

The Fourth Master Plan of Jeddah: Al-Soumait Engineering Services 1987

The Saudi government contracted the Al-Soumait Engineering Services to revise the 1981 master plan and to prepare detailed plans and reports. This 'Comprehensive Development Plan' was approved in 1987 by the Council of Ministers (Figure 5.11). Al-Soumait's plan continued to encourage low density development and the city to grow farther to the north and east. Owing to the continued absence of taxation for vacant land owners, there was no penalty to prevent continued blocking of development.

The scheme of 1987 aimed to cover an area of 1,785 square kilometres and to guide the urban growth of Jeddah metropolitan until 2025 (Mandeli, 2008; Jeddah Municipality, 2012). The plan recognised the increasing demand for housing, provided road and street networks in new areas connected to existing ones, as well as provide facilities and services in residential neighbourhoods. The plan aimed to create a balance between the present and future uses, organised development in new urban extensions and solve problems related to unplanned settlements (Mandeli, 2008; Abdulaal, 2012). The scheme of 1987 was accompanied by zoning regulations including determining land use, density, minimum plot area, maximum permissible ground coverage, maximum numbers of floors and set-back. The scheme was criticised for not achieving some of the Comprehensive Plan's goals such as: taking action with unplanned settlements, providing car parking areas, especially inside neighbourhoods and more housing to accommodate the increase in population. The scheme, also, was criticised for encouraging urban sprawl leading to further urban fragmentation and for creating social segregation in terms of income.

By the end of 1980's Saudi cities had experienced a massive expansion and fragmented development in each direction. Therefore, the government issued a Royal Decree in 1989 to the MOMRA to adopt urban growth boundaries (UGB) in an attempt to control growth in Saudis' cities (Al-Hathloul and Mughal, 2004; Garba, 2004; Mubarak, 2004; Mandeli, 2008). According to Alkhedaeri (1998) the UGB meant to be the future limits designated to accommodate future population, support activities which are anticipated during specific period and to ensure efficient use of land. Two UGBs were adopted by the Municipality of

Jeddah to reserve future expansion for 2014 and 2029 (Figure 5.12) (Jeddah Municipality, 2009a). The results of applying the 1989 UGB policy led to unbalanced development, thus, leading to unaffordable housing, environmental degradation and additional cost on providing utilities, services and infrastructure (Mandeli, 2008). According to Angel (2008) and Mandeli (2008) urban containment policies are not able to function as a wall that contains urban busting. Angel (2008) referred to what happened in London and Seoul to prove that the policy of greenbelts have not stopped urban expansion and development simply leapfrogged across the growth boundaries.

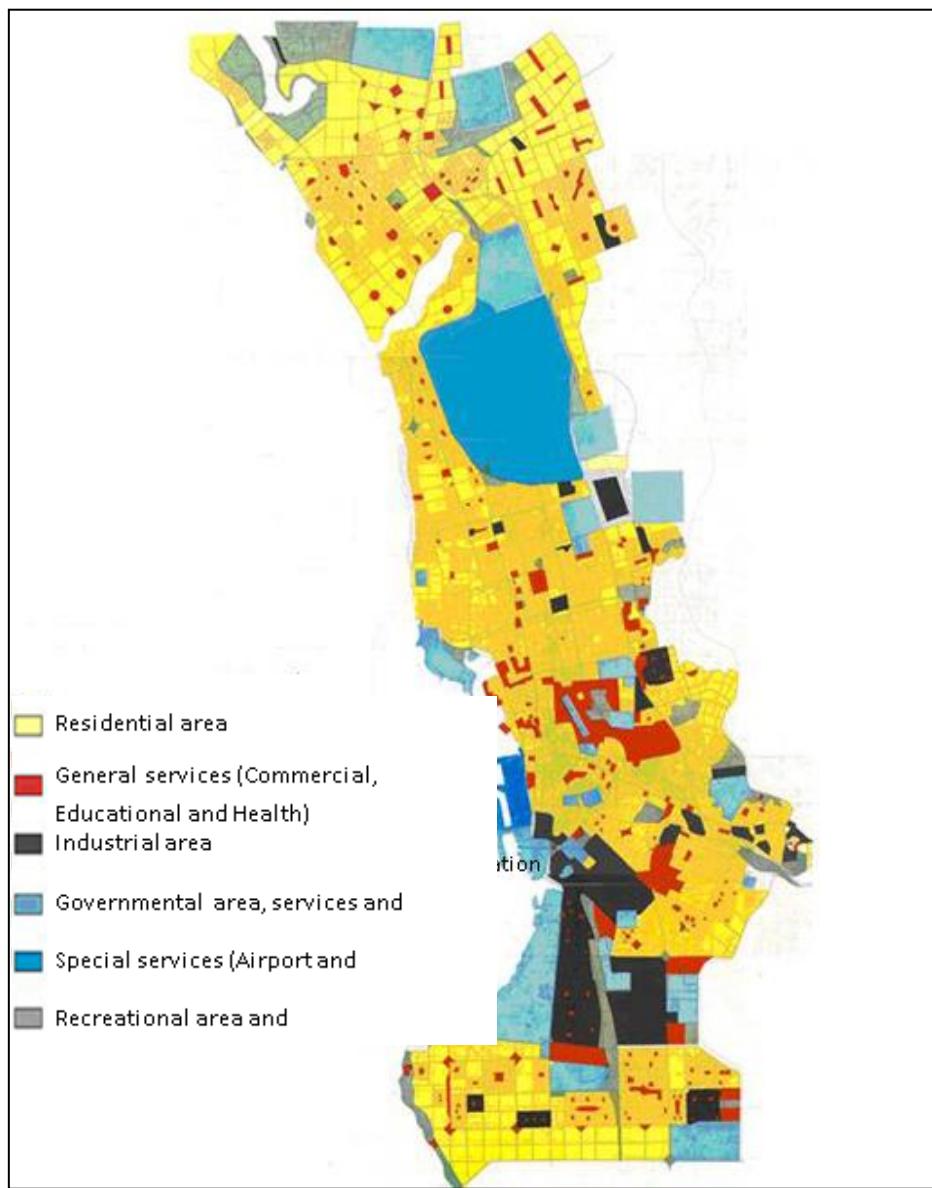


Figure 5.11: The fourth Master Plan of Jeddah – Al-Soumait's Plan in 1987.
Source: Adapted from Jeddah Municipality (2012a)

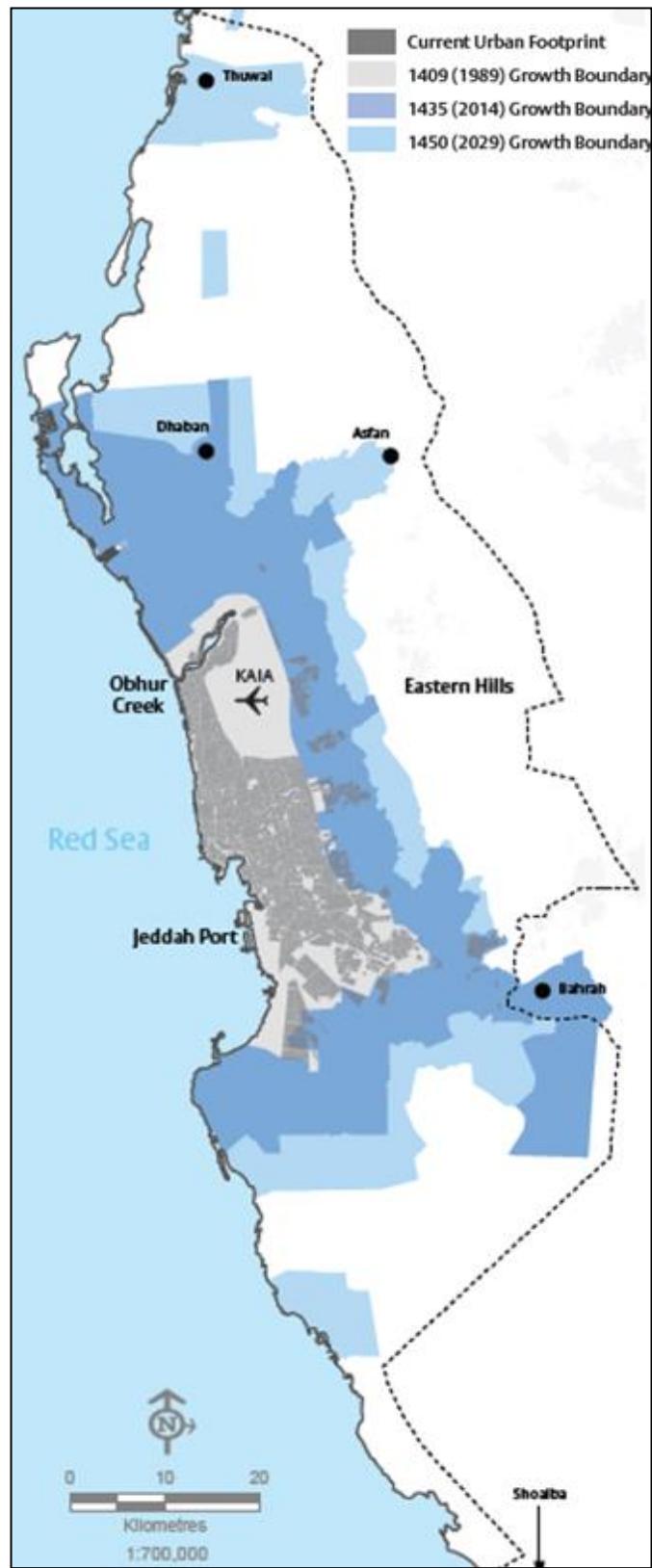


Figure 5.12: Jeddah's current and future urban growth boundaries (UGBs).
Source: Jeddah Strategic Plan (2009a)

The Fifth Master Plan of Jeddah: Al-Beeah Consultancy Office – 2005-2009

While city growth is taking place, the Municipality of Jeddah needs to tackle a series and enormous of challenges such as controlling and managing the urban growth of the city, the cost of providing infrastructure and affordable housing. Therefore, a question could be raised as to how national and local authorities can pay attention to all planning problems and people's needs? The Saudi government at the national level made a commitment to spatial planning in the seventh and eighth National Development Plans to control urban growth and provide affordable housing by infilling development (MOEP, 2001; 2005). Jeddah Municipality decided to make their city the first to implement the national objective by adopting a 'smart growth policy'. The assumption was that smart growth policy or compact development would ensure sustainability and an efficient use of vacant land (Al-Beeah Consultancy Office, 2004; Mandeli, 2008; Jeddah Municipality, 2009b). The question is whether the decision to encourage densification was misguided by its believed benefits where this might lead to inconsistent and incoherent outcomes (Mandeli, 2008; Abdulaal, 2012). In addition, the decision of densification might lead to serious social, ecological, physical problems and affect the living standards of the city (Mandeli, 2008). It is clear that growth needed to be limited and it was already clear that simply putting a line around a map caused house prices to rise etc. So smart growth was seen as a positive way to limit outward expansion. This thesis explores the impact of this policy looking through the lens of neighbourhood residential development.

The Municipality of Jeddah signed a contract with the Al-Beeah Consultancy Office to prepare a strategic plan, structure plan, and new master plan for the metropolitan along with new zoning regulations in an attempt to control horizontal growth by making urban fabric more compact. In 2004 the consultant prepared a new detailed master plan accompanied by new zoning regulations to achieve densification (Mandeli, 2008). Owing to the increase in oil revenue, especially during the third oil boom from 2005-2010 the country's economy flourished, where the country's GDP reached the peak in 2008 (World Bank, 2011). Thus, the country witnessed unprecedented and significant rapid development which far exceeded expectations. Jeddah Municipality approved the

new local plan in 2005 and by 2006 the Municipality prepared a detailed text book for the first time to describe the new zoning regulations for each zone (Figure 5.13) (Mandeli, 2008; Abdulaal, 2012; Jeddah Municipality, 2012). In 2007 the new master plan and the zoning regulation text book was approved by the Minister of MOMRA and applied and updated in 2009 (Abdulaal, 2012).

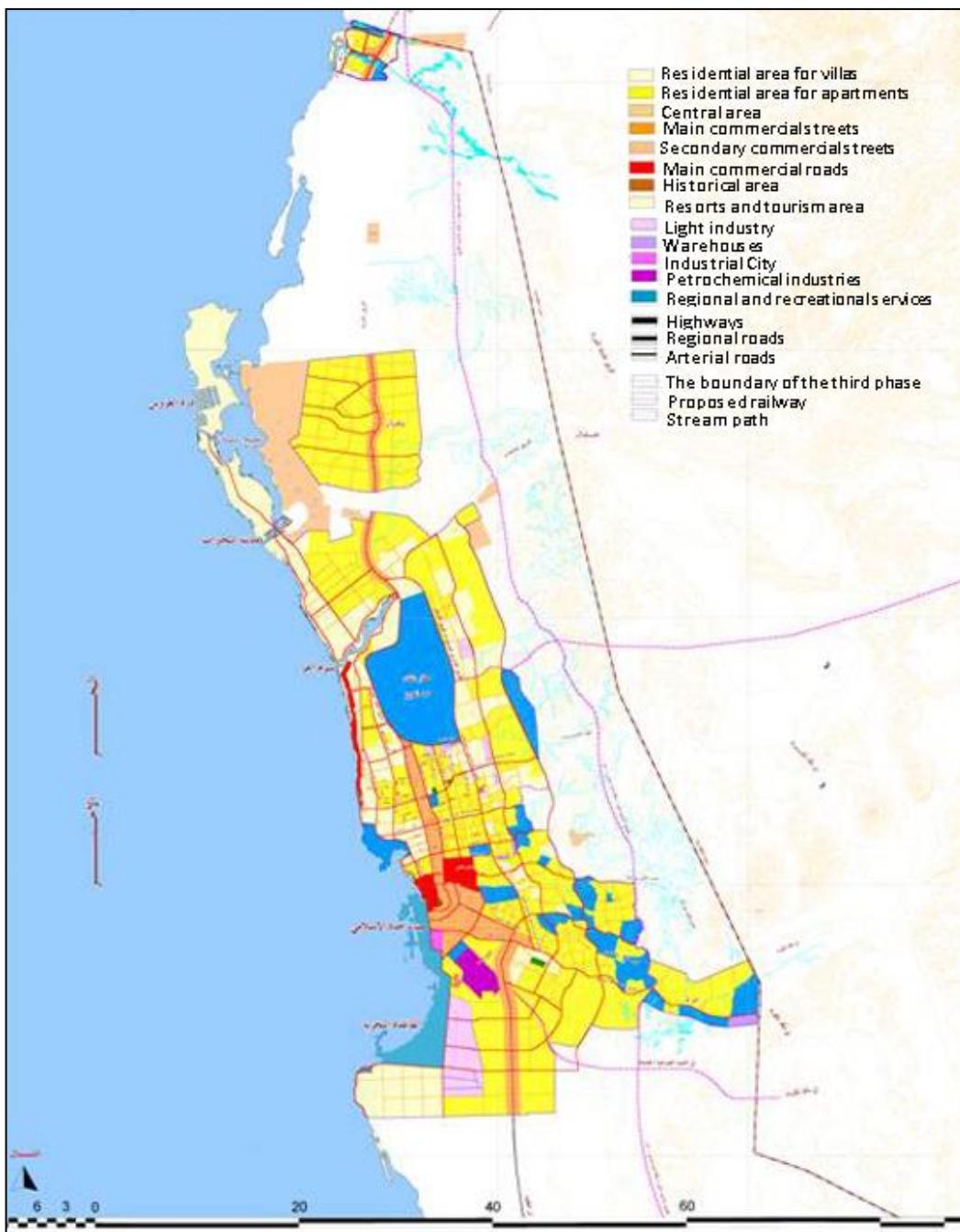


Figure 5.13: The fifth Master Plan of Jeddah – Al-Beeah's Plan in 2005.
Source: Adapted from Jeddah Municipality (2012a)

The scope of the new master plan is to cover an area of 2,500 square kilometres and guide the city's growth up to 2055, control urban sprawl, improve traffic congestion and road capacity, reduce infrastructure costs, make the city sustainable and provide affordable housing (Al-Beeah Consultancy Office, 2004; Jeddah Municipality, 2009b; Abdulaal, 2012; Jeddah Municipality, 2012). The new policy language in Jeddah become about intensification by activating the concept of floor area ratio (FAR) and make it the main regulation among other zoning regulations (number of floors, set-backs and etc.) to encourage vertical expansion (Jeddah Municipality, 2009b). The last plan propose to increase building height within some of the existing and future residential areas in order to utilise fully vacant land in the city as well as include satellite towns in an attempt to attract and absorb the increased populations (Al-Beeah Consultancy Office, 2004; Mandeli, 2008; Jeddah Municipality, 2009b).

The 2005 scheme divided the city into eight types of zones, where some zones classifications were broken into sub-zones with their own specific regulations to control urban development. The eight zones are; commercial and mixed uses, residential, industrial, regional and semi-regional service, special development, mega and unique project, historical area and development of integrated villages (Jeddah Municipality, 2009b). By allocating a zone for mega projects, Jeddah is expected to enter into the mega projects competition through the 'The Kingdom Tower' as 'World's Megatall building' in 2020 (Council on Tall Building and Urban Habitat, 2011). The new regulations provide five sub residential zones which are as follow:

- The first zone is for villas, where the minimum plot's area is 200 square metres with a maximum number of two storeys, FAR of 1.2 and lot coverage of 60 per cent.
- The second zone is the apartment zone with four floors of flats, FAR 2.4 and lot coverage of 60 per cent with a roof villa of two floors constituting 50 per cent of the built area and car parking level (Figure 5.14).
- The third zone is the mixed residential uses zone, where both types of housing are allowed.

- The fourth is allocated for areas which are not yet seen residential development, which gives land owner much flexibility to develop this area into villa or apartment or to create a mixed residential use and simply has to seek permission.
- The last zone is designated for spontaneous settlement, which have had their own unique regulations that are approved by a Royal Decree and the Municipality is working on preparing specific regulations to improve and regulate the settlements (Jeddah Municipality, 2009b: 29-35).

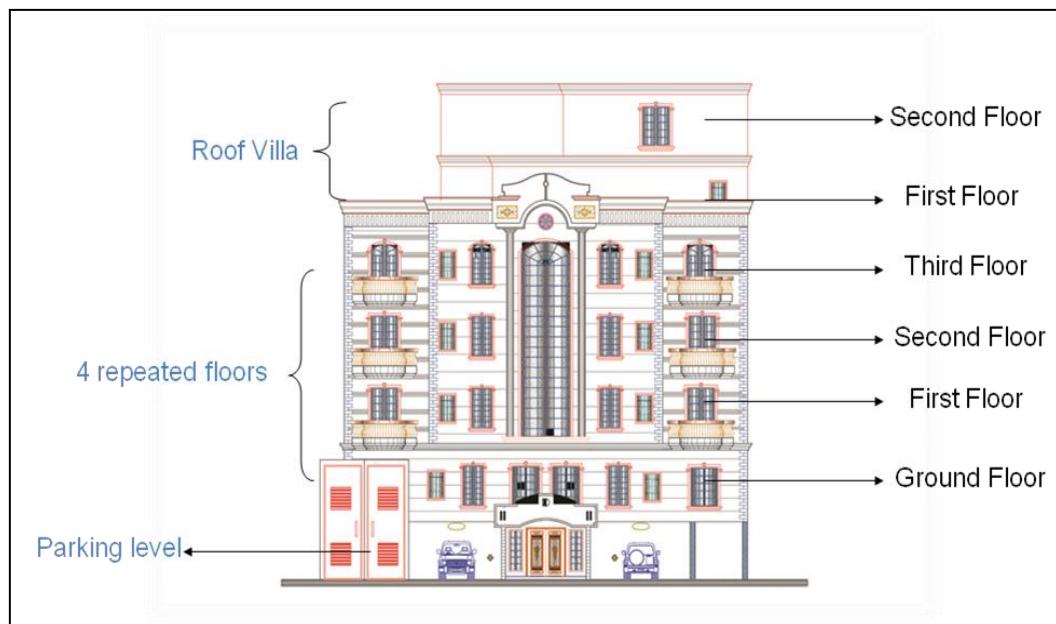


Figure 5.14: The concept of the new apartment.

Source: adapted from Architectural office.

Figure 5.15 illustrates the distribution of population density in 2007, where the city centre had more than 500 p/ha while other districts, especially the ones at the north-west of the city, have a population density of less than 100 p/ ha (Jeddah Municipality, 2009b).

The Municipal Council of Jeddah held a workshop in 2008 to discuss the implications of the new zoning regulations on Jeddah with professionals (academics and developers) and staff members from Jeddah Municipality (see

appendix 2, second meeting). Although professionals agreed with the Municipality on the point that the new regulations would deliver benefits to the built environment they believed that applying the new zoning regulations without a deep and critical study of the impacts might cause problems. In addition, the professionals criticised the Municipality for applying the new regulations without clarifying the basis for densification and rulings about the height of apartment blocks. Another major critique to the new master plan is that it did not consider public transportation, which is important to provide for the success of compact development.

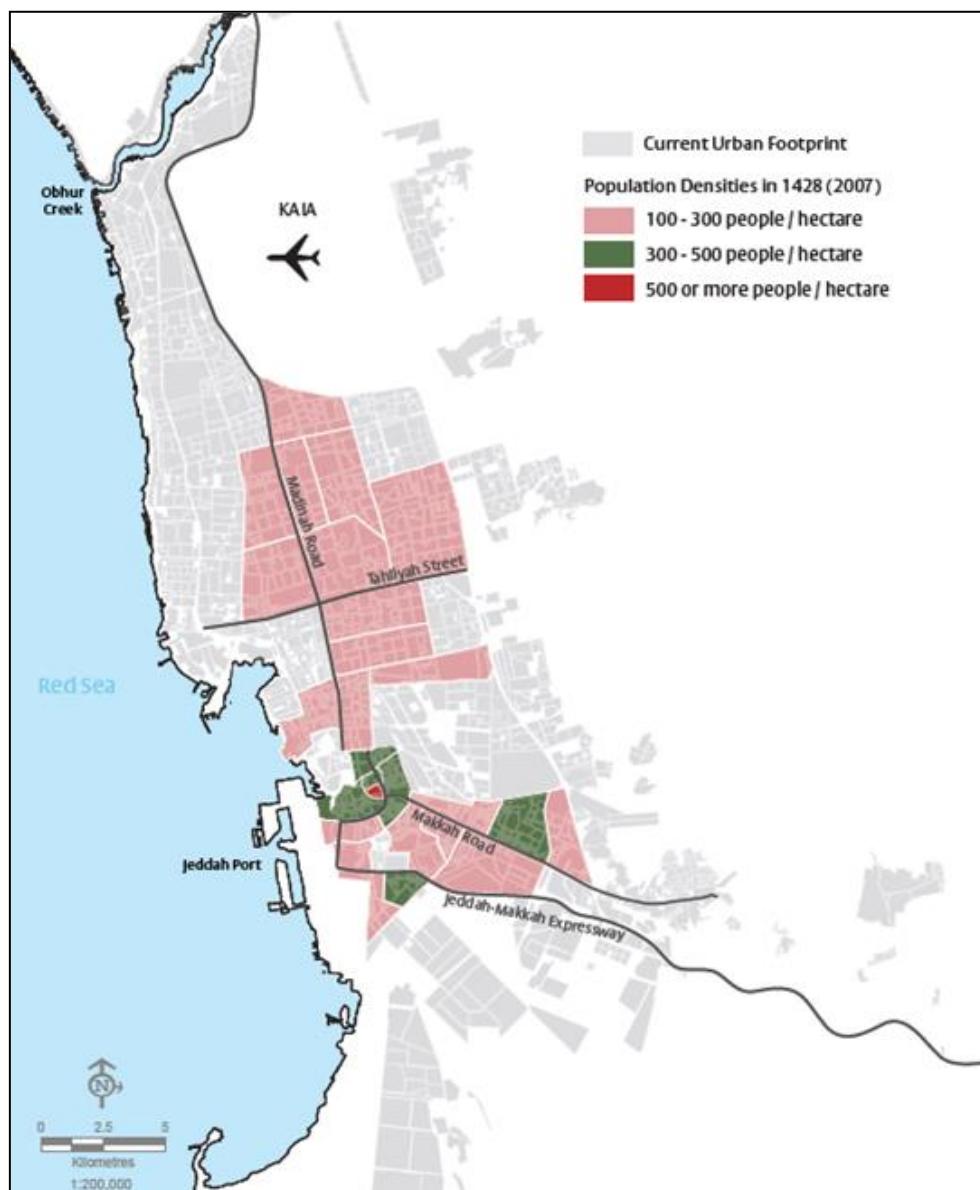


Figure 5.15: The distribution of population density in Jeddah.
Source: Jeddah Strategic Plan (2009a)

5.3.5 Housing

In Saudi Arabia residential housing is one of the main sectors of national development, where the construction sector includes real-estate development, constitutes 7.8 per cent of the GDP between 2007 and 2010 (Abdulaal, 2012). Owing to population increase, inadequate financing, inflation, low salaries compared to housing cost and waiting lists for loans and land grants, housing affordability has become a serious problem. Therefore, the major two issues and challenges in the housing sector that should be considered in future plans and policies are housing demand and supply as well as housing affordability.

Residents in Jeddah live in a variety of housing types, including villas, apartments, shanty houses and others (i.e. worker accommodation, endowments (Awqaf) and charitable houses) (Salagoor, 1990; Jeddah Urban Observatory Centre, 2007a). Table 5.5 shows that Jeddah has witnessed a 17 fold increase in the number of housing units from 1962 to 2001 (Salagoor, 1990; Al-Beeah Consultancy Office, 2004; Al-Otaibi, 2006). The table shows that apartments have significantly increased 38 times in less than 40 years. This could be attributed to the increase in the population and land prices, which made apartments an alternative to the more desirable but unaffordable villa.

Table 5.5: Housing types changes from 1963-2001: Source: Source: The author.

Housing Type	Abdul-Rahman Makhlouf 1962		Robert Matthew 1970		Sert Jackson 1977		Al-Beeah Consultancy 2001	
	No.	%	No.	%	No.	%	No.	%
Villas	1,545	5.4	3,250	4.3	14,229	8.2	57,647	11.6
Apartment	8,790	30.8	21,300	28.4	99,726	57.5	335,670	67.7
Shanty Houses	12,828	44.9	38,900	51.9	43,474	25	100,275	20.3
Other	5,420	18.9	11,560	15.4	16,060	9.3	2,082	0.4
Total	28,583	100	75,010	100	173,489	100	495,674	100

Figure 5.16 illustrates that the majority of the residents' in Jeddah are tenants with a spike in 1977 (76.9 per cent) owing to the increase in population and a later growth in home ownership after the new zoning regulation allowed the construction of six storey apartment blocks (Jeddah Municipality, 2009a).

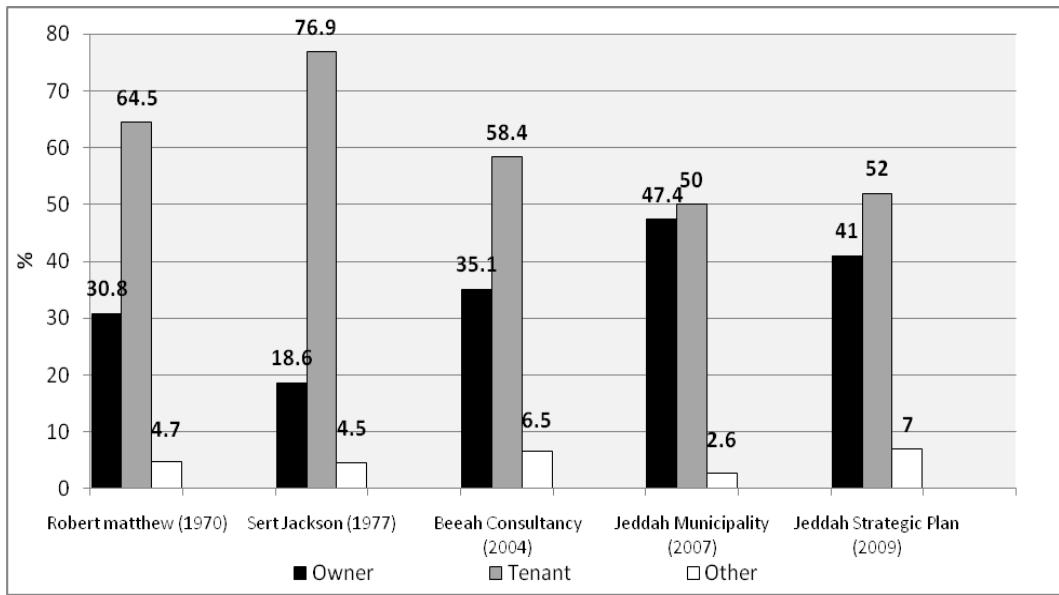


Figure 5.16: Housing tenure percentage from 1970-2009:
Source: Author.

Housing demand has been attached to population growth and family size, where both aspects are strongly linked to socio-economic change. In Jeddah the average family size was 4.8 persons in 2004 and according to a study in 2007 had increased slightly to 5.2 persons (Al-Beeah Consultancy Office, 2004; Qurnfulah, 2005; Al-Otaibi, 2006; Jeddah Urban Observatory Centre, 2007b).

Figure 5.17 illustrates housing demand from 2010 to 2055. The figures were estimated by using the forecasted figures of the population (the exponential curve model) as the maximum estimation of population. Thus, the need for housing would increase from 664,665 units in 2010 to 3,194,177 units in 2055. In total 2,529,511 dwellings will be needed by 2055, and then the policy should enable the construction of 63,238 dwellings per year.

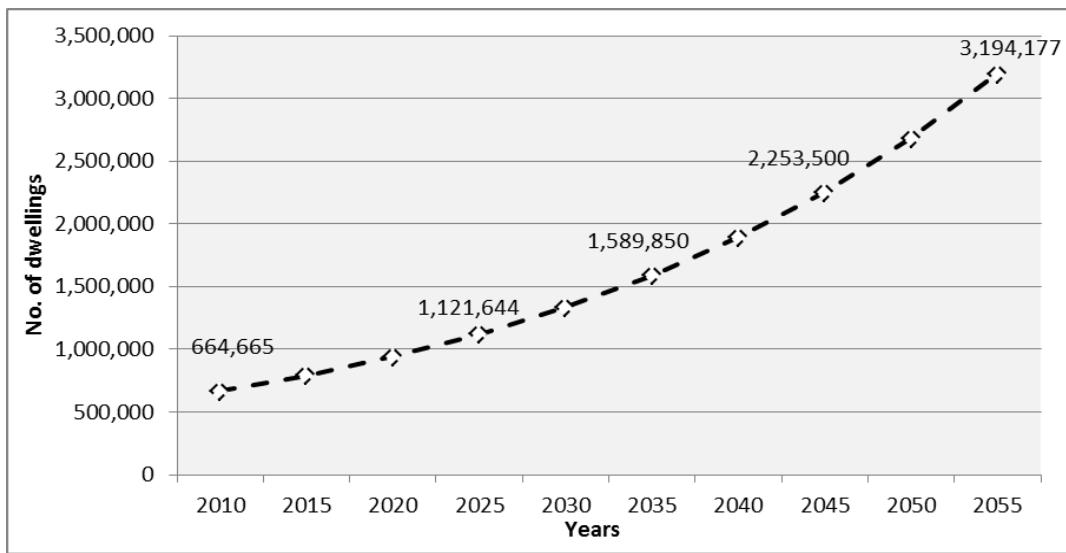


Table 5.17: The estimation of housing needs in Jeddah by 2055.
Source: Author.

5.4 The Metropolitan Land Use and Justification of Densification

The anticipated increase in population by 2055 will be accompanied by a high demand on services and housing. Although, the Municipality of Jeddah did not provide or illustrate any statistical figures justifying its decision, two main questions could be asked: is there enough vacant land in the built-up area to accommodate this future increase in population? What number of floors do we need to accommodate this future increase in population? Jeddah witnesses significant changes in the land use from 1964 to 2007, where the residential area increased from 20 square kilometres in 1970 to 213.7 square kilometres in 2007 and commercial use increased from approximately 30 square kilometres in 1964 to 156 square kilometres in 2007 (Aljoufie et al., 2012). The vacant lands percentage in built up areas is an important asset for future development to contain the future population increases. According to three different resources provided by the Municipality of Jeddah, the percentage of vacant land in the built-up area was 25 per cent in 2001 which constituted 339 square kilometres (Al-Beeah Consultancy Office, 2004) and 17 per cent in 2007 which constituted 147 square kilometres (Jeddah Urban Observatory Centre (JUOC), 2007c). A recent study by the Municipality of Jeddah showed that 57 per cent of the built-up area is vacant or 1,006 square kilometres (Jeddah Municipality, 2009a).

Although, it is not the place in this thesis to attempt to state which of these figures might be correct, a question could be raised as on which set of figures do decision makers in the Municipality of Jeddah rely on in their decisions?

Table 5.6 illustrates the total area for vacant land, the area designated for services constitute 33 per cent of the total vacant land and the net area of vacant land. By taking out the area designated for services and other uses from the total vacant land area the net area for vacant land for residential development is 97 square kilometres, 223.7 square kilometres and 664 square kilometres.

Table 5.6: The net area for vacant lands designated for future development inside the built-up area. Source: The author.

Vacant Land Area (m ²)	Services Area and Other Uses (33.8%)	Net Vacant Land Area (m ²)
147,000,000	49,980,000	97,020,000
339,000,000	115,260,000	223,740,000
1,006,000,000	342,040,000	663,960,000

Table 5.7 illustrates the estimated number of floors and area that is needed for residential development to accommodate the expected population growth by 2055. By assuming the future demand for housing is 2,529,511 dwellings, vacant land area for residential development is 223.7 square kilometres and there are two dwellings on each floor, then the future area would be needed is between 101 square kilometres and 169 square kilometres with building height between three to five floors and plot area of 400 square metres and or between 152 square kilometres and 190 square kilometres with plot area of 600 square metres and building height between four to five floors. Therefore, there was a need for densification by increasing the number of floors to accommodate the expected future population growth by 2055.

Table 5.7: The estimated area for future housing according to different number of floors. Source: The author.

Future Dwellings and Plot Areas	No. of Floors * Two dwellings				
	2 (4Units)	3 (6Units)	4 (8 Units)	5 (10 Units)	
No. of Dwelling (2055) 2,529,511	No. of buildings	632,378	421,585	316,189	252,951
Area (m ²)	400	252,951,200	168,634,000	126,475,600	101,180,400
	600	379,426,800	252,951,000	189,713,400	151,770,600

5.5 Conclusion

This chapter has mapped the chronological shift of Jeddah from traditional small walled town with narrow streets to the contemporary urban landscape characterised by super blocks, big plots and wide streets. The traditional town was based on human and animal scale and Islamic principles consistent with the social customs, values and climate. The contemporary urban morphological created by zoning regulations do not comply with these. Urban development is strongly linked with the economic development of the country, population growth, migration, government decision making and master plans and planning regulations. The chapter has traced the aforementioned changes in terms of the size of the city, the increase in the population and urban determination that led the city to grow in a linear pattern. A calculation was made to estimate the future population growth by 2055 in order to estimate the future demand on housing. Jeddah is a modern city that looks more or less like developed global cities, Jeddah has the planning problems found in both developed and developing cities. The two main planning issues the city is struggling with are the same issues that major Saudi cities are suffering from: controlling urban sprawl and providing affordable housing.

The chapter has charted how the five master plans have changed the city landscape. The earlier four master plans have been seen responsible for this by encouraging low density development. The latest master plan has attempted to address that by bringing forward the idea of compact. Having explored the main planning strategies, the next chapter assesses the overall performance of the local spatial planning authority in Jeddah and its capacity to implement regulations with implications for achieving its objective to be a smart growth city.

Chapter Six: Assessing Local Planning Authorities Performance in Jeddah

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CHAPTER SIX: ASSESSING LOCAL PLANNING AUTHORITIES PERFORMANCE IN JEDDAH

6.0 Introduction

The purpose of this chapter is to address one of the main issues in this research by mainly providing an overall assessment of the current performance of the local spatial planning authority in Jeddah, as good governance provides good decision-making related to zoning regulations. Although, the local spatial planning authorities include the Municipality and the Municipal Council of Jeddah the main focus of this chapter will be on the Municipality as the main authority charged with formulating, implementing and enforcing planning regulations. This chapter creates a platform showing the deficiencies in the current planning system at the local level that needs to be addressed in the future to achieve good urban governance which is considered important to improve the implementation of city zoning regulations.

This chapter is divided into four main sections. The first section, evaluates the quality of the local Jeddah Municipality based on the UN-HABITAT, Urban Governance Index (UGI). The second section assesses the overall performance of Jeddah Municipality. The penultimate section critiques the deficiencies of the UN-HABITAT model. The last section assesses the overall performance of Jeddah Municipality by modifying the UN-HABITAT Model to fit with the research.

6.1 Assessing the Performance of local governance by employing the UN-HABITAT (UGI)

This section presents the local planning authority through the lens of the UN-HABITAT Urban Governance Index (UGI) model, which consists of four main indicators: effectiveness, equity, participation and accountability, to assess and improve the quality of urban governance (UN-HABITAT, 2004). As mentioned in Chapter 3, the UN-HABITAT UGI framework is based on secondary data collected from different documents and sources. The assessment of the local governance in this section is not just concerned about planning but about governance as a whole. Appendix 6 illustrates the calculations for each of the

main four indicators and 25 sub-indicators of the UGI. The findings of the UN-HABITAT UGI model for Jeddah Municipality are as follows:

6.1.1 Effectiveness

According to Table 6.1, the effectiveness of local governance is based on eight sub-indicators, which includes; local government revenue per capita, ration of actual recurrent and capital budget, local government revenue transfers, ratio of mandated to actual tax collection, predictability of transfers in local government budget, delivery of services, published performance delivery standards, response to civil society and existence of a vision statement.

Financial factors are a significant consideration in the delivering of potential zoning regulations and implementation of planning decisions and plans for cities (Faqih, 2004; Elliott, 2008; Shafiei, 2011). None of the Saudi commentators provide robust evidence to support their statements that planning authorities are poorly financially resourced. An in-depth exploration revealed that Jeddah Municipality lacks in terms of the financial resources to deliver an effective service. In addition, the ability to forward a plan depends on the amount the local planning authority has. A former mayor, declared to a local newspaper in (2009) that the financial transfers together with the revenue of the Municipality are insufficient to fund and implement the Municipality's aims, plans and projects.

Table 6.2 illustrates a significant increase in the revenue spend from \$21(78.4 SR) per person in 2002 to \$38.6 (145 SR) in 2010. This is attributed to the growth in Municipality revenue from \$54.7 (205 SR) million to \$133.3 (500 SR) million with an increase of 144 per cent from 2002 to 2010. This was as a result of the 32 per cent increase in urban population during this period.

Table 6.1: Explanation of the effectiveness index and the sub-indicators. Source: Adapted from (UN-HABITAT, 2004).

Effectiveness	Sub-indicators	Description
	Local government revenue per capita (LGR)	The total local government revenue (the income annually collected, both capital and recurrent, in US dollars) (R) divided by total population (P) for 3 years average. (LGR)= (R/P)
	Ratio of actual recurrent and capital budget (RRC)	The total local recurrent budget (income derived on a regular basis) (R) divided by the total government capital budget (income derived from internal and external source) (C). (RRC)= R/C
	Local government revenue transfers (LGT)	Percentage of the local government revenue, which include the total local government revenue (transfer and non-transfer) (R) divided by transfers in local government revenue (income originated from higher government) (T). (LGT)= (T/R)*100
“Effectiveness of governance measures the existing mechanisms and the socio-political environment for institutional efficiency (through subsidiary and effective predictability) in financial management and planning, delivery of services and response to civil society concerns”	Ratio of mandated to actual tax collection (TC)	The actual tax collected divided by the Mandated (planned) tax to be collected. (TC)= C/M However, no taxation in Saudi Arabia.
	Predictability of transfers in local government budget (PoT)	Is the amount of fund transfers from higher budget of government (national state) known in advance (2-3 years) of the local budgeting process? (Yes=1 / No=0)
	Published performance delivery standards (PPDS)	Is there currently a formal publication of performance standards for key services (Water, sanitation, health, waste management and others) delivered by the local authority? (PPS) Yes=1 / No=0 The number of key services for which the PPS is present (S) The total number of key services or which (PPDS) should be present (T) (PPDS)= PPS*S/T
	Consumer satisfaction survey	The existence of a survey on consumers' satisfaction with the local authority's service Has a survey of consumer satisfaction with local government services being undertaken in the city? Yes=1 / No= 0
	Existence of a vision statement (VSE)	The measure of local authorities' commitment in articulating a vision for the city's progress. Is there a vision statement developed for the cities' future by the local government (VS)? Yes=1 / No=0 Has the vision statement been drafted through a participatory process (involving local government, civil society and the private sector) (PP)? Yes= 1 / No=0 (VSE)= 0.5*(VS+PP)

Table 6.2: Jeddah Municipality revenue per capita. Source: The author.

Year	Jeddah Municipality Revenue (Million)		Population	Revenue per Capita	
	SR *	\$		SR	\$
2002	205	54.7	2,614,680	78.4	21
2003	240	64	2,707,500	89	23.6
2004	300.6	80.2	2,803,600	107	28.6
2005	360	96	2,903,116	124	33
2006	441	117.6	3,006,165	147	39
2007	450	120	3,112,871	145	38.5
2008	450	120	3,223,365	140	37
2009	450	120	3,337,782	135	36
2010	500	133.3	3,456,259	145	38.6

*Jeddah Municipality (2010a)

As mentioned in Chapter 4, Figure 6.1 illustrates that Jeddah Municipality is highly dependent on the central government for its operating budget. In addition, although, the revenue of Jeddah Municipality is increasing it remains low in comparison to the transfer money from the MOMRA. The Figure shows that the MOMRA is transferring large amounts of money to Jeddah Municipality and that amount is increasing. The MOMRA transferred \$150 (562.5 SR) million in 2004 to the Municipality of Jeddah and \$372 (1,395 SR) million in 2010 - an increase of 147.5 per cent. The funds received from the MOMRA constitute 65 per cent of the Jeddah Municipality's total budget in 2004 and 74 per cent in 2010.

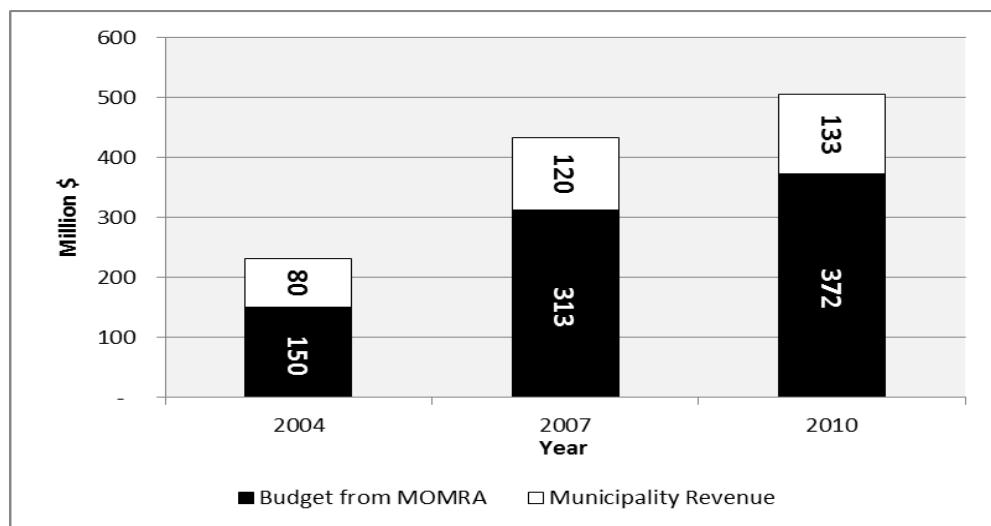


Figure 6.1: The Municipality budget from the MOMRA and the Municipality revenue. Source: The author.

In terms of collected tax there is no income tax in Saudi Arabia. However, there is a wealth tax known as (*Zakat*) of 2.5 per cent per year based on religious grounds. This tax is levied from rich people for the relief of poverty. It is not collected by the local planning authority; it is collected by a separate authority called ‘the Authority of *Zakat*’ under the MOF. As this tax does not go to the Municipality this sub-indicator scores zero.

Another financial obstacle that affects the performance of the local planning authority is that the Municipalities in Saudi Arabia cannot predict its budgetary requirements for the next two or three years because they are depending on what the central government give on annual bases. Moreover, the Municipalities cannot even predict how much money the central government is going to allocate for them. Therefore, the ability of the local planning government to predict the transfer budget from the central government is zero. The strategy and master plan were presented and open to consultation but this was limited to the business and developer community but ordinary citizens were excluded.

Looking at the eight sub-indicators in total, the effectiveness of Jeddah Municipality’s performance increased from 23 per cent in 2004 to 39 per cent in 2010. In comparison with other cities from around the world, Jeddah ranked very low (Figure 6.2). When compared with other Arab cities as seen in the shaded bars, it is clear that other Islamic cities in countries much poorer than KSA have higher effectiveness.

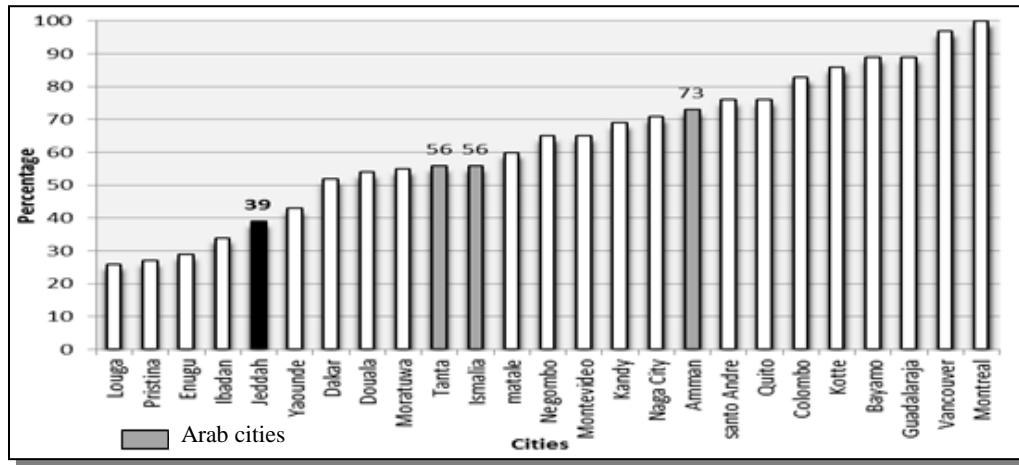


Figure 6. 2: Comparing the position of Jeddah Municipality in 2010 in terms of effectiveness with the UN- HABITAT results of 24 cities.

Source: the author and adapted form (UN-HABITAT, 2004).

6.1.2 Equity

This index is concerned with the role and access of women, men, children, older people, religious or ethnic minorities, disabled, rich and poor to resources and representation. It is assured through five sub-indicators: citizens' charter, proportion of women councillors, proportion of women in key position, pro-poor pricing policies for water and incentives for informal businesses (Table 6.3). In terms of citizens' charter the Municipality of Jeddah in 2010 has published, on its website, it is charter for citizens; however it is general and vague.

Saudi society is dominated by men and this function as an obstacle to the employability of women in key positions in city governance. Some Saudi men find it difficult to accept women as decision-makers; judge them to be incapable of taking these roles and resent their possible competition for jobs. As mentioned in Chapter 4, every four years the Municipal Council members are required to stand down for new elections. However, the introduction of democratic processes of election is new and to date only men are allowed to vote and stand for elections. Women remain excluded owing to traditional socio-cultural thoughts, not religious reasons as is often believed in the West. (Alsaad, 1990; Ammoun, 2006). Therefore, as there are no women councillors as yet the score is zero but progress is expected.

Table 6.3: Explanation of the equity index and the sub-indicators. Source: Adapted from (UN-HABITAT, 2004).

Equity	Sub-indicators	Description
<p>“Equity implies inclusiveness with unbiased access (be it for economically weaker sections, women, children or elderly, religious or ethnic minorities or the physically disabled) to basic necessities (nutrition, education, employment and livelihood, health care, shelter, safe drinking water, sanitation and others) of urban life, with institutional priorities focusing on pro-poor policies and an established mechanism for responding to the basic services”</p>	<p>Citizens' charter: right of access to basic services (CCS)</p>	<p>Is there a signed, published statement (charter) from the local authority which acknowledges citizens' right of access to basic services (CC)? Yes=1 / No=0 What is the number of key services for which the (CC) is present (S)? What is the total number of key services for which CC should be present (T)? $(CCS) = CC * S / T$</p>
	<p>Proportion of women councillors (X)</p>	<p>What is the percentage of the total number of women councillors (X) for both elected (We) and nominated (Wn) number of women councillors? T= the total no. of councillors in the last election $X = (We + Wn) / T * 100$</p>
	<p>Proportion of women in key positions (Y)</p>	<p>Percentage of women councillors (Y) in key positions (Wk) divided by the total number of councillors (T). The researcher considered the council in this indicator as the Municipality. $Y = Wk / T * 100$</p>
	<p>Pro-poor pricing policies for water</p>	<p>The presence or absence of a pricing policy for water which takes into account the needs of the poor households, translated into lower rates for them compared to other groups and prices applied to business/industrial consumption Is there a pro-poor pricing for water (PPC)? Yes=1 / No=0 Is water price cheaper for poor settlements (WP)? Yes=1 / No=0 Percentage households with access to water supply (within 200m) (HH wat)?</p>
	<p>Incentives for informal businesses (IM)</p>	<p>Presence of particular areas in the central retail areas of the city where small scale (informal) street vending is not allowed (or submitted to particular restrictions). Also measures the existence of incentives for informal businesses e.g. street vending. Informal public markets and municipal fairs</p>
		<p>Are there any particular areas in the central retail areas of the city where small scale (informal) street vending is not allowed? Yes=1 / No=0</p>
		<p>Are there any particular areas in the central retail areas of the city where small scale street vending is submitted to particular restrictions? Yes=1 / No=0</p>
		<p>Are there any other incentives like information public markets, municipal fairs? Yes=1 / No=0.</p>

The decision, in 2009 by the mayor to appoint a woman as assistant mayor of Jeddah's IT was seen to be particularly courageous. She was the first woman to occupy a key position in a Saudi Municipality. Since her appointment the number of women in the IT Department has increased from 14 to 100 employees in 2011 (Jeddah Municipality, Non). While this is an important step forward in the involvement of women in key positions as urban decision-makers, there is, as yet, no clear statement that shows women's role and rights in urban governance.

In terms of pro-poor pricing policy for water Jeddah scores zero because Municipalities in Saudi Arabia are not responsible for providing water or for setting the price of water and there is no pro-poor pricing policy for water in main Saudi cities (Shawly, 2007). In terms of areas allocated for informal street vending public markets, street vending is not allowed in Jeddah, therefore, this sub-indicator scores one.

Looking at the overall assessment for equity, it was static in the period between 2004 and 2007 (29 per cent) and marginally increased in the three-year period that followed to 30 per cent. This slightly increase was entirely owing to the improved position of women and street vending became not allowed. In comparison with other cities, Jeddah was again the fifth lowest in terms of equity and in comparison with other Islamic cities as Figure 6.3 demonstrates Jeddah was lagging behind.

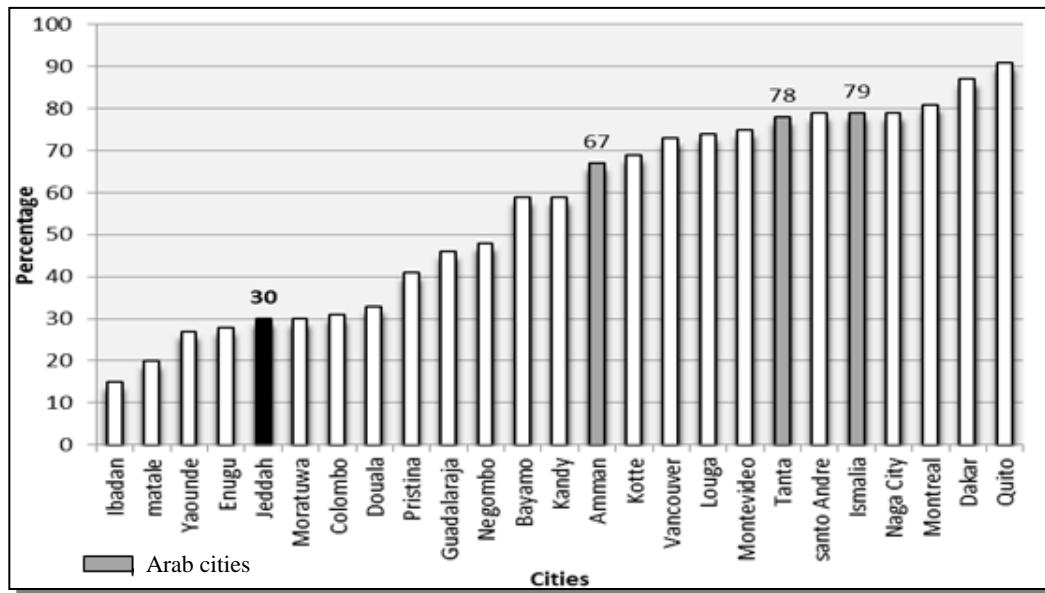


Figure 6.3: Comparing the position of Jeddah Municipality in 2010 in terms of equity with the UN- HABITAT results of 24 cities.

Source: the author and adapted form (UN-HABITAT, 2004).

6.1.3 Participation

Participation in urban governance is an indicator of good urban governance since it reveals the ability of citizens to participate in decision making and it is often a determinant of the transparency of government (Stewart, 2006). Participation is measured by five sub-indicators: elected council, locally elected mayor, voter turnout, public forum and the number of civic associations per 10,000 people (Table 6.4).

As discussed in Chapter 4, half of the council members are elected, therefore, Jeddah scores 0.5. However, Jeddah scores zero in terms of elected mayor, where mayors in Saudi Arabia are appointed by central government through Royal Decree. The percentage of the total voter turnout in the Municipal elections slightly increased from 25 per cent in the first election in 2005 to approximately 30 per cent in 2011 (MOMRA, 2011). The concept of voting is still very new and it may be stated that the population still needs to have some further education on the rights that they can now exercise.

Table 6.4: Explanation of the participation index and the sub-indicators. Source: Adapted form (UN-HABITAT, 2004).

Participation	Sub-indicators	Description
“Participation in governance implies mechanisms that promote strong local representative democracies through inclusive, free and fair municipal elections. It also includes participatory decision-making processes, where the civic capital, especially of the poor is recognized and there exists consensus orientation and citizenship”	Elected Council (EC)	Measures whether the local governing council is elected by the local population through organized voting at the city level. Are councillors locally elected? If the councillors are both elected as well appointed, please provide the distribution in percentages
	Locally elected Mayor (LEM)	Measures how the mayor is selected, whether directly elected (1), elected amongst the councillors (0.75) or appointed (0.50) Is the Mayor locally elected? Yes=1 / No=0
	Voter turnout (VT)	The total voters turnout (both male and female) in percentage in the last election
	Public forum (PF)	The public forum could include people’s council, city consultation, neighbourhood advisory committees and town hall meetings. Is there any public forum for citizens to express their views? Yes=1 / No= 0 If yes, frequency (how many times in a month or year) of such forums.
	Civic associations per 10,000 population (CA)	Measures the number of Civic Associations (registered) per 10,000 people within the local authority’s jurisdiction. (CA) is the Civic Association per 10,000 people, (N) is the number of Civic Associations and (Y) is the total population. CA= $10,000 * N / Y$

There is a communication between citizens and the local government, where the Jeddah Municipal Council is the first Saudi Council that hold meetings with citizens (both men and women)¹. These meeting were held in the University hall or in the Council, but men are separated from women. Therefore, this sub-indicator scores one.

The total number of formally registered civic associations is 700 and each civic association has a branch at the local level (MOSA, 2012). Some of these civic associations are charitable bodies looking to relieve poverty among poor families, women and orphans, others human rights and others with Jeddah parks. Civic associations in Saudi Arabia characterised by being non-governmental, voluntary, not-for profit and have an organisational framework. However, the approval and establishment of these associations are under the administration of the central government

Looking at the five sub-indicators of participation in total what can be seen is that there is a considerable improvement in participation from seven per cent in 2004 to 39 per cent in 2010 largely attributed to the establishment of the Municipal Council. People legitimately became able to participate in election and vote. Figure 6.4 reveals that while Arab cities scored poorly compared to other cities in the world, Jeddah Municipality is particularly the poorer².

¹ The Municipal Council of Jeddah held a meeting per month with people.

² This could be attributed to the fact that Arabs still shying away from practicing democracy or they are not practicing it as it should be.

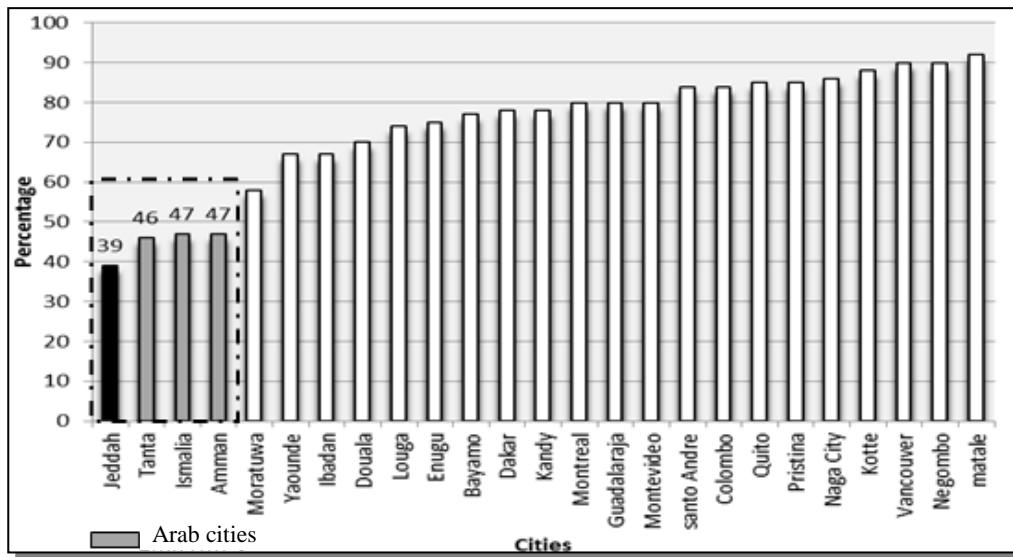


Figure 6.4: Comparing the position of Jeddah Municipality in 2010 in terms of participation with the UN-HABITAT results of 24 cities.
Source: the author and adapted from (UN-HABITAT, 2004).

6.1.4 Accountability

This indicator monitors the transparency, responsiveness and corruption of the local government. Also, it measures the extent of autonomy from the higher government. Accountability is measured through seven sub-indicators: formal publication of contracts/tenders, budgets and accounts, control of the higher levels of government, codes of conduct, facility for citizen complaints, anti-corruption commission, disclosure of income/assets and independent audit (Table 6.5).

The Municipality of Jeddah declare information about formal tenders and contracts through newspapers and on its own website as part of a commitment to transparency and to encourage open competition. In the case of large scale projects that require specialists it operates closed tender arrangements. However, none of the Saudi's Municipalities publish information about their budgets and accounts. Therefore, Jeddah Municipality scores 0.5.

The local planning authority is controlled by the higher levels of the government. Although, as mentioned in (Chapter 4) Saudi Arabia is characterised by centralisation and has power over local government, the

higher level of government cannot close the Municipality owing to its important role at the local level, especially with the rapid urban and population growth. The MOMRA has delegated some of its duties and responsibilities for spatial planning at the local level since the law of Municipalities and Villages passed in 1977 (Al-Sabban, 1990; Daghistani, 1990; Mandeli, 2008). However, central government still has the absolute right to appoint, remove or suspend officials at the local level.

Jeddah Municipality scores one regarding the existence of a system to receive and address citizen and information on corruption within the local authority. Officers at the local level have as part of their job description and duties to receive complaints. The fact that there is a system but it is not communicated to the public, citizens have no confidence in the system and from the fieldwork citizens were clueless as to whom they should go with their complaints.

Table 6.5: Explanation of the accountability index and sub-indicators. Source: Adapted from (UN-HABITAT, 2004).

Accountability	Sub-indicators	Description
<p>“Mechanisms are present and effective for transparency in the operational functions of the local government; responsiveness towards the higher level of the local government; local population and civic grievances; standards for professional and personal integrity and rule of law and public policies are applied in transparent and predictable manner”</p>	<p>Formal publication of contracts/tenders, budgets and accounts (FP)</p>	<p>Existence of a formal publication (to be accessible) by the local government that consists of contracts, tenders and budgets and accounts Is there a formal publication of contracts and tenders (CT)? Yes=1 / No= 0 Is there a formal publication of budgets and accounts (BA)? Yes=1 / No= 0</p>
	<p>Control by higher levels of government (CHLG)</p>	<p>Measures the control of the high levels of government for closing the local government and removing councillors from office Can the higher levels of government close the local government? Yes=0/No=1 Can the higher levels of government remove councillors from office? Yes=0/No=1 Can the local government, without permission from higher governments: Set local tax levels? Yes=1 / No= 0 Set users changes for services? Yes=1 / No= 0 Borrow funds? Yes=1 / No= 0 Choose contractors for projects? Yes=1 / No= 0</p>
	<p>Codes of conduct</p>	<p>Existence of a signed published statement of the standards of conduct that citizens are entitled to form their elected officials and local government staff. Is there a signed, published statement of conduct citizens are entitled to form their elected officials and local government staff? Yes=1 / No= 0</p>
	<p>Facility for citizen complaints (FRC)</p>	<p>The existence of a facility established within the local authority to respond to complaints and a local facility to receive complaints and information on corruption. Are there any facilities or mechanisms to receive complaints or grievances from citizens? Yes=1 / No= 0 Is there any official appointed to receive and respond to complaints against public authorities? Yes=1 / No= 0</p>
	<p>Anti-corruption Commission (ACC)</p>	<p>Existence of a local agency to investigate and report cases of corruption. Is there a local agency to investigate and report cases of corruption? Yes=1/No= 0</p>
	<p>Disclosure of income/assets (PIA)</p>	<p>Are locally elected officials required by law to publicly disclose personal income? Yes=1 / No= 0 Are locally elected officials required by law to publicly disclose personal assets? Yes=1 / No= 0 Are locally elected officials required by law to publicly disclose immediate family income? Yes=1 / No= 0 Are locally elected officials required by law to publicly disclose immediate family assets? Yes=1 / No= 0 Are locally elected officials incomes and assets regularly monitored? Yes=1 / No= 0</p>
	<p>Independent audit (RIA)</p>	<p>Is there a regular independent audit of municipal accounts? Yes=1 / No= 0</p>

In terms of the existence of a body to investigate cases of corruption the local planning government scores one, owing to the two anti-corruption commissions at the national level (Control and Investigation Board and National Anti-Corruption Committee). Both boards operate at all levels. Since the establishment of the National Anti-Corruption Authority, mayors, deputies and high ranked officers in Jeddah Municipality have been held to question. As a mean of exposing corruption officials are required by law to disclose personal income and assets and immediate family income and assets. However, this information is not made publicly available. In addition, there is an independent authority for auditing to evaluate the performance.

The overall assessment of accountability increased from 26 to 41 per cent in the period 2004-2007 respectively, owing to the regular audits of the Municipality by the Municipal Council. In addition, the level of accountability increased from 41 per cent in 2007 to 58 per cent in 2010 because of the establishment of the National Anti-Corruption Committee and delegation authority to the Municipality. Figure 6.5 demonstrates that Jeddah is outperforming more cities in terms of accountability but still, in comparison with other Arab cities looks weak.

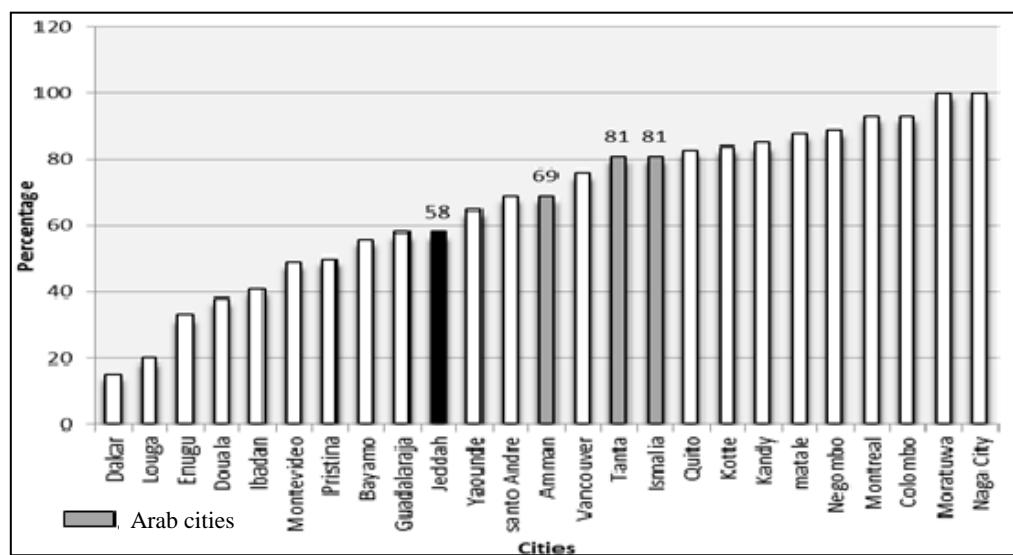


Figure 6.5: Comparing the position of Jeddah Municipality in 2010 in terms of accountability with the UN- HABITAT results of 24 cities.

Source: the author and adapted from (UN-HABITAT, 2004)

6.2 The Overall Assessment of Jeddah Governance

This section presents the changes in the performance of the local planning authority through three different periods; 2004, 2007 and 2010. Figure 6.6 shows the changes in the performance of Jeddah's urban governance in terms of the four main UG indicators, where Jeddah in 2004 attained its best performance in equity scoring 29 per cent, followed by accountability at 26 per cent, effectiveness at 23 per cent and participation at seven per cent. In 2007 however equity had remained static; there was marginal improvement in effectiveness but significant improvements in participation reaching 38 per cent and accountability at 41 per cent. By 2010 Jeddah accountability had reached 58 per cent, effectiveness had increased to 39 per cent while the other two indicators had increased only marginally. Thus, there was a significant increase of 82 per cent in participation, 55 per cent in accountability and 41 per cent in effectiveness; however, equity scored significantly the lowest with an increase of 3.3 per cent between 2004 and 2010.

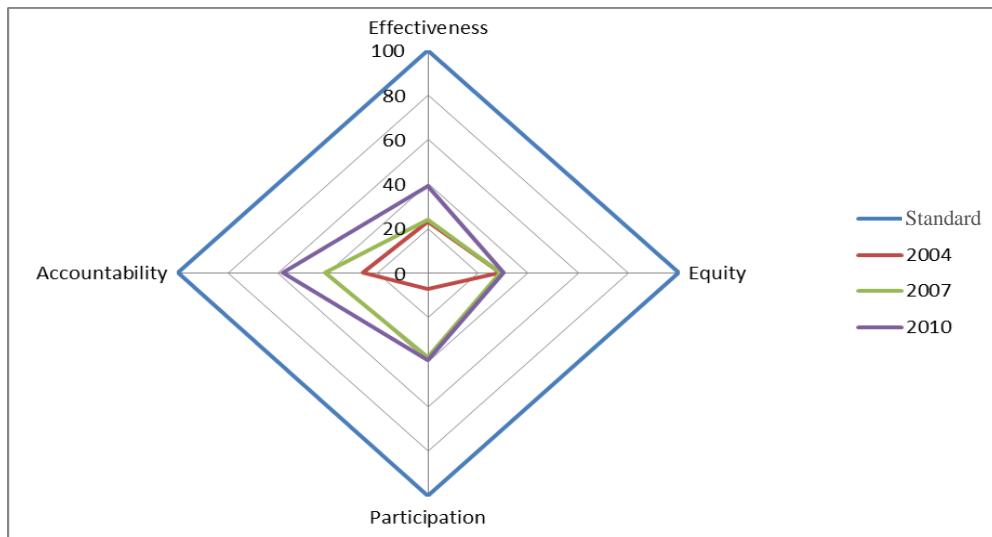


Figure 6.6: The progress of the performance of Jeddah governance
Source: Author.

In comparison with other cities, Figure 6.7 shows that Jeddah was the third lowest in terms of the overall governance performance assessment (42 per cent) and in comparison with other Islamic cities Jeddah was lagging behind.

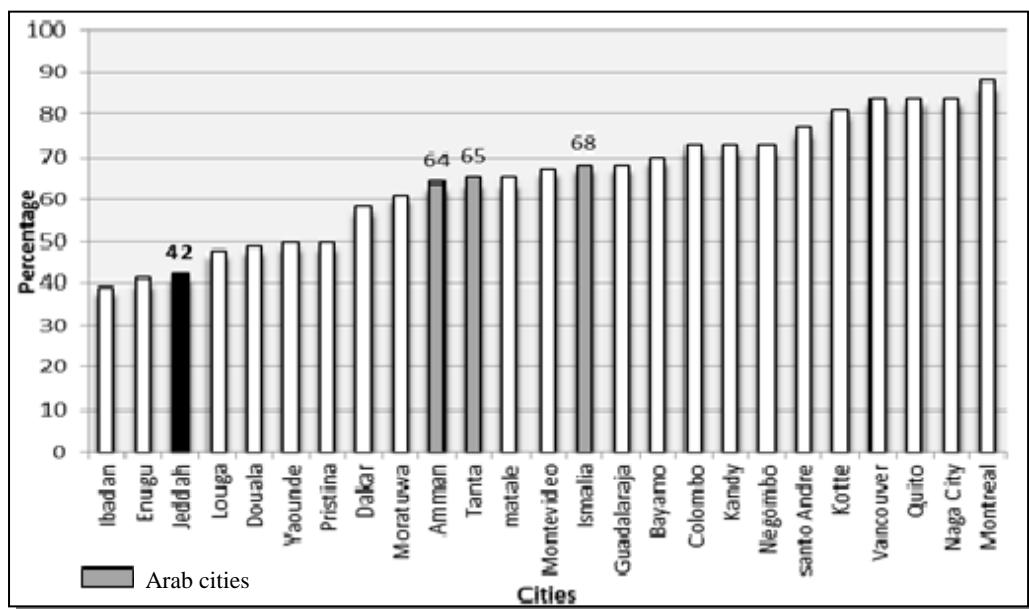


Figure 6.7: Comparing the position of Jeddah Municipality in 2010 in terms of the overall assessment with the UN- HABITAT results of 24 cities.

Source: the author and adapted from (UN-HABITAT, 2004).

6.3 Modifying the UN-HABITAT UGI Model

Although the UN-HABITAT “Urban Governance Index” has proven incredibly useful as a tool for assessing the local planning governance in Jeddah, critical evaluation shows the weakness of the model. The purpose of the model is to assess the performance of local government but this is much broader than the focus of this thesis which is the local planning authority. By posing deeper and specific questions the model might shed greater light on the performance of the local authority in respect of planning. Also from a Saudi context, a number of questions in the model might be usefully recast to give us a sharper picture about the status quo.

This section presents the governance assessment for Jeddah based on the modifications to UGI model. As mentioned in Chapter 3 (pg. 103-104), the research recast the UGI model by adding, modifying and omitting

some questions and reweighted the indicators to match and be in compliance with Jeddah's context, thus, giving a sharper picture about the current situation (see appendix 7).

6.3.1 Effectiveness

After recasting the model this indicator consists of four sub-indicators (Table 6.6). The sub-indicator of predictability of transfers in local government budget is modified should be known in a year advance not as suggested two or three years to reflect the current situation. The calculation of the sub-indicators regarding the financial factor is altered by using the consumer price index (CPI), to get the accurate figures.

Table 6.6: Recasting and reweighting the effectiveness sub-indicators.

Sub-indicator	Weight	Modified	New score
Local government revenue per capita	0.25	-	0.4
Ratio of recurrent and capital budget	0.1	Omitted – because it is confusing as it serves the same purpose as the 'Local government revenue transfer' but in ratio	-
Ratio of mandated to actual tax collected	0.1	-	0.1
Local government revenue transfer	0.1		0.4
Predictability of transfers in local government budget	0.1	-	0.1
Published performance delivery standards	0.15	Omitted- because Municipalities and Municipal Councils are not responsible for providing key services and to suit the study	-
Consumer satisfaction survey	0.1	Moved to accountability - it is more relevant to accountability	-
Vision Statement effective	0.1	Moved to participation - it is more relevant to participation of different stakeholders	-

Table 6.7 illustrates the changes in and accurate figures of the Municipality's revenue per capita over time. The table shows that by using the CPI significant differences appear in the last three years between the figures of the revenue per capita and the accurate figures, where the accurate revenue per capita declined from \$37 (140 SR) to \$32 (120 SR)

per person in 2008, \$36 (135 SR) to \$29 (110 SR) per person in 2009 and \$38.7 (145 SR) to \$30 (112.5 SR) per person in 2010.

Table 6.7: Jeddah Municipality accurate revenue per capita. Source: The author.

Year	Jeddah Municipality Revenue (Million)		Population	Revenue per Capita		CPI* (%)	Accurate Revenue per Capita (CPI)	
	SR	\$		SR	\$		SR	\$
2002	205	54.7	2,614,680	78.4	21	98	80	21
2003	240	64	2,707,500	89	23.6	98.6	90	24
2004	300.6	80.2	2,803,600	107	28.6	98.9	108	29
2005	360	96	2,903,116	124	33	99.6	125	33
2006	441	117.6	3,006,165	147	39	101.8	144	38
2007	450	120	3,112,871	145	38.5	103	140	37
2008	450	120	3,223,365	140	37	116.5	120	32
2009	450	120	3,337,782	135	36	122.4	110	29
2010	500	133.3	3,456,259	145	38.7	127.3	112.5	30

*MOF (2011b)

Table 6.8 illustrates the increase in Municipality budget (transferable budget from the MOMRA) between 2003 and 2010. By applying the CPI significant differences appear between the figures of the budget per capita and the accurate figures of the budget per capita especially between 2008 and 2010. The budget per capita declined from \$145 (544 SR) to \$124 (466 SR) per person in 2008, from \$145 (544 SR) to \$118 (444 SR) per person in 2009 and from \$146 (549 SR) to \$115 (431 SR) per person in 2010. In addition, the table shows a significant decline in the last four years, owing to the significant increase in the CPI from 103 per cent in 2007 to 127.3 per cent in 2010. The overall assessment of the Municipality's effectiveness in 2010 following modification of the index decreases from 39 to 38 per cent.

Table 6.8: Jeddah Municipality accurate budget per capita. Source: The author.

Year	Jeddah Municipality Revenue (Million)		Population	Revenue per Capita		CPI* (%)	Accurate Revenue per Capita (CPI)	
	SR	\$		SR	\$		SR	\$
2002	781.8	197.8	2,707,500	274	73	98.6	278	74
2003	864.9	230.7	2,803,600	309	82	98.9	312	83
2004	1,002	267.2	2,903,116	345	92	99.6	347	92
2005	1,224	326.5	3,006,165	407	109	101.8	400	107
2006	1,622	432.5	3,112,871	521	139	103	506	135
2007	1,749	466.4	3,223,365	544	145	116.5	466	124
2008	1,814	483.8	3,337,782	544	145	122.4	444	118
2009	1,897	505.7	3,456,259	549	146	127.3	431	115
2010	781.8	197.8	2,707,500	274	73	98.6	278	74

*MOF (2011b)

6.3.2 Equity

This indicator was recast to focus more on the women role and ‘pro-poor’ pricing policy. It consists of four sub-indicators (Table 6.9). Surprisingly, following the modification in the UGI model the overall assessment of equity in 2010 changed from 30 per cent to zero.

Table 6.9: Recasting and reweighting the equity sub-indicators.

Sub-indicator	Weight	Modified	New score
Citizens charter for basic services	0.2	-	0.1
Percentage of women councillors	0.2	-	0.4
percentage women in key positions	0.1	-	0.4
Percentage households with water connection	0.15	Omitted - To suit the research	-
Existence of pro-poor policy	0.1	The focus on equity in terms of building permission fees and planning violation fines	0.1
Is water price is cheaper for poor settlements?	0.1	Omitted - To suit the research	-
Incentives for informal market	0.15	Omitted - An extraneous indicator	-

6.3.3 Participation

After recasting the model this indicator consists of five sub-indicators, where the sub-indicator ‘civic associations per 10,000’ was replaced by ‘vision statement’ to focus on planning aspects that suit the research purposes (Table 6.10). It was moved from effectiveness to participation,

as it requires knowing if the vision statement was drafted through a participation process. The results of the overall assessment of participation in 2010 after modification increases from 30 to 50 per cent.

Table 6.10: Recasting and reweighting the effectiveness sub-indicators.

Sub-indicator	Weight	Modified	New score
Elected council	0.15	-	0.15
Locally elected Mayor	0.15	-	0.15
Voter turnout	0.30	-	0.30
Peoples' forum	0.15	-	0.15
Civic associations PER 10,000 POP	0.25	Vision Statement effective - To focus on planning aspects and the replaced indicator focus on participation	0.25

6.3.4 Accountability

This indicator consists of eight sub-indicators, where the sub-indicator 'customer satisfaction survey' was moved from effectiveness to this indicator, as it considers part of transparency and important for accountability (Table 6.11). However, rather than asking about the existence of anti-corruption bodies, it would be more useful to consider; firstly, whether an anti-corruption body exists and how effective it is in being able to tackle corruption. Following the modification in the model the results of the overall assessment of the accountability index in 2010 increases from 58 to 63 per cent.

Table 6.11: Recasting and reweighting the accountability sub-indicators.

Sub-indicator	Weight	Modified	New score
Formal Publication	0.2	-	0.1
Control by higher Govt.	0.07	-	0.07
Local government authorities	0.08	-	0.08
Codes of conduct	0.1	Consumer satisfaction survey - To focus on planning aspects	0.15
Facilities to receive complaints	0.1	-	0.1
Anti-corruption commission	0.15	Divided into two questions regarding the existence of the commission and if it is active or not	0.2
Personal Income and assets	0.15	-	0.15
Regular Independent audit	0.15	-	0.15

6.4 The Overall Assessment of Jeddah Governance after Modification

Figure 6.8 illustrates a comparison between the overall assessment of Jeddah following the modification in the model and unmodified figures of other cities, where Jeddah was the lowest 37.8 per cent, owing to the decline in effectiveness and equity.

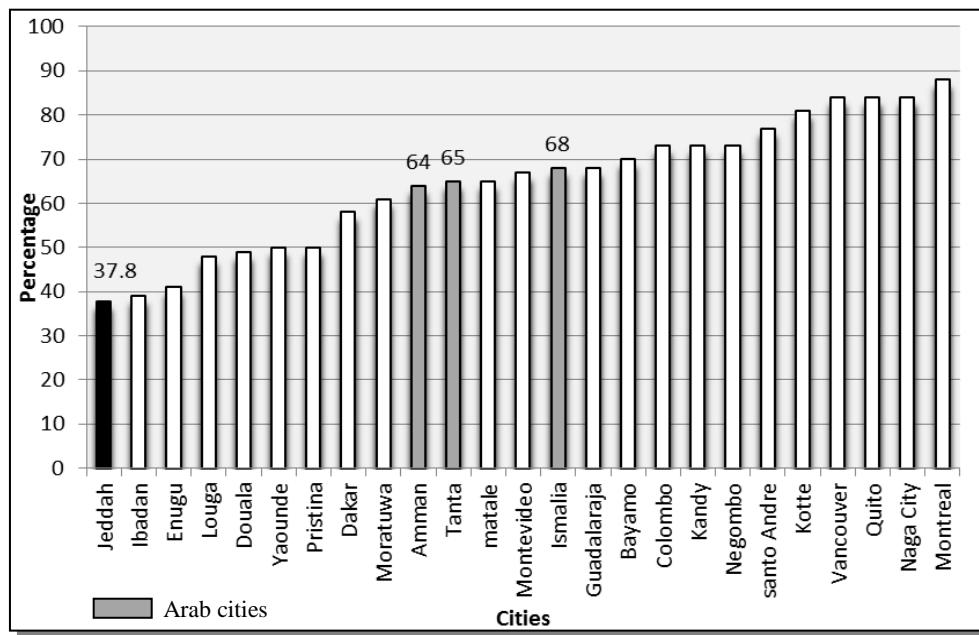


Figure 6.8: Comparing the position of Jeddah Municipality in 2010 after recasting in terms of the overall assessment with the unmodified UN-HABITAT results of 24 cities.

Source: the author and adapted from (UN-HABITAT, 2004)

6.5 Conclusion

This chapter has employed the UN-HABITAT UG index and its utility for assessing the robustness of the local government in Jeddah as a whole and in particular its performance as a local planning authority. This chapter was important to illustrate the ability of Jeddah planning authority to conduct its affairs in an open way and to effectively manage its obligations set a context in which might further explore the fine grain performance of the planning authority in its implementation of the new zoning regulations. The lack of good fit between the index and cities in Saudi Arabia has also been explored and the index has been modified and reapplied to give a sharper picture about the status quo.

This has demonstrated that the overall assessment of Jeddah urban governance was low before and after modifying the UGI model and in comparison to many world cities and even in comparison to other Arab cities Jeddah's performance has lagged behind. The findings in terms of effectiveness revealed that the revenue of local planning authority is low and depending on the central government. Equity scored the lowest indicator and the findings revealed that, although, women held a key position in the Municipality; they are no councillors' women in the Council. Moreover, there is no clear statement that explains women's role and rights in urban governance. In terms of participation witness a significant increase, however, it scored the lowest in comparison with other cities. In addition, women are excluded from voting and standing for elections. The reality of participation will be explored fully in Chapter 8. The accountability indicator scored the highest, however, in comparison with other Arabs cities looks weak. The next chapter assesses the Municipality performance from both the officials and professionals perspectives to clarify in depth the imperfections in the system and illustrate their opinions regarding the impact of the new zoning regulations on Jeddah.

Chapter Seven: Stakeholders' Performance Assessment of Jeddah Municipality and the New Zoning Regulations

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CHAPTER SEVEN: STAKEHOLDERS' PERFORMANCE ASSESSMENT OF JEDDAH MUNICIPALITY AND THE NEW ZONING REGULATIONS

7.0 Introduction

This chapter presents the analysis and findings of structured interviews collected from key actors (i.e. Municipality's staff, professionals and residents) during fieldwork conducted between January and March in 2010. Both quantitative and qualitative methods were used in order to obtain the maximum amount of information. The aims of this chapter are to address some of the research issues by identifying the factors that are needed to enhance the performance of the local planning authority to be able to implement the zoning regulations; explore issues that influence the planning authority's ability to implement zoning regulations. The chapter also considers the performance and quality of the local planning authority from different perspectives and in turn evaluate the capacity of the local planning authority to achieve good governance and thus its ability to deliver potential zoning regulations. The chapter also explores the impact of the new zoning regulations on the built environment.

The chapter is organised into four main sections. Section one evaluates the capacity of the local planning authority by addressing the factors and issues that have had an impact on the ability of the local planning governance to implement zoning regulations. The second section explores the existence of discretion in the planning system as well as corruption. The penultimate section illustrates the places of breaches and reasons of being non-compliance with the regulations. The later section discusses the impact of the new zoning regulations from the perspective of professionals and officials.

7.1 Evaluating the Capacity of the Municipality

The section aims to present and discuss the perspective of officials and professionals (i.e. architects, planners and landscape architects) regarding the factors that could influence the ability of the local planning governance to

successfully implement zoning regulations and certain issues related to the status quo of the performance of the local planning authority.

From the Municipality officials' and professionals' perspectives, it is obvious that by looking at Figure 7.1 and 7.2 that many of the factors were critically important. However, there were three factors in common between both the officials and professionals that should be taken into account, as they have a significant influence on the implementation of zoning regulations. Both officials and professionals gave top priority to accountability, coordination and cooperation between the Municipality's departments and enforcing the law, as the most influential factors on the performance of local planning authority.

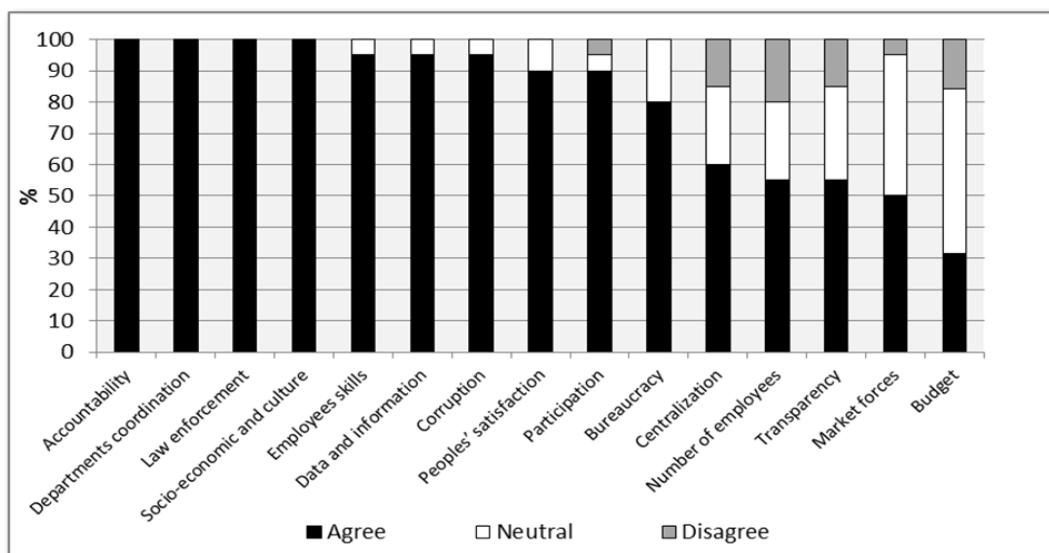


Figure 7.1: The influential factors from the officials' perspectives

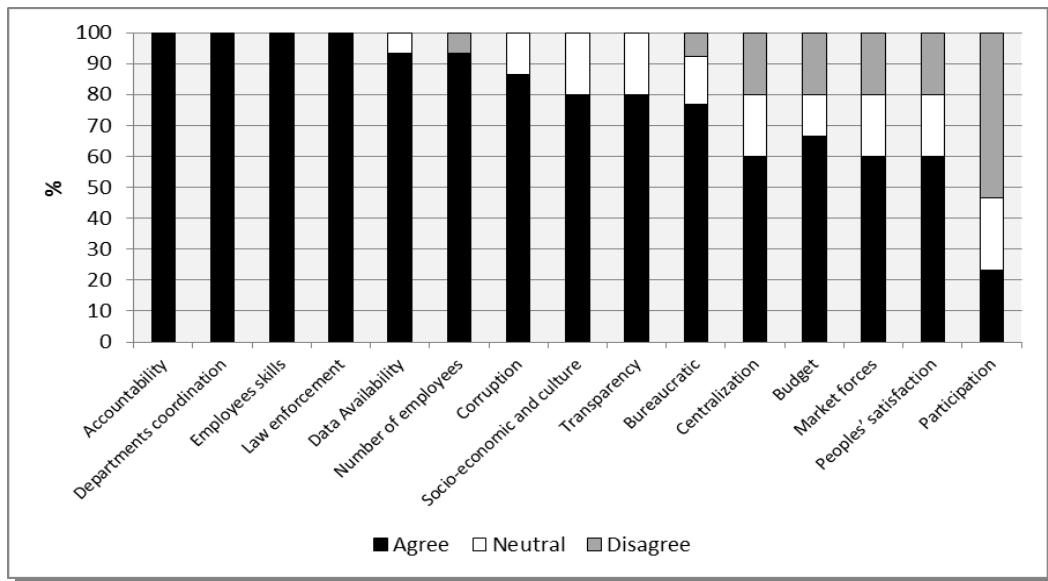


Figure 7.2: The influential factors from the professionals' perspectives

As Figure 7.3 illustrates 46.6 per cent of Municipality officials feel that they are not held accountable for their decisions and only one fifth (20 per cent) of the officials feel they are. Chapter 8 will show that there is lack of accountability regarding the Municipality's decisions. However, all officials in high positions in the municipalities in Saudi Arabia, and especially officials in Jeddah Municipality, are held more accountable since the 2010¹.

¹ The 2009 flood caused a catastrophe in Jeddah, where more than 100 people died as a result of poor planning practice and heavy rain. The Municipality allowed people to build in areas such as valleys known as being high-risk areas for any kind of development. Since this incident, a Royal Decree declared in 2010, adopted the establishment of the National Anti-Corruption Committee. The government opened a widespread investigation of corruption in all its sectors, especially in Jeddah. Many officials holding high positions in Jeddah Municipality, such as the Deputy of Mayor and one of the previous mayors, were brought into question. Newspaper journalists are now allowed to write about corruption to raise citizen awareness and interest about the problem.

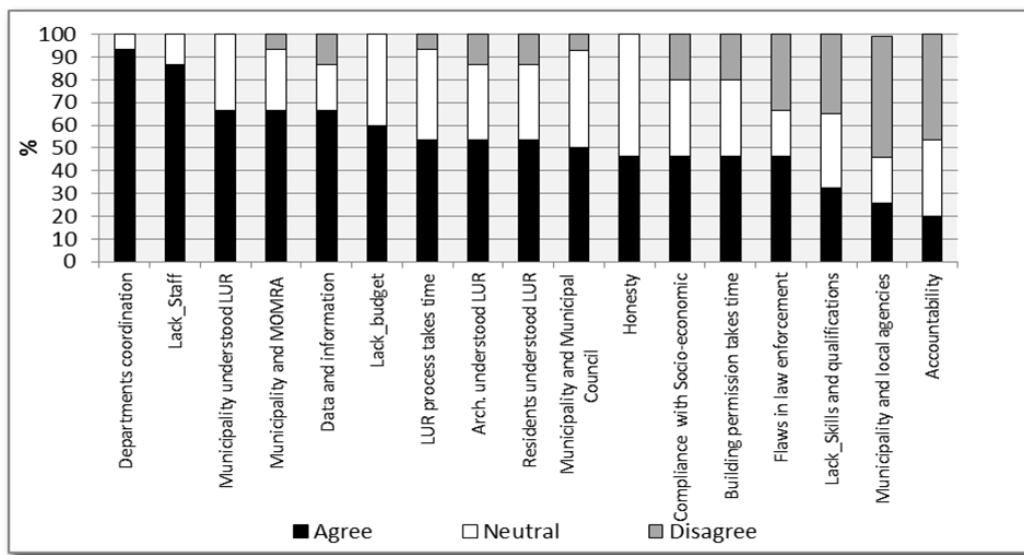


Figure 7.3: Assessment to the current performance of the Municipality from the officials' perspectives.

Officials and professionals were asked about the level of honesty and integrity of the Municipality's staff in charge of implementing and monitoring the regulations. The majority of officials and professionals were neutral about the staff's honesty and integrity and rather less than half agreed that they found honesty and integrity. However, the professionals are more heavily neutral with only 20 per cent disagreeing that the staff were honest in their dealings (Figure 7.4).

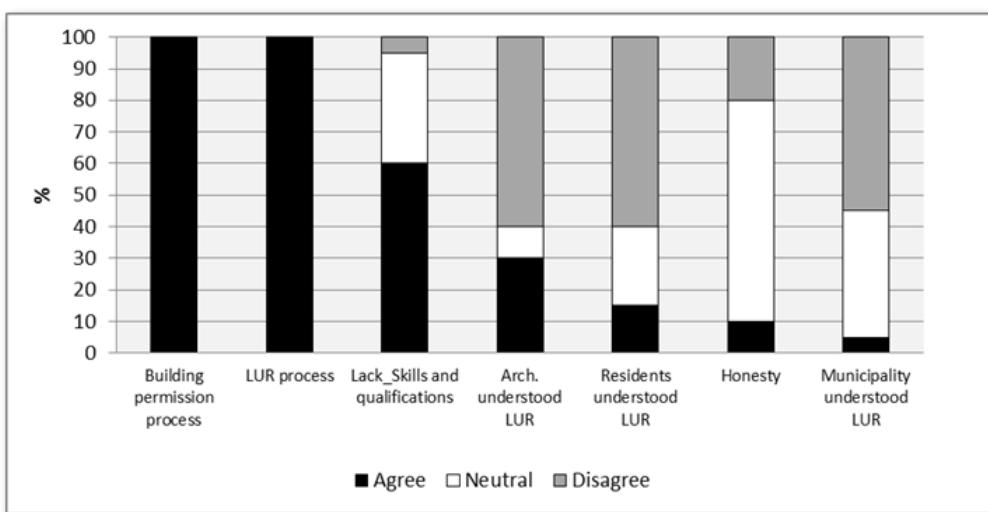


Figure 7.4: Assessment to the current performance of the Municipality from the professionals' perspectives

When a question was asked regarding the existence of mutual cooperation and coordination between the Municipality's departments, the majority (93.3 per cent) of the Municipality's staff indicate that there is coordination and cooperation between the departments with no disagreements. In terms of the existence of mutual cooperation and coordination between the Municipality and the MOMRA, the Municipal Council and other governmental local agencies, it was found that two-third (66.7 per cent) of the Municipality's staff indicates that there is cooperation and coordination between the Municipality and the MOMRA. In addition, half of the officials agreed that there is a cooperation and coordination between the Municipality and the Municipal Council and 43 per cent are neutral. One of the case studies to be discussed latter in Chapter 8, shows the lack of cooperation and coordination between the Municipality and the Municipal Council in terms of zoning regulations. On the point of cooperation and coordination between the Municipality and other local government agencies, it was found that more than half (53.4 per cent) of officials feel there is not enough coordination and cooperation between the Municipality and other local government agencies responsible for schools, hospitals, health clinics and mosques. The lack of coordination and cooperation may be owing to the centralised government system, which has led to difficulties between the governments' authorities at different levels.

Questions regarding imperfections in law enforcement revealed that slightly more than one-third (33.4 per cent) of officials think that there is no deficiency in the process of regulation enforcement, yet 46.6 per cent of officials feel that there are flaws. Imperfections in the laws' enforcement may be linked to the low staff numbers, poor training, low budget and lack of accountability.

Although, both officials and professionals agreed that centralisation has an influence on the performance of the Municipality, however, as Figure 7.1 demonstrates officials felt it was the least influencing factor; while professionals felt quite strongly (70 per cent) that a shift to a decentralised model would reduce bureaucracy and increase the level of competition between the sub-municipality's leading to better performance. In addition, professionals believe that the city's growing population and size demand changes within the Municipality's

management to improve deliverables. Conversely, professionals believe the centralised management model is better because decentralisation encourages bribing and other forms of corruption through fragmentation. From the officials' perspective, more than half (53.3 per cent) indicate that decentralisation would not deliver any added benefits. These officials believe that decentralisation will lead to fragmentation, bribing practices and added difficulties in the monitoring and general control of the work. The officials in favour of decentralisation feel that decentralisation is beneficial to the Municipality's performance and the overall satisfaction of the residents. Pro-decentralisation officials believe the abolishment would lessen bureaucracy and increase the efficiency of implementation, levels of competition between the sub-municipalities, and levels of accountability and responsibility.

It was found that in terms of bureaucracy, which includes time to approve new editing for zoning regulations and time to issue building permission, that all of the professionals and more than half (53.4 per cent) of the officials revealed that the process of editing and approving the further revisions of the new zoning regulations by the Mayor and the Minister of MOMRA takes time. Regarding building permission, it was found that less than half of the officials stated that building permits take quite a lot of time to be issued because the drawings are often non-compliant with the regulations. Building permission should take 48 hours according to officials and that is a demonstration of efficiency. In their view the problem lies with the professionals who are unable to comply and therefore this creates a lengthy delay. However, all professionals completely disagreed with the officials' estimate of time for granting building permission and revealed that a wait of one to six month(s) on an apartment building and one to four month(s) for a villa is more usual. Time taken to determine building permissions is a crucial indicator in determining efficient performance.

There was considerable divergence between the officials' and professionals' perspectives on the relative importance of several factors and this was particularly the case in terms of budget. It was found that officials were more concerned about budget than professionals, where the professionals judged the Municipality budget as having less influence on deliverability of potential zoning regulations.

The findings show that two-thirds (66.7 per cent) of the officials believe that the budget is an influential factor in optimising delivery, enhancing the decision-making and staff recruitment. Sixty per cent of the officials with no disagreements stated that the Municipality suffers from a lack of budget, which in turn affect the capacity and performance of the local planning authority. Thus, it hinders the Municipality to implement the projects, recruit more qualified staff and take advantage of more advanced technology. The suggested budget deficiency links to evidence illustrated in Chapter 6 regarding the effectiveness of the Municipality, which showed that there is a shortfall in the Municipality's revenue and Jeddah is more dependent on central government. This financial dependency is a hindrance in terms of effectiveness.

More than half (52.6 per cent) of the professionals were neutral about the budget issue which may reflect the lack of transparency about these matters to those outside the Municipality itself. The professionals seem to think that because the national government is wealthy, the Municipality must be also. However, it maybe surmised that professionals in disagreement with the budget as an influential factor were those tacitly commenting that money itself does not impact effectiveness and capacity. Rather, the professionals in disagreement may be suggesting that the most important factor is to have highly skilled and qualified staff than having more money.

In terms of employees' skills and numbers, it was found that both officials and professionals agreed on the importance of hiring qualified staff for enhancing the performance of the Municipality and implement zoning regulations in a successful way. All officials and almost all of the professionals believe that the greater the skill and qualification base of its staff, the better the delivery and implementation of zoning regulations will become. The Municipality's staff are fairly evenly split between those who felt officers were skilled, those who were neutral and those who felt that there was a lack of skill. These views were not shared by professionals, where 60 per cent of whom think that there is a lack of skill and qualification across the Municipality's staff, which in turn reflects on their ability to understand and explain the new regulations with subsequent impact on the successful implementation of zoning regulations. In addition, it was

found that 12 per cent of the total staff are graduates and less than five per cent are engineers.

However, divergence in opinion appears between officials and professionals on how important and influential the number of staff on the performance of the Municipality. The great majority (93.3 per cent) of the officials believe that more staff equals a more powerful authority which impacts on successful policy implementation; this view was shared by only half of the professionals. The dominant view (86.7 per cent) of officials revealed that the Municipality is understaffed. The number of the staff in the Municipality of Jeddah increased from 1,335 employees in 2004 to 3,200 employees by 2009. However, this increase in number of Municipality's staff was accompanied with a rapid population growth, therefore, as Figure 7.5 illustrates the ratio of employees per 1000 population was 0.48 employee in 2004 and 2005 but doubled in 2009 (Jeddah Urban Observatory Centre, 2007c; Jeddah Municipality, 2010b).

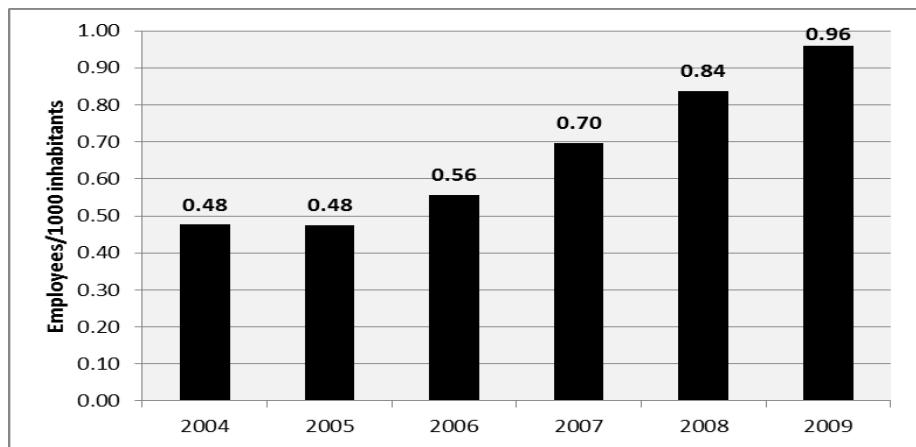


Figure 7.5: The proportion of employees in the Municipality of Jeddah per population.

However, to recruit staff with high quality skills and experience depends on finance which in turn makes the issue of budgeting quite critical. A local newspaper 'Al-Madina' in (2010) reported on an investigation undertaken by the government (the General Monitoring Bureau) into Jeddah Municipality regarding the issue of recruiting 135 experts. The majority of the experts to be recruited were foreigners offered high salaries that could reach tenfold the salary of a junior employee with a degree. The discrepancy in pay circumvents the rules of

the Ministry of Civil Service. The human resources manager at Jeddah Municipality defended their position by arguing that the municipalities in general pay low salaries but to attract and retain skilled employees better salaries and therefore larger budgets are needed.

Another factor that can be considered important is public participation. The professionals were more interested than the Municipality's staff in public participation. It was found that 90 per cent of professionals believe citizens should participate in decisions related to zoning regulations and that participation improved the work of the professional because clients were better informed about the regulations. In addition, the professionals clarified, participation could demystify both zoning regulations and procedures to grant building permission. While from the officials' perspective, more than half (53.4 per cent) feel that people's participation has no influence on decisions related to zoning regulations, and therefore, there is no need for citizens to participate. In one case, an official remarked that planners can take a holistic view, whereas ordinary residents are purely self-interested. However, although planners may have the 'holistic view', they cannot possibly understand what the living conditions are for the people living and working in every part of the city. Chapter 6 showed that there is a lack of public participation, where the indicator rated low. Chapter 8 will go on to demonstrate citizens are participating whether they are allowed to or not.

Residents were asked about their willingness to participate in planning decisions. It was found that more than half (53 per cent) would like to participate in those planning decisions that directly impact on their daily lives. However, residents who do not want to participate in planning decisions felt either apathetic toward the planning system or that participation would have no impact on decisions and would therefore be a waste of time.

When asked about the involvement of architects in decision-making about zoning regulations almost all of the officials felt this was a good idea. Repositioning architects as active mediators between the Municipality and residents would be effective and efficient as the architect already deal with zoning regulations and is largely responsible for translating the regulations into construction plans. Therefore, their involvement would mutually benefit the Municipality and the

architects. The mediatory role of the architect would serve to demystify some regulations and reduce the number of rejected drawings. Conversely, findings reveal that the majority (85 per cent) of professionals were not invited to comment on the new zoning regulations before they were adopted and they were required to apply them. Professionals were also asked if they would like to attend future meetings to discuss zoning regulations issues. Seventy per cent of the professionals stated that they would like to do so. The professionals who said no preferred to wait until they received a formal invitation from the Municipality constituted 65 per cent, while 15 per cent felt that if they were to be included then the current meetings times are not suitable, where the meetings were held during office hours. The rest claimed that they either do not have time to attend the meetings or considered them unproductive.

Gender equality in the Saudi society is virtually non-existent as men dominate the society. The professionals and officials were asked about the advocacy of women participation in decision-making regarding zoning regulations, as well as a meeting format that would be socially accept for women to attend. The questions were posed to learn the degree of general acceptance by the local Saudi. It was found that half of both the professionals and officials advocate women's participation in decisions related to zoning regulations and feel it is important to include women in the delivery and implementation of potential zoning regulations. In addition, more than two-thirds (66.5 per cent) of the residents supported the idea. The support shows that although there are men who believe that women should not participate and have no role in issues related to zoning regulations, the majority of men accept and believe that women's' participation is a crucial aspect. In one case where women asked men at a Municipal Council why women could not participate in the Municipal Council's planning meetings. The chairman of the Council and some of the men showed their willingness to accept women's involvement. One man openly agreed with the chairman of the Council saying, "Women have equal rights as do men in participating. Islam gives women the right to speak". Per contra, it was noticed that there was some opposition to the idea of allowing women to participate in the meetings, evident from their facial expressions that suggested unease or displeasure.

In terms of meeting format appropriate for women's attendance, those that advocated women's participation were asked which format would be best: fully mixed, segregated, or any form. Preferences for meeting format show that 45 per cent of the residents preferred mixed-meetings, while slightly more than two-third (33.5 per cent) are indifferent about what the meetings' format as long as women are allowed to participate, and 21.5 per cent want segregated meetings held in different halls or rooms, where women can listen and talk without been seen by the men. However, the professionals' perspective showed that more than half (54.5 per cent) supporting women's participation do not care which format the meetings have as long as women are allowed to participate, followed by 27.3 per cent who preferred to have segregation and only 18.2 per cent preferred mixed-meetings. The Municipal Council considers the Saudi culture by holding its meetings with residents in a university halls, segregating men and women between two rooms, where women can listen and talk without being seen by the men.

In terms of the comprehension of the new zoning regulations, two-thirds (66.7 per cent) of the officials think they are easy and this also applied to professionals and residents. The professionals however feel very differently. More than half feel the regulations are misunderstood by the Municipality staff and 15 per cent went on to state that residents were more likely to understand the regulation than the Municipality staff themselves. The professionals consider themselves something of an authority over the regulations as they deal with them on a regular basis, however, the professionals concede that the regulations are difficult to understand because over half of all drawings are rejected by the Municipality on first submission. The professionals have come to believe that each staff member at the Department of Building Permits has his own interpretations; they suffer from a lack of consistency which demonstrates a lack of common understanding between Municipality staff. When professionals were asked about the clarity and transparency of the building permission application process, 45 per cent felt that the process is unclear, while 30 per cent are neutral, and only a quarter felt they are clear.

In terms of people's satisfaction with their built environment, 60 per cent of officials believe people's satisfaction is important factor but has less influence on the implementation process for zoning regulations, while 90 per cent of professionals believe that public satisfaction is critical factor with no disagreement. Additional questions about satisfaction of services provided by the Municipality were posed to professionals only. Such services include: ability to access to zoning regulations and ability to follow documents via the internet. The majority of professionals (75 per cent) are satisfied because they have reliable access to a textbook of zoning regulations on the Municipality's webpage. However, only 23 per cent of the professionals are satisfied with the ability to follow their drawings' status electronically through the Municipality's webpage, 60 per cent neutral and only 17 per cent are dissatisfied with the tracking services.

As part of assessing the satisfaction of residents and professional, this research asked both residents and professionals to evaluate their recent experience with the Municipality. Figure 7.6 illustrates that half of both professionals and residents rated the Municipality performance as fair and acceptable. Additionally, more than one-third (35 per cent) of the professionals and 25.3 per cent of the residents said that their most recent experience with the Municipality was good. However, none of the professionals rated their last experience as excellent. Only five per cent was very good and 10 per cent as poor. Residents are clearly more satisfied with the Municipality's performance than the professionals, though it must be acknowledged that the professionals deal almost on a daily basis with Municipality officers while contact between residents and Municipality staff is much more sporadic.

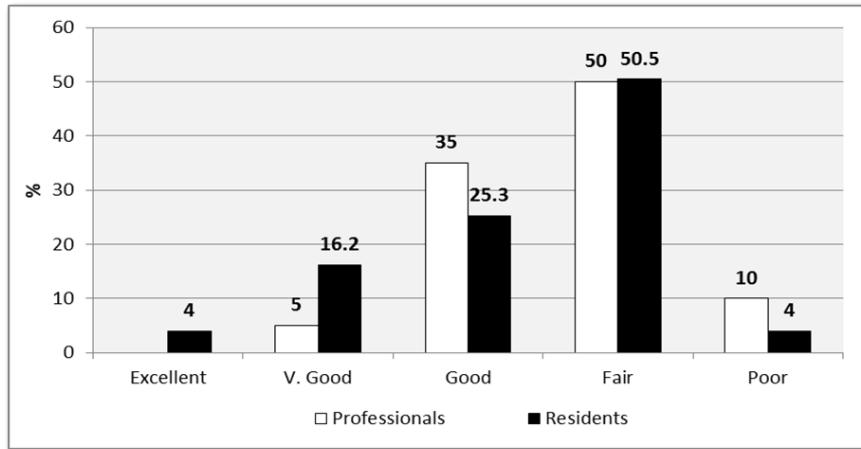


Figure 7.6: Professionals' and residents' evaluation of Jeddah Municipality.

7.2 Discretion and Corruption

Officials were asked about whether discretion existed in the new zoning regulations and how it was used. Only one staff member claimed that there is no place for discretion in the new zoning laws, citing the law as being the law. The rest of the officials stated that there is and it relied on precedents and also issues that contradict with Islamic principles. There were other cases which needed to be treated with discretion because of more particular issues with locations etc. One official did admit that discretionary decision-making could lead to corruption.

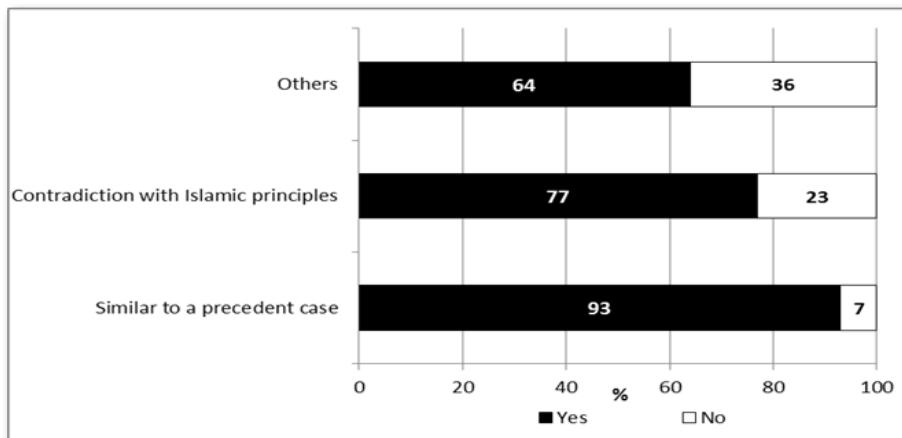


Figure 7.7: Cases of discretion in the planning system

Although, people are aware of corruption in most governmental sectors, especially in the municipalities, residents were not allowed in the past to discuss corruption or accuse the Municipality's staff of corrupt practices. In fact, those who claim there is corruption may be charged with defamation. Most of governmental sectors deny there is corruption. If the corruption is acknowledged, the residents will be accused of exaggerating the severity. Because knowledge of corruption is systematically oppressed, both officials and professionals were asked to discuss what they believe the reasons behind the corruption are. The findings of the study, shown in Table 7.1, illustrate both that officials (73.3 per cent) and professionals (53.3 per cent) agreed low official salaries is problematic, giving incentive to the officials to accept bribes in some situations. One professional described officials as actively supplementing their salaries by taking bribes. The officials' salaries are not enough to have a decent quality of life in Jeddah².

Table 7.1 shows the second reason for corruption from the point of views of both officials (33.3 per cent) and professionals (46.7 per cent) is the lack of supervision and monitoring of the Municipality's work, decision-making and performance. The third reason from the officials' perspective (38.5 per cent) and professionals (27 per cent) is the lack of accountability as a significant cause of corruption. Centralisation is primarily seen as an issue or a reason for corruption from the professionals' perspective, more so than officials' perspective. A reason like others was the lowest, which include immoral beliefs, irreverence toward the law, weakness in faith and avarice.

This was supplemented by a question to the professionals to clarify in which of the Municipality departments they have witnessed corrupt practices. The departments were determined in the questionnaire includes the Department of Building Permissions, Local Planning, Monitoring and Inspection, sub-municipalities and others.

² The Municipality's inspectors earn \$800 (3,000 SR) per month, which is much lower than the average per capita \$1,345 (5,044 SR) per month, so the inspectors are frequently inspecting properties they could not possibly afford to buy. Others officers earn between \$1,600 and \$3,200 (6000-12,000 SR) per month. Condoning any breach or in some cases an expensive car or 10 folds of workers' monthly salaries to acquisition something that is illegal.

Table 7.1: The main causes of corruption in the Municipality of Jeddah.

Main Reasons	% Officials Professionals	
	Officials	Professionals
First main cause	Low salaries	73.3
	Centralisation	-
	Lack of monitoring	6.7
	Lack of accountability	13.3
	Other	6.7
Second main reason	Total	100
	Low salaries	13.3
	Centralisation	6.7
	Lack of monitoring	33.3
	Lack of accountability	20
Third main reason	Other	26.7
	Total	100
	Low salaries	7.7
	Centralisation	17
	Lack of monitoring	30.8
	Lack of accountability	38.5
	Other	6
	Total	100
	21.3	21.3
	23	23
	22	22
	27	27
	6.7	6.7
	100	100

Source: Fieldwork, Jeddah, 2010.

Figure 7.7 shows 60 per cent of the professionals report the most corruption in the Department of Monitoring and Inspection, or by those working in the field responsible for monitoring any breach at any building. The second most corrupt branch according to professionals are the other municipalities while the Department of Building Permissions came third in the list. Other departments were also seen as having corrupt practices.

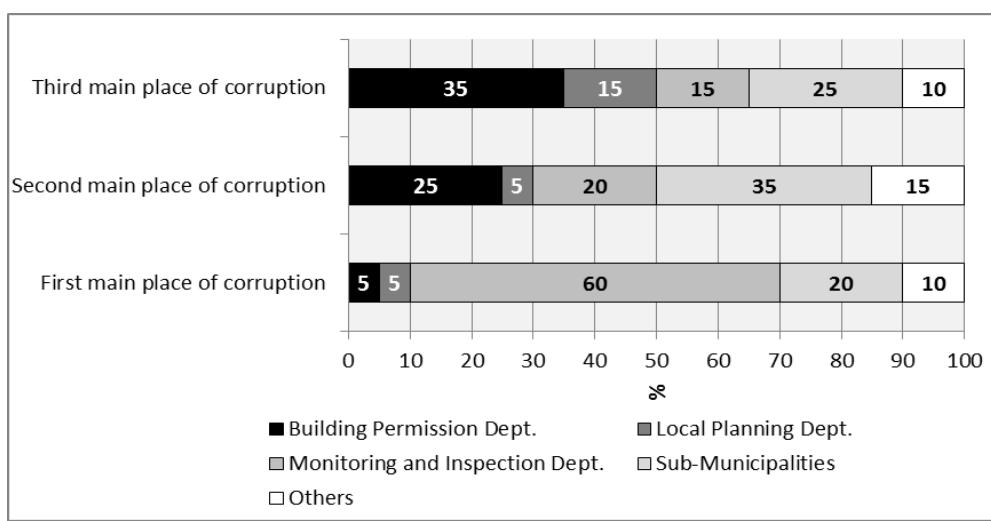


Figure 7.8: Places of corruption within the Municipality's departments

However, officials are not the only party responsible for the corrupt activities. Residents and professionals have equally taken part in the offering of bribes as well as acting in blatant transgression of planning regulations. A number of officials reported that residents (i.e. owners and developers) building extensions to their dwellings without the necessary building permission. Other residents ask architects to change the building's plan after the original submission had been granted building permission from the Municipality. The architects make the illicit changes in order to please their clients for the sake of their business. A professional brought up the issue of the setbacks citing a case in which a client asked the architect, after building permission had been granted, to change the drawings in order to increase the building area by reducing the dimensions of the rear setback.

7.3 Breaches Places and Reasons

Both officials and professionals were asked to discuss where and why do breaches occur. Table 7.2 shows that 40 per cent of the officials and 45 per cent of professionals agree that breaches mostly appear in approved parking spaces. Developers change the parking level into a dwelling or otherwise reduce or increase the space allocated to car parking without permission. This breach commonly appears in apartment blocks under the new zoning regulations. Thirty one per cent of officials stated that the second most common are in building extensions, while the professionals felt that this was most likely to occur in setbacks. The most common third breach, from the perspective of 30 per cent of the officials, relates to building height. The breach in building height appears in apartments under the new regulations because some of the developers acted not in compliance with the zoning regulations. However, 35 per cent of the professionals believe that the third most common breach is both non-compliance building height and unapproved extensions. This will be discussed in a case in Chapter 8.

Table 7.2: The main places for breaches.

	Breaches	% Officials Professionals	
		Officials	Professionals
Main breach	Building height	13	10
	Setbacks	14	30
	Parking space	40	45
	Changing uses without permission	6	5
	Extensions without permission	27	10
	Total	100	100
Secondary breach	Building height	8.7	20
	Setbacks	25	35
	Parking space	28	15
	Changing uses without permission	7.7	5
	Extensions without permission	31.6	25
	Total	100	100
Tertiary breach	Building height	30	35
	Setbacks	16.7	15
	Parking space	16.7	10
	Changing uses without permission	8.6	5
	Extensions without permission	28	35
	Total	100	100

Source: Fieldwork, Jeddah, 2010

Officials were asked why these breaches occurred. In response, half said it was a societal norm to flout the rules and laws. This was supported by an interview with an academic at KAU who agreed that ignorance and lack of respect of the roles and regulations is part of the Saudi culture and is one of the distinguishing features of the developing world³. The second reason according to 43 per cent of the officials' is the lack of law enforcement and accountability on the part of the Municipality. Other significant reasons are the high development costs that cause developers' more difficulty in reaching their intended profit margins. The bureaucracy of the Municipality is then seen as something to be avoided. This will be discussed further in the following Chapter.

7.4 Assessing the Impacts of the New Zoning Regulations

This section presents the perspective of both officials and professionals regarding the effects of the new zoning regulations. A meeting was held in the Municipal Council (see appendix 3, second meeting) to discuss the impact of the new regulations. Twelve indicators were set to assess the new zoning regulations. The indicators grouped in four categories: economic, physical, social and

³ Information obtained by the author in interview with an academic staff in FED in 2009.

environmental aspects. Table 7.3 summarises their impact of the new zoning regulations from the perspective of officials and professionals. It is obvious from the table that officials believe that the new zoning regulations will deliver benefits to the built environment, while from the professionals' perspective the negative impacts outweigh the positive. The professionals felt the Municipality had failed to consider comprehensive studies of the implications of the new regulations during their preparation.

Table 2.8: Assessing the new regulations from different perspectives. Source: adapted from Steiner and Butler (2007: 374)

Category	Indicators	Official Perspective	Professional Perspective
Economic	Dwelling price	-	-
	Investment	+	+
	Plot price	-	-
	Infrastructure cost	+	+
Physical	Urban sprawl	+	+
	Building construction	+	+
	Car parking	+	-
	Open space	+	-
Social	Privacy	+	-
	Strengthening relationship	+	-
	Safety and security	+	-
Environmental	Noise pollution	-	-

According to the Figures 7.9 and 7.10, there are significant commonalities between the two perspectives, and yet many differences. In terms of economic aspects, it was found that both professionals 70 per cent and officials 93.3 per cent agreed that the new zoning regulations have played a major role in the increased development momentum. According to Mandeli (2011) infill developments revitalises economic investment. The residential building construction is high as investments are being made and buildings are being constructed. The officials believe the increase in the activities of building construction is a direct result of the new regulations. The regulations give developers and merchants more confidence to invest in residential real-estate markets. The investor confidence relates to questions asked regarding the impact of the new zoning regulations to provide the necessary housing for meeting

housing demands. Half of the professionals and two-thirds (66.7 per cent) of officials agreed that the new regulations have helped to cope with the housing demand by delivering different types and sizes of dwellings to the real-estate market.

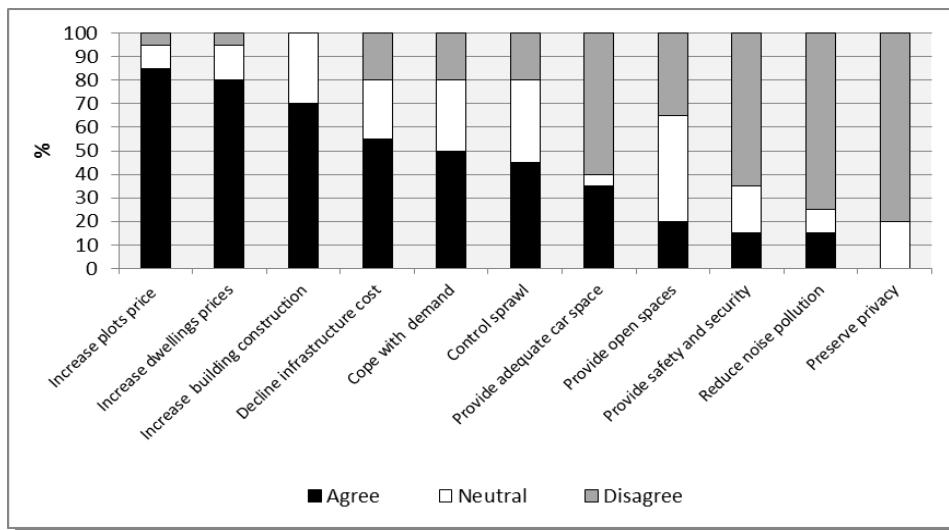


Figure 7.9: Assessment of new zoning regulations' impact according to the professionals' perspective.

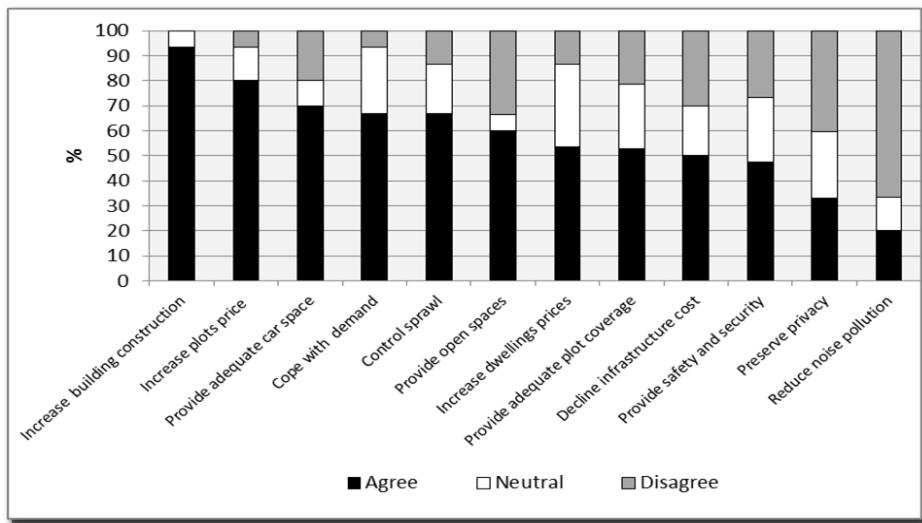


Figure 7.10: Assessment of new zoning regulations' impact according to the officials' perspective

However, it was found that the majority (85 per cent) of professionals and the officials felt that the new zoning regulations have also increased plots prices. There was also strong agreement that the new regulations had increased the price of dwellings. In the Municipal Council, professionals agreed there is a positive

correlation between density and property prices. The professionals also claimed dwellings prices have risen by 100 per cent and in some extreme cases as much as 200 per cent. The price increases have had a negative impact on housing affordability, especially, for middle and working class residents, which contradict one of the main aims of the latest master plan. Officials have rejected claims that the new zoning regulations have been the only reason for the increase in land and dwellings prices, rationalising that this is owing to inflation and the rising cost of materials. Officials also claim that the current increase in prices is only temporary arguing the disproportionate demand over supply will even out as housing stock increases. The officials' justification contradicts the study done by the Al-Beeah Consultancy Office. The study showed that the only negative impact of the new master plan will be the increase in properties prices owing to monopoly. As mentioned in Chapter 2 compact development has the potential to raising housing and land prices (Breheny, 1992b; Song, 2012). Reductions in the cost of infrastructure relates to questions of urban sprawl control, a key objective in the new master plan and the new zoning regulations, is to control the city's massive sprawl, as less sprawl reduces infrastructure network sizes and thereby costs associated with building and maintaining extensive networks. It was found that more than half (55 per cent) of professionals and half of officials believe that the new zoning regulations will implement this vision. However, professionals believe that by increasing the density there will be increased pressure on infrastructure and other services.

As one of the main aims of the new master plan is to control urban sprawl, it was found that 45 per cent of professionals and 66.7 per cent of officials believe the new regulations will do this and that will impact on infrastructure costs. Sixty per cent of the professionals believe that the new regulations did not provide adequate parking space. All of the professionals complained that the parking level regulations in apartment blocks developed under the new regulations are difficult to implement in reality. The difficulty of implementing car parking standards prompted the Municipality to hold a meeting between the Department of Local Planning and Building Permission to discuss the complaints from architects (see appendix 2, first meeting). The result is a recommendation to revise car parking standards. Some professionals also commented on parking issues, arguing that

owing to the lack of public transportation residents living in high density mixed-use neighbourhoods suffer from traffic congestion and parking availability, particularly visitors' parking. In contrast, 70 per cent of officials believe that the new zoning regulations provide adequate parking options. The officials claim the regulations allocate enough car parking (i.e. parking level within the apartment block) to prevent traffic congestion and ensure the flexibility of traffic flow within neighbourhoods. In the meeting of Municipal Council the professionals were concerned about, the capacity and the efficiency of the infrastructure and services to cope with the high density. Second, they felt that the capacity of the current street networks is not ready for increasing density and the master plan did not provide for public transport. Last, land-subdivision regulations do not match with the new zoning regulations, where the former were not updated with the zoning regulations.

In terms of social aspects, professionals and officials were asked whether the new zoning regulations would provide a safe and secure environment for the residents. Sixty five per cent of the professionals disagreed, while only 47.6 per cent of the officials believe that the new regulations will provide safe neighbourhoods. In the meeting, the professionals have shown their concern about the increase in built density, fearful that higher densities may undermine safe neighbourhoods and the willingness of people to mingle with those with different cultural norms. However, the officials' rebuttal claims the new regulations will revive traditional ideas supporting extended families and the compact urban form. Reviving the traditional ideas is thought to strengthen social ties.

Professionals and officials were asked if the new regulations function to preserve the privacy of the residents. Significantly, no professionals felt that they do and the majority (80 per cent) felt that privacy has been compromised. The views of the officials were more mixed with only one third believed that the new regulations preserve privacy. The privacy issue was also discussed between the Municipality officers and architects but it was professionals who raised the issue particularly in respect of those sites which had been previously designated as villa developments. The officials choose not to comment on the issue. However,

Chapter (8) exposes the lack of fit between the regulations as implemented and very significant cultural issues.

In terms of environmental considerations, it was found that both the professionals 75 per cent and 66.7 per cent of the officials believe that the new zoning regulations will increase noise pollution and that density together with the lack of public transport will be reflected on people's health. The professionals have evidence that suggests carbon dioxide emissions and noise pollution would increase considerably to the detriment of health in those areas, where more than 90 per cent of the population depends on cars in their commute.

7.5 Conclusion

This chapter has explored the perspective of professionals and Municipality's officials regarding the factors that are needed to enhance the quality of the Municipality's performance and the issues that influence the capacity of the local planning authority, in a hope that by revealing defects the Municipality will focus on improving good governance and its ability to deliver potential zoning regulations. The chapter has shown that accountability, coordination, and cooperation between the Municipality's departments and law enforcement are seen by officials and professionals as the most influential factors for an effective implementation of zoning regulations. It was found that the Municipality suffer from centralisation, bureaucracy, lack of participation and accountability. In addition, the Municipality suffer from insufficient budget, shortage in qualified and skilful employee and number of staff. However, it was found that there is coordination and cooperation between the Municipality and its departments, MOMRA, the Municipal Council and weak between the Municipality and other governmental sectors. The chapter has revealed that there is discretion in the system according to the officials. Generally speaking discretion left to officials' judgment. In addition, the chapter revealed that corruption is attributed to the low salary, lack of monitoring and accountability. In addition, the chapter has provided the places where corruption can take place. Breaches mostly appeared in parking levels in apartments under the new regulations, house extensions without permission and building height. Breaches are attributed to ignorance and disrespect of the regulations, a lack of accountability and law enforcement, high costs of development and the cumbersome bureaucracy of the Municipality.

Regarding the impacts of the new zoning regulations from the professionals' and officials' perspectives, it was found that the officials believe that the new zoning regulations will deliver benefits to the built environment, while from the professionals' perspective the negative impacts outweigh the positive ones. The next chapter will discuss in more depth the problems that emerged after applying the new zoning regulations and will discuss some issues related to the performance of the local planning authority.

Chapter Eight: The Impact of Applying the New Zoning Regulations on Stakeholders in Jeddah

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CHAPTER EIGHT: THE IMPACT OF APPLYING THE NEW ZONING REGULATIONS ON STAKEHOLDERS IN JEDDAH

8.0 Introduction

This chapter explores the impact of implementing the new zoning regulations by considering cases determined between 2009-2010. It aims to reveal the conflict between the stakeholders (residents, developers and local spatial planning authority)¹, the imperfection in the planning system at the local level which influenced the implementation of zoning regulations, the impact of applying the new regulations on residents and developers satisfaction and reaction.

The chapter is organised into five sections. It commences by setting the justifications for choosing the cases. Describing the issue of each case is provided separately in the second section. Section three discusses and analyses the cases, poses key questions that are related to the main line of the research and shows the conflict between and reaction of stakeholders. It also clarifies the factors that affect the implementation of the new zoning regulations. The penultimate section discusses the cases from the perspective of the Islamic law. The last section suggests ways forward.

8.1 The Justifications for Selecting the Case Studies

As mentioned in Chapter 3, three cases were selected through the Municipal Council meetings and one case was identified through the newspaper, to provide rich points of learning in which the impact of the new zoning regulations might be more deeply appreciated, not only on development but also on developers and residents. Through these it is also possible to judge the capacity of the local authorities (the Municipality and the Municipal Council) in their roles as decision makers on the implementation and enforcement of the zoning regulations. These Cases serve therefore as a mechanism to determine the extent to which the views expressed by the local authorities, developers and residents are reflected in practice.

¹ The word developers and investors are used interchangeably in this chapter.

8.2 Detailed Case Studies of Zoning Regulation Conflict

Although, zoning regulations should enhance the quality of life and provide sustainable development (Qian, 2008; Cullingworth and Caves, 2009) regulations could potentially have negative impacts that cause conflicts, particularly between stakeholder groups (Selmi and Kushner, 2004).

The first three cases relate to the violation of privacy for those living in villas after applying the new zoning regulations within low density residential zones. The fourth case was in a neighbourhood dedicated as a residential zone under the new regulations and suffers from non-compliance with the new regulations and lack of services. Table 8.1 summarises the issues in these four cases.

8.2.1 Al-Salam subdivision

The first case is about a local resident who owns a plot with an area of 720 square metres. The plot is located within the subdivision of Al-Salam (Figure 8.1). The plot is surrounded by villas of one or two storeys and two narrow local streets on the west and south sides of the plot² (Figure 8.2). The developer applied for building permission from Jeddah Municipality in accordance with the new zoning regulations. The developer's intention was to construct a six storey apartment block, which included a parking level and roof villa. Permission was granted in January of 2009 and construction began in February. However, six months into the build the developer was told by the Municipality that he must cease building work. The Municipality's decision was made on the grounds that the adjacent neighbours made formal objections to the Municipal Council regarding the proposed building height. The neighbours were concerned that the new building would compromise their privacy.

² Local streets are designed for residential neighbourhood

Chapter Eight: The Impact of Applying the New Zoning Regulations on Stakeholders in Jeddah

Table 8.1: Summarise the new zoning regulations issues on the ground of four neighbourhoods

	Conflict between	Interest	Problem	Decision	Effect	Cause	Result	Condition				
First Case Al-Salam	Developers	Constructed an apartment block for investment	The privacy of the residents would be compromised	The Municipality stopped the investor from building	Incur substantial financial loss to buy and build the property	The Municipality effects developers and residents	The developers were satisfied with the new regulations.	Under construction				
	Residents	Preserve privacy			Lack of trust in the Municipality		However, developers were dissatisfied with the Municipality decision					
Second Case Al-Naghii	Residents	Preserve privacy	The privacy of residents and a girl's school has been compromised	The Municipality stopped the investor from building	Distort the view of some of the villas by constructing a metal cover on the top of their villas' fences	The Municipality effects developers and residents	The residents were satisfied with the Municipality's decision to stop developers building	Nearly finished				
	Developers	Built an apartment block for investment			Some of the family members cannot use the yard							
Third Case Al-Marwah	Residents	Preserve privacy	The privacy of residents would be compromised	The Municipality stopped the investor from building	Incur substantial financial loss to buy and build the property	The Municipal Council effects the developers	However, residents are dissatisfied with the new regulations	Un built				
	Developers	Bought plot to build an apartment block for investment			Lack of trust in the Municipality							
Fourth Case Al-Haramyen	Residents & Developers	Investment for developers and housing for residents	Non-compliant with the new zoning regulations	The Municipality imposed penalties on those who were not compliant with the new regulations	Incur substantial financial loss to buy a dwelling	The Municipality did not monitor the developers	Residents and developers were dissatisfied with the Municipality's actions	Built				
	Municipality	Enforcing the law			Lack of trust in developers		Developers sold the flats to the residents					

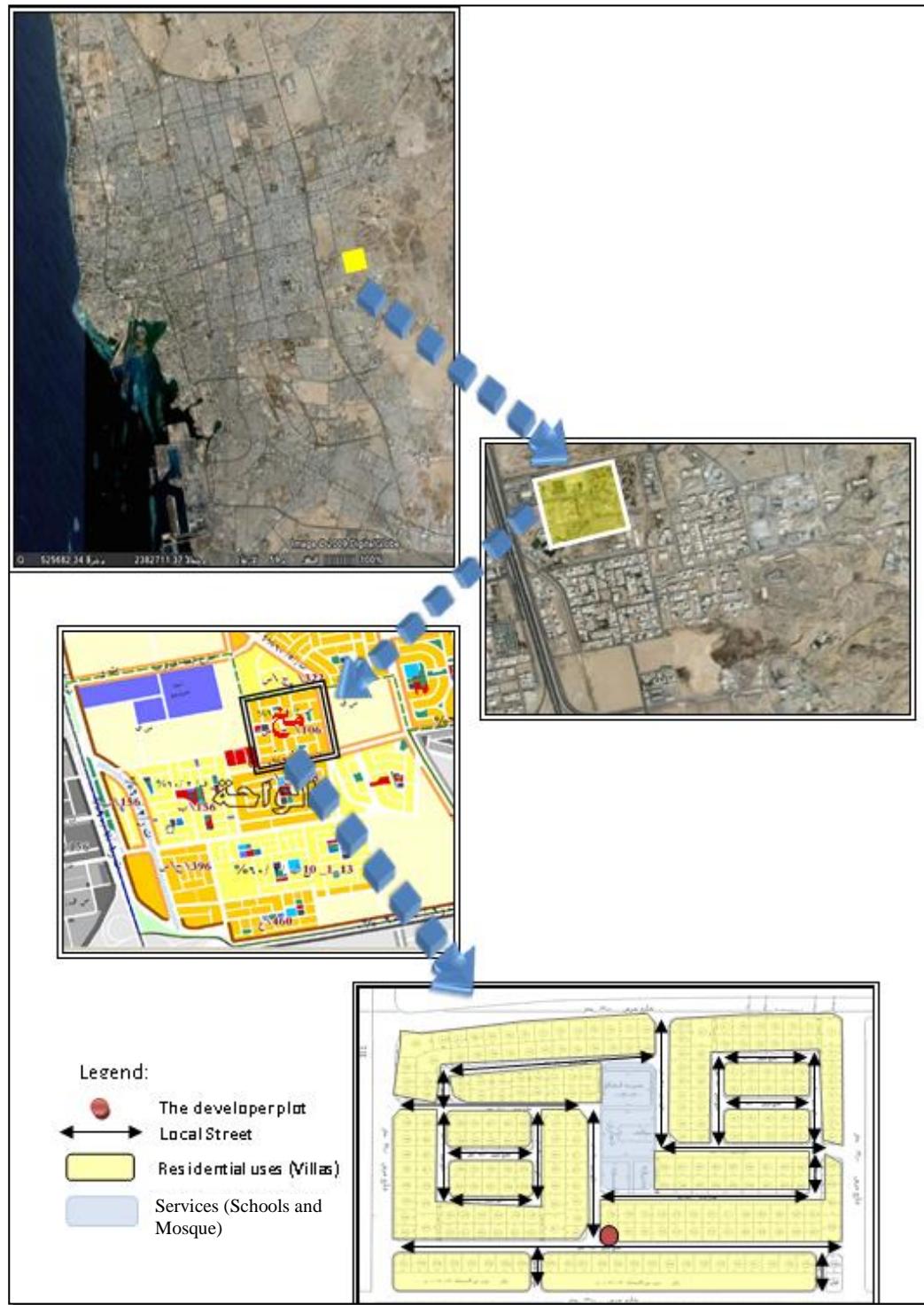


Figure 8.1: The location of Al-Salam subdivision.
 Source: Adapted from Google Earth (2012) and Jeddah Municipality (2012b)

In response to the complaints, the Municipal Council held three meetings to discuss the issue in the neighbourhood (see third, fourth and fifth meetings in Chapter 3, pg. 95). The first two meetings with the Municipality, which had decided to increase the density by increasing the number of floors in a neighbourhood where 39% of the land was villa development and 45% of land was vacant. The third meeting was a public hearing between the developers both (residents and investors) and the villas' residents.



Figure 8.2: Terrace of villas with two floors in Al-Salam neighbourhood

The villas' residents felt forced to make alterations to their dwellings that were not aesthetically pleasing in their view. Examples included raising boundary fences with metal in an attempt to protect their privacy from those living in three storey apartments (Figure 8.3). If the new blocks proceeded, whether as seven or four floors the impact on them would be to cause even higher fences.

The outcome of this meeting was a tentative decision to stop developers from building and await a final decision for the Municipal Council and the Municipality. Two options were suggested by both planning authorities. The first option was to build a block of four floors with no parking level and roof villa. The second option was to build three storeys plus a parking level and no roof

villa. Both options reduced the number of floors with a maximum height of 16 metres and with no roof villa.

A month after the Municipal Council decision, the developer appealed on the grounds of a sub-section in the new regulations that stated that the parking level should not be counted in the total number of floors. However, it is included within the building height. The developer relied on this distinction to support his argument to retain a parking level in a four storey development that would not exceed 16 metres. The Municipal Council rejected the developer's appeal on three grounds. Firstly, the proposed development would encroach on the neighbours' privacy. Secondly, there were fears that the parking level would be transformed into dwelling units which does happen as would be seen in a later case. Finally, it would set a precedent in the neighbourhood. The Council instead reiterated the two options that it had offered. Firstly, to build a maximum of four storeys with a maximum height of 16 metres with no parking level. Secondly, to allow a parking level but with only three storeys above this. In both options a roof villa could not be included and there would be no compensation for speculative investment losses.



Figure 8.3: The alteration of the facade by using metal fence

The developer incurred financial losses of \$267,000 (approximately one million SR). The developer believed he had made a sound investment and had spent time and money on building permission fees, architectural fees, building materials and construction costs. These fees cannot be reclaimed and the materials purchased cannot be reused because they have deteriorated on the site (Figure 8.4).



Figure 8.4: Deterioration of building materials

8.2.2 Al-Naghi subdivision

The second case concerns a group of resident owners who live in villas within the Al-Naghi neighbourhood (Figure 8.5). The Al-Naghi subdivision is divided into two parts: the Al-Naghi (A) and the Al-Naghi (B). The former is occupied and the latter vacant. Previously both of these subdivisions were coded as one residential subdivision under the old zoning regulations and people were allowed to build both apartments and villas on the condition that they did not exceed two storeys for villas and three for apartments. However, the Municipality applied the new regulations in both A and B.



Figure 8.5: The location of Al-Naghi subdivision.

Source: Adapted from Google Earth (2012) and Jeddah Municipality (2012b)

The owners in Al-Naghi (A) complained to the Municipal Council about the Municipality's decision regarding changes in the zoning regulations specifically that developers were allowed to construct six storey apartment blocks in their neighbourhood. This in turn compromised the residents' privacy and prevented the owners and their families from using the villas' yards. As in the previous case the decision made the villas' owners raise their fences to protect their privacy. An additional complication was that here the windows of the new apartment block overlooked a girls' school.

A site visit was undertaken with one of the Council's officers to meet and listen to the residents' complaints and to determine the prevailing land-use in the neighbourhood. It was found that the majority of the dwellings were one or two storey(s) villas, together with some apartments built to a maximum of three storeys and a few apartment blocks under the new zoning regulations.

The apartments under construction had a parking level with four stories of apartments and a roof villa on top. Once finished and occupied they would compromise the residents' privacy. The only apartment that was finished and occupied was the one that overlooked a girls' school, which might be considered a precedent in planning law. The school had shielded the yard with a thick black fabric cover. For cultural reasons the researcher was not allowed to take photos or hold interviews with the girls or the teachers, however, local people were deeply concerned as to how such a development could be permitted without consulting them.

A discussion by members of the Municipal Council and the Municipality both parties agreed that construction of these types of buildings should be stopped immediately until the discrepancy between cultural requirements and the regulations has been resolved. The Council stated that the addition of even a single brick would have a negative impact on neighbours' privacy. This decision satisfied the owners of the villas, however, the developers were aggrieved that the Municipality that had given planning permission was now stopping the works so close to completion. The developers incurred financial losses and felt that they were victims in these decisions.

8.2.3 Al-Marwah subdivision

The third case relates to objection submitted to the Municipal Council by a local resident who lives in his own villa. The villa is located within the Al-Marwah neighbourhood, in the Al-Marwah district (Figure 8.6). The villa is two storeys, and surrounded by villas on three sides with a local street on the northern most side. The owner objected to the Municipal Council about a developer who intended to apply for permission to construct a six storey apartment block including a parking level. Such a building if approved under the new regulations, would compromise the privacy in his villa.

The owner gave five reasons behind his complaint. Firstly, the new building would compromise his privacy, resulting in his family being unable to use their yard. Secondly, such an infringement of privacy would prompt him to raise his fence and thus detract from the overall appearance of his villa. Thirdly, he and other owners had incurred financial costs to build their own villas. Fourthly, the owner and his neighbours had applied for permission to build four storeys before the new regulations came into being but were refused and had to be content with building villas of a maximum of three floors (Figure 8.7 and 8.8). Finally, after living in the villa for a year the villas' owners found that the Municipality changed the zoning regulations in their neighbourhood to allow people to build more than four floors. He and the other villas owners complained to the Municipality that the new apartment windows would overlook their yards. The Municipality rejected their complaint, which caused them to appeal to Municipal Council as a last resort.

The chairman asked the Municipality to postpone the application of these new regulations in this particular neighbourhood. The Municipality accepted this and told the developers to comply with the old regulations. The owners of the vacant plot were dissatisfied with the resolution and objected for two reasons. Firstly, they claimed that they came as investors and bought the plots at high prices but were prevented from making a return on their investment. Secondly, some of the developers had already been granted building permission from the Municipality and had already incurred greater expenditure. However, the Municipality and the Municipal Council rejected the developers' request and closed the case.



Figure 8.6: The location of Al-Marwah subdivision.

Source: Adapted from Google Earth (2012) and Jeddah Municipality (2012b)



Figure 8.7: Buildings heights in Al-Marwah subdivision



Figure 8.8: Villa is the common housing type in Al-Marwah subdivision.

8.2.4 Al-Haramyen subdivision

The fourth case investigated issues in the Al-Haramyen neighbourhood located in the Al-Marwah district (Figure 8.9). This case differs from the previous cases, because this neighbourhood was designated as a high density residential zone under the new regulations (Figure 8.10).

According to a local newspaper called '*Okaz*' (Hadhadh and Ba Bkair, 2008) the Municipality found 80 percent of the new apartments construction diverged from the new regulations. Examples include not complying with the dimensions of the building facade, changing the parking level into dwellings and creating the roof-top villas that covered 90% rather than 50% of the roof (Figure 8.11). *Okaz* reported that the Municipality has requested the owners of the non-compliant apartments to pay a fine or to remodel the building in accordance with the regulations. While some of the residents were dissatisfied and objected to the high prices of the dwellings, those dwellings that had been converted from the parking level were offered with low prices, so were quickly sold.

Others complained about the Municipality's actions. The local residents reported that some residents had been forced to move out of their homes, which were then demolished in order to comply with the new regulations about car parking. The residents also reported that in cases, where demolition would affect the structural integrity of the building, the electricity was cut off until the residents paid the fine.

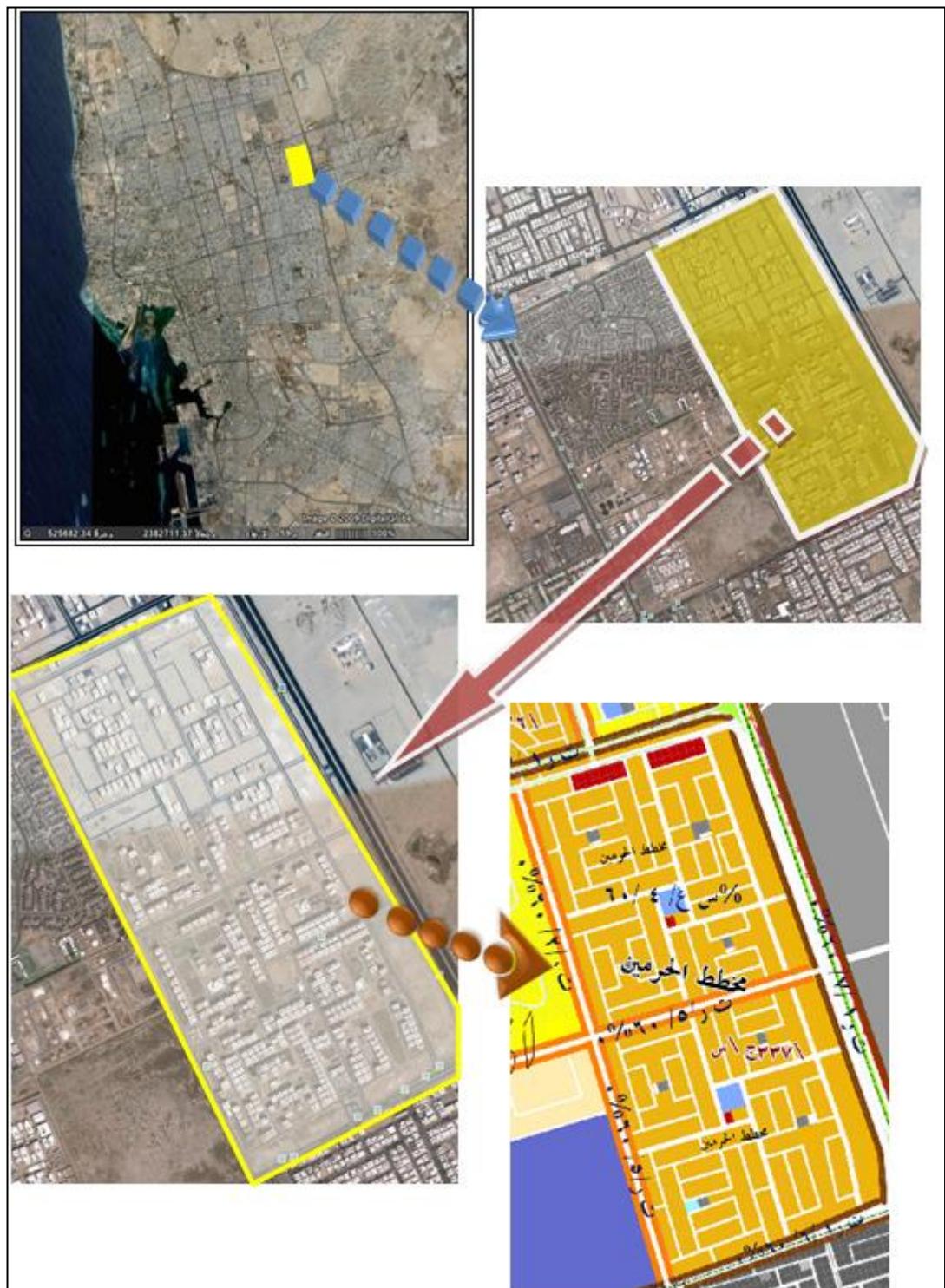


Figure 8.9: The location of Al-Haramyen subdivision.
Source: Adapted from Google Earth (2012) and Jeddah Municipality (2012b)



Figure 8.10: The Monotonous visual appearance of the apartment blocks in Al-Haramyen



Figure 8.11: Two apartment blocks violated the ratio coverage of the roof villa

One resident mentioned that the Municipality and the police should hold the developers not the residents accountable for the problems. The residents considered themselves to be victims which was emphasised by the allegation that they were deceived by the owners of the apartments who sold them the flats with structural and plumbing defects. Some of the residents have evacuated their apartments.

In 2012, fissures and cracks were appeared and some occupied buildings were nearly to collapse owing to the level of ground water which affected the buildings structure (Okaz, 2012). In addition, the majority of the residents were openly dissatisfied with the Municipality's performance in delivering public services. They complained of narrow street capacity in a high density neighbourhood and poor street maintenance, lack of open spaces, and stagnant water (Figure 8.12).

A visit was made to the sub-municipality that is in charge of this neighbourhood, to know how these illegal buildings were constructed without any recognition from the Municipality. The head of the sub-municipality confirmed the newspaper reports. He explained that the Municipality asked the residents either to pay a fine or to demolish the non-compliant portions. The residents ignored this. Thus, the sub-municipality took steps to evict residents and demolish the non-compliant portions of the buildings (Figure 8.13). In some extreme cases in which demolition could not resolve the issue, electricity was cut off to force residents to leave or to pay the fine. Regarding issues about the public services and the infrastructure, he claimed that the Municipality is working with other agencies to provide the necessary and adequate infrastructure.



Figure 8.12: Pedestrian paths became narrow streets



Figure 8.13: Removing the non-compliant part

Source: (Al-Jazirah, 2008)

8.3 Analysis and Discussion of the Cases

The qualitative evidence discussed in this chapter raises salient questions about the problems caused by the new regulations for, the local authorities, developers and residents. One of the issues raised is who should take responsibility dealing with these issues or for causing these particular problems. The consequences of their decisions on the city, neighbourhoods, inhabitants and developers.

In the first case the Municipality and the Council set a 16 metre height ruling. It should be noted that the 16 metres limitation does not necessarily prevent the neighbour's privacy from being compromised. If the Municipality allowed the developer to build four storeys including a parking level the developer still could accommodate the 16 metres limitation. By assuming that the height of one floor is three metres then the total height of four storeys including a parking level would be 15 metres, well within the limitation. In addition, the Municipality prevented the developers from building roof villas and having parking levels without paying the developers any compensation. The Municipality's decision contradicts what is provided in the new regulations, as the developer had the right to build a parking level, as it is excluded from the number of floors, but included within the building height. If the developer does not grant a floor for car parking as in the first case, then it will affect the street's traffic capacity and flow, where the local street fronts the building's main facade is very narrow.

In the second case where an occupied apartment overlooked a girls' school raise questions about the practices of the Municipality officers who either did not visit or know about the adjoining uses before issuing building permissions. In the case of residential buildings the officers consider whether the architectural drawings comply with the new regulations and deal with the building as a separate entity with no obligation to consider the impact on the surrounding buildings.

In the third case the Municipality through the recommendation of the Municipal Council stopped the new regulations' application in the neighbourhood before they start constructing any apartment in response to residents' complaints. Given that in this case residents were quite quick to complain, which raises queries as to why the residents as in the previous cases left it so late to object?

In the fourth case the Municipality were late in taking actions and penalised residents who may well have acted in good faith. Interviews with some academics and residents described the evictions as inhuman and the Municipality either did not consider this or did not see it as important. The officers of the Municipality stated that they were aware of the impact on people but felt they had a duty to uphold the regulation and to prevent any possible precedent being set. The Municipality in the fourth case imposed sanctions on the residents of non-compliant buildings based on *caveat emptor*. This might seem to be unfair for those who bought in good faith. Nevertheless, it might be stated that those who purchased apartments should make inquiries if the dwelling is legal or not. A question could be asked: where were the inspectors?

It was possible, from the qualitative evidence, to see that there were conflicts between the stakeholder; the local planning authorities, investors and inhabitants. In addition there are three significant factors that affect the ability of the local spatial planning government to implement zoning regulations; namely the capacity of the local authorities, cultural resistance to accept the regulations and planning issues (Figure 8.14):

8.3.1 Capacity of the local authorities

Through the qualitative evidence it was obvious that there have been ten major issues that affect the performance of the local authorities. The first issue was the local authority's arbitrary decisions by: applying the new regulations without having a clear understanding of existing dwellings, stopping the developers from building after granting them building permission and no compensation was paid to them. These decisions do not encourage the developers to follow the rules in the future and raise three issues: first, did the local spatial planning authorities take the right actions? Second, is it worth applying for building permission if it is to be disregarded? Third, if developers are entitled to compensation, who will pay them? As mentioned in Chapter 4 (pg. 132), in law compensation is possible, however, in practice it is not paid or it takes time. Another arbitrary decision when the Municipality punished those who were living in the non-compliant apartments instead of those who built and sold them.

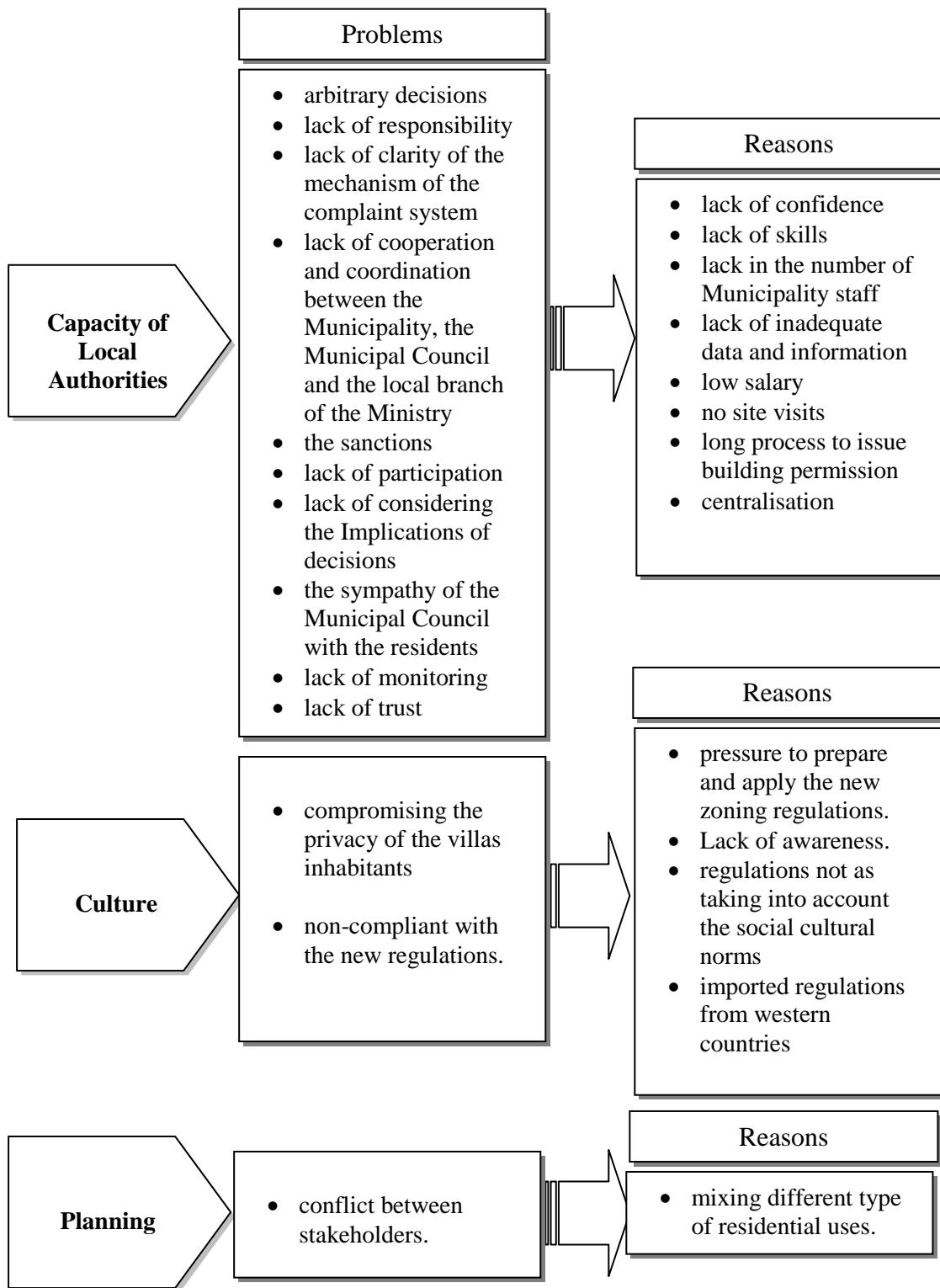


Figure 8.14: The three significant factors, issues and reasons that have had a strong influence the implementation of the new zoning regulations.

Some of these inconsistent decisions are owing to the lack of adequate data and information relevant to planning decisions which raises questions about the validity of the data. It also raises questions about the extent of the Municipality officers' confidence about their decisions? The local authorities seem to wilt under public pressure.

The second issue was the poor level of Municipality performance in terms of the lack of responsibility for its decisions. For instance, in the second case the Municipality officers did not distinguish between the two subdivisions and mixed two different types of housing (i.e. apartments with villas) with various heights in one area without considering the consequences of this decision. The bringing together of what had been two separate areas under one zoning regulations had already led to a conflict between the villas' owners and apartment blocks developers. The Municipality officers did not know how to explain this conflict and they seemed not to want to take responsibility and to admit they were wrong in their decision. The planning officers claimed that it was not the Municipality's fault, as the previous plan did not specify the type of residential zone they were. This justification was judged to be unconvincing. In the fourth case, the Municipality did not hold those who built and sold the non-compliant dwellings accountable for the violation because it was difficult for the Municipality to chase the developers. In addition, the Municipality did not want to take the responsibility of monitoring the construction in the early stages. In both cases the local authorities must consider its decisions and be able to be accountable in the future. This can be attributed again to the lack of adequate data and information, lack of accountability and the issue of losing face which is culturally important as mentioned in Chapter 4 (pg. 141).

The third issue was lack of clarity in the objection system, where in all four cases it was not clear which government agency the residents and developers should go to complain. The residents objected to the Municipal Council when the Municipality refused the residents request. However, the developers did not know to whom they should object where both of the local authorities did not respond positively to them. Although, technically the developers could complain to the Board of Grievance or local courts they tried to find a solution by compromising

with the Council. In doing so they were able to avoid a long bureaucratic process with the government agencies. This lack of clarity in the objection system is attributed to the complex governance map of agencies (see Chapter 4, pg. 133).

The lack of cooperation and coordination between the Municipality and both the Municipal Council and the local branches such as the Ministry of Electricity and Water was the fourth issue. The Municipality should coordinate and discuss any amendments in the zoning regulations with the Municipal Council before adopting and applying the regulations. However, it was obvious in the first case, that the Council was not up-to-date with the amendments to the new regulations. This could be attributed to the centralisation in the system as mentioned in Chapter 4 (pg. 128); however, the questionnaire findings revealed that the majority of the Municipality officers felt there is a high level of cooperation between the local authorities (see Chapter 7, pg. 206). If the Municipality and the Municipal Council worked cooperatively, this situation could have been avoided. Specifically if the Municipality were to systematically inform the Council of any changes to the zoning regulations before applying these regulations, developers would not have their building permissions revoked. The Municipality should furthermore work to coordinate with the local branches of the Ministries to ensure that the latter provides infrastructure to the neighbourhood before allowing people to build.

The fifth issue pertains to the penalties or sanctions that the Municipality imposed. Interviews with academics, Municipality officers and professionals revealed that the Municipality should increase fines for non-compliance. They viewed the current fines as so low as to be no deterrent to developers which gives the option to ignore the regulations when the financial means are available to pay the fine³.

Lack of enforcing and monitoring the law by the Municipality's officers was the sixth issue. It was obvious in the second and fourth cases that earlier monitoring

³ According to the Ordinance of Fines and Penalties of Violation, if a developer built with building permission and was non-compliant the fine is approximately \$270 – 2,700 (1000 – 10,000 SR) per square meters. If a developer built without building permission the fine is approximately \$800 – 1,333 (3000 – 5000 SR) per square meters. In both cases the fines will be estimated by the inspector according to the location of the property (Municipality, 2001).

and enforcement would have prevented the problems that arose. The Municipality has inspectors but clearly they were either not present or not taking action. According to the sub-municipality this issue is explained as the mayor's decision to centralise monitoring, has affected the role of the inspectors and the sub-municipalities, thus, has weakened the overall effectiveness of monitoring development. If decentralisation is the answer, then more power should be given to the sub-municipalities. In addition, the city is extensive and the inspectors struggle to follow-up on everything they find, particularly, when construction could be continuing through the night. This suggests that the problem is staff shortages as mentioned in the previous chapter. The anti-compliance attitudes of some of the developers and residents, made implementing and enforcing the new regulations difficult. A reason not put forward by the sub-municipalities is the issue of low salaries. In addition, some of the inspectors work on temporary contracts that are renewed annually, which mean they have little security. In these circumstances it is possible that inspectors might wilt in front of developer's or possibly are bribed to look the other way.

The seventh issue relates to the lack of consideration given to the implications of the local authorities' decisions. This is clear in the apparent disregard of privacy issues and of the economic concerns of developers adjoining buildings. This is attributed to the lack of extensive studies that predicts and shows the impact of planning decisions owing to the lack of skills, which creates tension between the stakeholders, especially, between the developers and the residents.

The eighth issue pertains to the lack of participation and consultation regarding planning decisions with citizens. The first three cases illustrate that although citizens are excluded from consultation and participation in the planning system where there is no institutional place for their voice, in practice they managed to overturn the decision: Would consultation and public participation within the planning system help to prevent these kinds of conflicts? The local authorities should set a public participation mandate before applying the new regulations such that the Municipality should consult residents about any possible change. This issue could be attributed to the arrogant confidence of the Municipality planners. One of the officers refused the idea of involving ordinary people who

from his perspective do not know anything about planning in decision making when the Municipality has the experts. However, while this may be true, local people may have strong and indeed valuable views about their own neighbourhood. In defence of the officers' position we may reflect on the fact that there is no voice for ordinary people in the system, which encourages the experts to feel that they know the city and people needs.

The ninth issue deals with the sympathy of the Municipal Council toward the residents. The Council was more positively responsive to the residents' complaints than to the developers in the first three cases. Although, the Municipal Council tried in the first case to mediate between the developers and the inhabitants in order to find a compromise solution, the Council's final decision harmed the developers. The developers felt that the Municipal Council should be objective in their decisions. This sympathy made the developers upset and put the Council in a crucial position. However, this is clearly not always the case.

As a result, there might be a lack of trust on the part of the stakeholders in the law enforcement system. As mentioned in Silberstein and Maser work (2000) the lack of trust in public officials and government is attributed to the failure of the government to respond to the community values and fulfill its commitments. There is a mutual lack of trust between the local authorities and the developers, where the local authorities passed quick judgment about the developers and the latter worried about changing decisions that incurred developers' financial losses without compensation. Citizens, also, have lost trust in the local authorities. These issues have a negative impact on citizens' and developers' satisfaction and the capacity of the planning authorities, which influenced the implementation of zoning regulations.

Table 8.2 illustrates how the issues arising from the case studies correspond to the UGI. Through the lens of the UGI, it can be seen that the issues of low staffing and low salaries arise from inadequacies in the municipal budget and revenue exacerbated by poor financial penalties and contribute to low effectiveness. The low effectiveness of the Municipality affects the capacity of the local planning authority, which in turn leads the officials to take arbitrary decisions and developers to avoid the conditions of the permission or to side-step the process

altogether. The low fines and lack of monitoring development lead to breaches in the zoning regulations. The conflicts that emerged between residents and developers arising from the inroads into the privacy of villa residents were attributed to the general lack of public participation in planning and governance matters and lack of consultation both on the introduction of new regulations and on building permission for new dwellings in their neighbourhoods. Lack of participation leads to a lack of accountability for officers. This is linked to issues of corruption, and the Municipality trying to evade responsibility for its decisions. This is made very clear in the third case. The issue of equity could be presented in terms of fines imposed on residents without considering their socio-economic status and treating developers and residents differently from one case to another.

Table 8.2: Linking the case studies with the UGI model.

UGI	Cases	Issues
Effectiveness	1, 2, 3 and 4	<ul style="list-style-type: none"> Low staffing levels is attributed to low revenue and budget of the Municipality, which affect the capacity of the local planning authority and lead to take arbitrary decisions and lack of monitoring development, where there are breaches of zoning regulations. The Municipality imposes a fine but that is too low to act as a deterrent. The low revenue and budget of the Municipality leads to low salaries which may tempt officers to take bribes.
Participation	1, 2 and 3	<ul style="list-style-type: none"> Changing and applying new regulations and granting developers building permission without public participation, which created conflicts between stakeholders. The Municipal Council held a public hearing in the first case to listen to both developers' and residents' points of view. The Municipal Council managed to convince the Municipality to stop the development of apartment blocks. Residents who are excluded and have no voice in the system managed to change decisions.
Accountability	1, 2, 3 and 4	<ul style="list-style-type: none"> The Municipality did not want to take the responsibility for its decisions, especially, in the third case. The lack of accountability led to corruption. The Municipality in the first case did not follow the regulations owing to the lack of accountability. The lack of accountability makes some developers evade compliance with the law.
Equity	1, 2, 3 and 4	<ul style="list-style-type: none"> Developers in the first three cases were treated differently from the developers in the fourth case, where the Municipal Council sympathised with the residents. Residents in the fourth case were treated differently than the residents in the first three cases, where the Municipality imposed sanctions on them. The Municipality imposed the same fine regardless of the financial circumstances of the residents.

8.3.2 Cultural resistance to accept the regulations

Through the cases it was possible to see that there have been two major cultural issues for resisting the regulations. The first issue was privacy and the second issue was complying with the regulations. As mentioned in Chapter 4 (pg. 141), many western and Saudi scholars' emphasise the importance of protecting privacy in their work (Al-Hathloul, 1981; Salagoor, 1990; Tipple, 1992; Eben Saleh, 2002).

Privacy in Saudi Arabia not only refers to the protection against intrusion as it is also taken to mean in Western communities, but is a religious, cultural and social obligation of the community (Eben Saleh, 1997; Al-Hemaidi, 2001). As Tipple mentioned in his work (1992) it is a generally important requirement for residents to be able to prevent their indoor and outdoor spaces from being overlooked, particularly for those who value privacy, but especially Muslims. However, according to an interview with the chairman of the Council (2009) the Saudi society reveres privacy more than any other society but infringes on privacy more than any society by applying inadequate regulations.

In the first three cases it was possible to see how privacy was compromised because of two issues. Firstly new zoning regulations were implemented without any regard for existing development. This was due in part to the Municipality being keen to implement the new regulations as soon as possible. This pressure led to a lack of zoning ordinance to clarify the regulations in detail. Secondly, imported planning regulations, where design professionals give more priority to physical aspects such as, building height, plot coverage and others aesthetic aspects instead of considering imperative social and cultural values. This is often attributed to the use of planning professionals who may have studied abroad where privacy is not such as a critical issue and foreign consultants who have limited understanding of the Saudi cultural context. Eben Saleh (2001) talks about the regulations in question being imported from Western countries without adapting them to the socio-cultural context. According to Daghustani (1991) implementing and enforcing regulations can be difficult if the applied regulations are not relevant to the local conditions. Therefore, it should be recognised that imported planning regulations need to be tailored to fit or should emerge from the

culture. In the traditional city for example privacy played a significant role in the building design, where according to Tipple (1992) the outcomes of the traditional neighbourhoods was a fruitful sequence of negotiations and agreements amongst the inhabitants to overcome conflict.

Two reactions emerged from the villas' inhabitants as a result of compromising their privacy. The first reaction was to construct steel or corrugated plastic structures on the top of dwellings' fences to protect the villa inhabitants' privacy from being violated by adjacent neighbours. In the case of the girls school the girls were no longer able to get direct sunlight, which has health implications as vitamin D intake can be reduced. This is already an issue for Saudi women (Al-Sibai, 2013). Raising their voices and changing planning decisions was the second reaction of the residents.

One of the main differences between a developed and developing countries is to the extent to which respect for and comply with the law is shown. It is commonly believed in Saudi Arabia that Saudis do not like to comply with rules or regulations that do not suit them. In the case where the parking level was converted to a dwelling we can see perhaps a small example of what is seen to be perhaps characteristics of developing countries. Officials from the Municipality, academics and the consultant were quick to suggest that some developers are consistently disorderly and negligent in the face of planning regulations. A senior academic indicated that this might be owing to the heterogeneity of the society. Many people from developing countries and nomads migrate from villages to work in Jeddah. These migrants bring their culture with them, which is not necessarily in step with the city culture. In some cases migrants build entirely without seeking any permission (Abdulaal, 2012). The view is that this eventually became a societal norm. Thus, if developers and inhabitants who are expected to comply with the new regulations, as reported in Arimah and Adeagbo (2000) do not do so then it has a negative influence on implementation. It was also clear that there was a general lack of awareness about the regulations.

Developers view contemporary zoning regulations as a hindrance to land owners' rights to act on their plots around, thus, to maximise returns. Salagor (1990) emphasises that zoning regulations should respect the right of ownership as is the

case in the traditional neighbourhoods, where the land owner has the right to build and act on his property as he wishes as long as he abides by the Islamic principle that he causes no harm. However, officers in the Municipality were clear that developers cannot be allowed to decide these things by themselves. If developers are building to house their own families then they would be more likely to comply with the regulations. But if the developers are building for investment then they are looking for money.

8.3.3 Planning aspects

Through the cases it was obvious that there has been a serious conflict among the stakeholders. Clearly there is a fundamental friction between mixing villas and higher floors apartment block close by in one residential zone. A key question should be addressed: what is the impact that one use has on another, particularly different residential uses in one zone?’

This analysis demonstrated that:

- The contradictory position of the Municipality in the first three cases, where the Municipality adopted and applied the new regulations and stopped the developers from building after the residents' complaints. These inconsistent decisions weaken the capacity and the position of the local authority, especially, the Municipality and show the lack of confidence among the Municipality's officers.
- Although, the developers were satisfied with the new regulations, because the regulations helped increase their profits and maximise returns, the developers complained that zoning regulations are hindering them from acting freely on their plots and therefore reducing their potential profits.
- Compromising the villa residents' privacy was the main problem in the first three cases which made people dissatisfied about the new zoning regulations. The financial losses that the developers incurred were another problem, which affected the position of the local planning authority and the implementation of zoning regulations.
- The people who are powerless and have no voice in the planning system are powerful and have an influential force in the implementation of planning

decisions. In addition, people tend to assess the performance of the planning system through the paradigm of what they got out of it.

- The weak capacity of the local authorities, especially, the Municipality led to issues in the implementation of the new zoning regulations, which in turn led to problems and lose in trust in the performance of the local authorities.
- The Municipality in the fourth case was dissatisfied with those who were not compliant with the new regulations considering it disrespectful of the law. However while believing this the sanctions were applied to the residents.

8.4 Discussing the Cases from the Perspective of the Islamic Law

This thesis cannot explore these issues in any great depth, however, a focus group was held with lawyers to scope out the issues of harm. They generally considered that regardless of those that had been harmed in these cases, they should appeal to the Board of Grievance or local courts, though these are time consuming processes. The lawyers based their opinion on one of the jurisprudence principles '*Al-Qawa'id Al-Fiqhiyah*' which is, 'Do not harm others and others should not harm you'.

In the first three cases, the lawyers believed that these cases were complicated because while the developers were harmed by stopping them from building when they were acting legally, the local authorities did the right thing by stopping the developers from compromising the local residents' privacy which was also an act of harm. In their discussion they revealed that based on Islamic law, there are three jurisprudence principles that underpin the residents' position (Table 8.3).

Table 8.3: The jurisprudence principles that support the developers', residents' and Municipality's positions

Municipality	Developers	Residents
• Islam respects the	• Harm must not	• Repulsion of evil should be addressed

<p>laws as long they do not contradict.</p> <ul style="list-style-type: none"> The Municipality has the right to impose sanctions on those who were not compliant with the regulations. This would be considered a legal precedent. 	<p>be alleviated by an equal or greater harm, but by a lesser harm.</p>	<p>before inviting goodness.</p> <ul style="list-style-type: none"> If two evils are confronted, and one affects religious matter and the other is worldly in nature, the priority should be to repulse the former. Sometimes a prohibition may be allowed to avoid a greater one. If two evils are confronted, and one is greater than the other, the priority should be to repulse the greater.
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Firstly, repulsion of evil should be addressed before inviting goodness. They considered on the one hand, compromising privacy an evil act that should be stopped and on the other hand the provision of accommodation an act of goodness. So although the new regulations would encourage development and would increase the number of dwellings these new buildings should not compromise residents' privacy. Secondly, if two evils are confronted, one affects religious matter and the other is worldly in nature, the priority should be to repulse the former. The compromising of residents' privacy is an evil action that affects religious culture but developers lost money which is also an evil but worldly in nature. Thirdly, if two evils are confronted and one is greater than the other, the priority should be to repulse the greater. The harm done to religious culture is greater than that done to profit.

One of the lawyers had a different opinion, where he believed that stopping developers from constructing their buildings, especially when they began the projects legally is an unaccepted action that would cause harm on developers by costing them a lot of money. In addition, the lawyer believed that although privacy is an important religious aspect it could be considered a lesser harm than losing money, where architects could provide solutions to prevent privacy from being compromised.

In the fourth case the lawyers believed that the Municipality has the right to impose sanctions on those who were not compliant with the regulations. Otherwise this would be considered a legal precedent from the perspective of Islamic law, which comes under the Islamic category of 'analogy'. Although the lawyers clarified that Islam requires Muslims to obey the laws as long as these

laws do not contradict the Islamic principles, they also revealed that Islam allows people to use their properties as they like as long as they do not cause harm to others. Regarding the fourth case, the lawyers mentioned that there are three jurisprudence principles that support the residents' position, especially for those who were living in dwellings that were transformed from a parking level into dwellings. Firstly, it is mandatory to execute the lesser of two harms. They considered evicting individuals and families from their dwellings would cause more harm to society than changing the parking level to dwellings. Secondly, if two evils in question are confronted, one is clearly greater than the other; the priority should be to resist the greater. The lawyers clarified that the evictions or cutting off electricity are considered a greater evil than been non compliant with the regulations. Finally, sometimes a prohibition might be allowed to avoid a greater one, so it was felt that the Municipality could allow the illegal conversion of parking levels to apartments to avoid greater evils.

Although, the lawyers emphasised the importance of compliance with regulations and the Municipality need to enforce, they clarified that according to the Islamic principles the residents should not be evicted sent out of their non-compliant dwellings to prevent because of the negative impact on the families. Accordingly, the lawyers granted the owners the right to build on their property as they like as long as it causes no harm to others. The lawyers emphasised the charges should be brought against those who sold these non-compliant dwellings not the residents. The discussion between lawyers demonstrated that these issues are far from clear and there is a complex knot of problems, where it is difficult to establish where the greater harm has been caused and everyone involved in the process feels that they have suffered some harm.

8.5 Proposed Solutions by Professionals and Lawyers

This section discusses some suggested solutions to alleviate infringement of privacy from the perspective of both professionals and lawyers. It appears that alternatively architectural solutions would have been appropriate to keep everybody content by preserving the developers' profits, creating housing and not disturbing residents. The developers in the first and second cases could have been asked to plant trees or to use translucent or opaque glass in their buildings or

provide horizontal or vertical sun shading for the neighbours, thus providing a simple solution to the conflict (Figure 8.15).

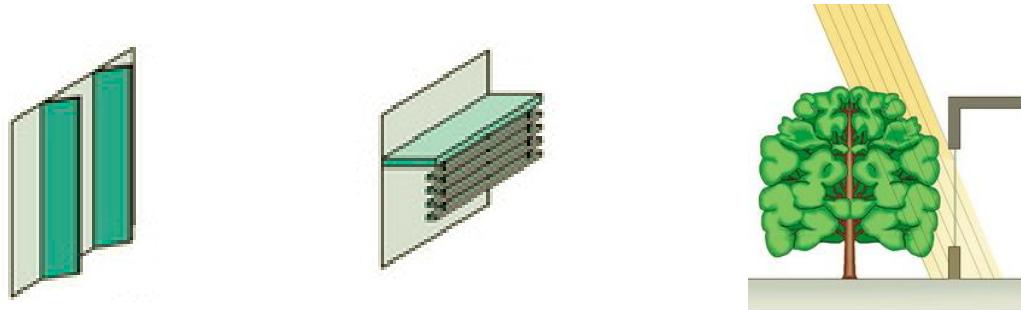


Figure 8.15: Some suggested solutions to screen the windows.

Source: The Carbon Neutral Design Project (CNDP) (2012).

From the legal perspective, the Municipality could have asked landowners to present their land title to determine whether the plots should be developed according to old or new regulations. If the developers bought the land before the Municipality adopted the new regulations, their actions should be judged under the terms of that agreement and if they bought the lands after then their work should be considered according to the terms of the new agreement under the new regulations.

8.6 Conclusion

This chapter has used four case studies as rich points of learning to understand the impact of applying the new zoning regulations in existing neighbourhoods. What emerged from these case studies was the serious issue of infringement of privacy. The decision to mix different types and heights of residential buildings and make them contiguous to each other caused serious conflict between stakeholders. The problems were magnified by the planners' practice of dealing with buildings as separate entities and not as elements of a broader neighbourhood setting.

Three issues emerge strongly from the case studies exploration. Firstly, we might question the cultural fit of what are imported regulations that were developed in non- Islamic contexts. However, and this is the second point, it might be that a vision of a denser more sustainable city might be achieved by more judicious application of new zoning regulations. This would require several major changes in local government practices. The chapter has illustrated the planning authority is undermined by poor resourcing including inadequate data and staff with a lower skill base have contributed to what are judged to be arbitrary decisions applied with little confidence. Uneven responses to monitoring caused by too few inspectors on poor salaries adds to a general view that compliance with the planning regulations is more voluntary than compulsory with instances of corruption being too common. The sobering reality that developers may take all the correct steps and have their development halted on with no compensation also serves to undermine confidence in the system. Finally the vexed issue of public participation arises very clearly.

In theory there is no place for the voice of citizens in the planning system and no mechanisms for their participation and consultation to allow objections to development to be heard before permission is given not after. However as the case studies demonstrate they are an influential force in shaping what happens on the ground. This raises the question 'Is it time to shift from government to governance?' The chapter has discussed the cases from the lens of Islamic law and has provided some solutions. The next chapter will explore in more detail the responses of residents in different zoning neighbourhoods to determine the extent to which the regulations are responsive to their needs.

Chapter Nine: Assessment of Residential Satisfaction with Zoning Regulations

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CHAPTER NINE: ASSESSMENT OF RESIDENTS' SATISFACTION WITH REGULATIONS WITHIN DIFFERENT ZONES

9.0 Introduction

This chapter presents the analysis and findings of the structured interviews collected from residents living in three zones (i.e. villas, apartments with the new zoning regulations and mixed between villas and apartments) during the fieldwork conducted between January and March 2010. The aim of this chapter is to address the level of residents' satisfaction with their dwellings and neighbourhoods and to which the regulations are responsive to people's needs.

The chapter is organised into four main sections. Section one presents and discusses the personal characteristics of the respondents of each zone. Section two explores housing characteristics in each zone. The third section assesses the overall resident satisfaction in each zone. Seven variables are used to measure the level of residents' satisfaction with their dwellings and 10 variables grouped in three categories to measure the level of satisfaction with their neighbourhoods. At the same time, descriptive and inferential statistical analyses were carried out using Chi-square and Pearson's correlation coefficient (r). The last section discusses how the UGI model fits with residents satisfaction.

9.1 Social Characteristics of Households

This section presents socio-demographic characteristics of the respondents. The current residents are characterised in terms of socio-economic demographics; residents' age, nationality, marital status, household size, education, and income are all taken into account.

9.1.1 Respondents' age and nationality

Table 9.1 illustrates that more than quarter (26.4 per cent) of the total sample (250 respondents) were between the ages of 40 and 44, followed by the age group of 45-49 (22.8 per cent) and 8.8 per cent were older than 49, while the young age group 25-29 constituted 5.2 per cent.. The results of carrying out Kruskal-Wallis

test reveals that the villa zone is significantly dominated by the oldest group, while those who live in the apartment zone make up the youngest group. The disparity could be attributed to family size and household income.

Table 9.1: Descriptive statistics characterising the respondents' socio-demographic.

		% Villa Mixed-Use Apartment under new Regulations			Total
Age (n=250)	25-29	2.9	5.4	6.5	5.2
	30-34	2.9	20.5	22.6	18.4
	35-39	14.7	17.8	25.8	18.4
	40-44	38.2	23.2	32.3	26.4
	45-49	26.5	23.8	12.8	22.8
	+49	14.8	9.3	0	8.8
Nationality (n=250)	Saudi	100	93	100	94.8
	Non-Saudi	0	7	0	5.2
Marital Status (n=250)	Single	0	0.5	0	0.4
	Married	100	99	93.6	98.4
	Divorced	0	0.5	3.2	0.8
	Widowed	0	0	3.2	0.4
Household Size (n=250)	Small (1-4)	17.6	33	38.7	31.6
	Medium (5-8)	76.5	60.5	61.3	62.8
	Large (9-12)	5.9	6.5	0	5.6
	Mean	6	5.5	4.7	5.5
Education (n=250)	Intermediate school	0	2.2	0	1.6
	Secondary school	8.8	8.6	3.3	8
	Technical school	3	10.3	0	8
	College	38.2	38.4	29	37.2
	University and above	50	40.5	67.7	45.2
Income (n=250)	3,000-3,999 SR	0	1.1	0	0.8
	4,000-4,999 SR	0	3.8	0	2.8
	5,000-5,999 SR	0	13	0	9.6
	6,000-6,999 SR	0	16.2	0	12
	7,000-7,999 SR	0	10.8	3.2	8.4
	8,000-8,999 SR	0	8.1	16.1	8
	9,000-9,999 SR	2.9	7.6	6.5	6.8
	10,000-12,000 SR	11.8	9.2	32.3	12.4
	+12,000 SR	85.3	30.3	41.9	39.2
Tenure	Owner	97	60.5	87	68.8
	Tenant	3	39.5	13	31.2

Source: Fieldwork, Jeddah, 2010

The table shows more than one-third (38.2 per cent) of respondents living in the villa zone are between the age of 40 and 44, followed by 32.3 per cent who are living the apartment zone in the same age group. The young age group, ages 30-34, are concentrated in the apartment zone 22.6 per cent and the mixed-use zone 20.5 per cent. Older respondents aged above 45 prefer to live in the villa zone 41.3 per cent and 33 per cent are living the mixed zone. The vast majority (94.8

per cent) of the respondents are Saudi. All of those living in the villas and apartments zones are Saudis, while non-Saudis were found in the mixed zone.

9.1.2 Marital status of respondents

Marital status plays an important role in changing people's places in terms of dwelling and neighbourhood, as marriage changes their economic means and social status. As can be seen in Table 9.1 the vast majority (98.4 per cent) of the 250 respondents are married, while 0.8 per cent was divorced and only 0.4 per cent are single or widowed. Additionally, all respondents living in the villa zone are married. Almost all (99 per cent) living in mixed-use zone and 93.6 per cent living in apartment zone are married. No single residents were reported as living in the apartment zone under the new regulations. However, two exceptions include two single men living in the mixed zone. Exceptions such as these are rare because, in Saudi Arabia, flats are allocated for families. Single residents are not allowed to live in an apartment building occupied by families. The building must be entirely allocated to single males or females in order to be socially acceptable.

9.1.3 Household size and structure

As discussed in Chapter 4, the Saudi family structure has undergone significant change within the last six decades from extended to nuclear family and continues to do so. In addition, it has become a household necessity to have a paid maid which has implications on space. Although the nuclear family increasingly has become the normal family unit, there are still few families who preserve the traditional structure and continue to live in extended family groups. For the purposes of this research, the household in this study includes the head of the household, his wife, children and servants¹. In some cases it includes co-resident relatives.

In Jeddah the family size was 5.2 persons in 2007 (Jeddah Urban Observatory Centre (JUOC), 2007b). Table 9.1 reveals that the respondents in this research tended to have above average families of between five and eight members (62.8

¹ The servant lives in the same dwelling unit but different floor in villas but in the same level or floor in flats. However, if the husband of the maid was working as chauffeur then the servant will not live with the family.

per cent). Just over a third had small families of one to 4 persons. While large households of between 9 to 12 were in the minority (5.6 per cent). True to the idea that the nuclear family has become the norm, the data reveals that only 8.4 per cent were extended families. The share of households with servants was predictably high at 84.4 per cent, where the overwhelming majority (85.8 per cent) of the households had one servant, 13.7 per cent had two servants and only in one case were there 3 servants. The Kruskal-Wallis test shows that the villa zone ranks the highest in household size with a mean of 6 persons, followed by the mixed zone with a mean of 5.5, while the apartment zone reported the lowest household size with a mean of 4.7 persons.

When looking at all three zones the dominant household was medium, where three quarters of the villa zone was occupied by households of this size; they also made more than 60 per cent of those in the apartment zone and in the mixed villa and apartment zone. Small households were found predominantly in the apartment zone and were least likely in the villa zone.

9.1.4 Level of education

Table 9.1 reveals that 45.2 per cent of respondents had at least one degree while more than a third had received a college education. Those who have completed intermediate education only with the lowest percentage at 1.6. Respondents in the new apartment zone were the most highly educated and those in the mixed zone reported the lowest level of qualification and education.

9.1.5 Household income

Disposable income is critical in determining location and opportunities to exercise choice in the dwelling. The household income is measured as the total and regular financial earnings of the working household members. The results of the sample (Table 9.1) show the largest proportion of households (39.2 per cent) had a total income of more than \$3,200 (12,000 SR) per month and only 12 per cent of the respondents were earning between \$1,600 and \$1,866 (6,000-6,999 SR) per month. The total income of respondents living in the villa zone ranges from \$2,400 to more than \$3,200 (9,000-12,000 SR) per month. The income of those living in the apartment zone under the new regulations ranged from \$1,867

to more than \$3,200 (7,000-12,000 SR) per month. The income of those living in the mixed-use zone ranges from \$800 to more than \$3,200 (3,000-12,000 SR) per month.

The results of the Kruskal-Wallis tests reveal variations in income distribution between the respondents amongst the three zones. Respondents living in the villa zone were wealthiest, followed by those living in the apartment zone under the new zoning regulations, while those living in the mixed zone report the lowest income. The findings show that more than a third (34 per cent) of respondents earning less than \$1,866 (7,000 SR) per month are living in rented flats in the mixed zone.

9.1.6 Tenure status

More than 68 per cent are owners and approximately one third (31.2 per cent) are tenants. Almost all of respondents living in the villa zone own their dwellings, followed by those who own flats in the apartment zone under the new zoning regulations (87 per cent), and approximately two thirds (60.5 per cent) of the those who live in mixed zone are owners. However, among the three zones, the mixed residential zone constitutes the highest percentage of tenants at 39.5 per cent. This may be linked to household income but it may also indicate that many of the dwellings in the mixed residential zone were actually bought by investors seeking to earn money from property rather than live in these dwellings themselves

9.2 Housing Characteristics and Conditions

As indicated in Chapter 5, the urban population growth in Jeddah has been coupled with a high demand for housing and owing to lack of housing supply and housing affordability, the Municipality of Jeddah applied new zoning regulations in an attempt to accommodate and respond to people's demands and needs by providing different housing types. This section focuses on housing characteristics and conditions in the selected sample to show differences, similarities, issues, and preferences between the three zones. Aspects considered include housing purchase prices, rental rates, housing finance, residency duration, aspiration (i.e. desire to move to another house), plot size, room quantity, persons per bedroom,

floor area, flat quantity per building, number of floors and parking availability are used to define the housing's character and condition.

9.2.1 Purchase price and annual rental rates

The costs associated with owning or renting housing indicates general housing affordability as well as the impact of zoning regulations on housing prices (Speare, 1974; Green, 1999; Evans, 2004; Glaeser et al., 2005; Quigley and Rosenthal, 2005; Glaeser et al., 2006; Ihlanfeldt, 2007; Eicher, 2008). Housing prices change as a result of supply and demand, price of building materials, and an extent, building regulations.

Table 9.2 illustrates the purchase price of 172 dwellings varies depending on type and zone. The table shows generally, the purchase price of houses for less than one-third (29.1 per cent) of the owners is between \$80,000 and \$160,000 (300,000-599,999 SR), followed by a price range of \$400,000 to \$480,000 (1,500,000 to 1,799,999 SR). In addition, 12.8 per cent of owners paid between \$320,000 and \$400,000 (1,200,000 and 1,499,999) to own a dwelling. Generally, the findings show the mean of price housing is \$354,457 (1,329,215 SR) and the median \$336,667 (1,262,500 SR) with a standard deviation of \$245,009 (918,785 SR). The results of the Kruskal-Wallis tests reveal that the villa zone as expected was the most expensive followed by the mixed zone then the apartment zone under the new regulations.

Table 9.2: Descriptive statistics of purchase prices in three zones.

		% Villa Mixed-use Apartment under new Regulations			Total
		Villa	Mixed-use	Apartment under new Regulations	
Purchase price (n=172)	-300,000 SR	0	7	3.7	5.2
	300,000-599,999 SR	0	27.7	70.4	29.1
	600,000-899,999 SR	3	0	11.1	2.3
	900,000-1,199,999 SR	15.2	5.4	14.8	8.7
	1,200,000-1,499,999 SR	6.1	17.8	0	12.8
	1,500,000-1,799,999 SR	24.2	13.4	0	13.4
	1,800,000-2,099,999 SR	0	14.3	0	9.3
	2,100,000-2,399,999 SR	21.2	3.6	0	6.4
	2,400,000-2,699,999 SR	12.1	2.7	0	4.1
	2,700,000-2,999,999 SR	3	0.9	0	1.2
	3,000,000-3,299,999 SR	6.1	6.3	0	5.2
	3,300,000-3,599,999 SR	0	0.9	0	0.6
	+3,600,000 SR	9.1	0	0	1.7
Min. SR		800,000	250,000	280,000	250,000
Max. SR		4,500,000	3,500,000	1,000,000	4,500,000
Mean SR		2,109,394	1,287,277	549,630	1,329,215
Median SR		2,200,000	1,300,000	480,000	1,262,500
Std. Deviation SR		983,492	825,888	195,654	918,785

Source: Fieldwork, Jeddah, 2010.

In a comparison between the three zones in terms of annual housing rent, it was found that the annual rent of villas in both zones (villa and mixed-use zones) is higher than other types of dwellings, followed by the rooftop villa in apartment's zones and flats. Additionally, there were more than 15 villas in the mixed zones for rent between \$21,333 and \$34,133 (80,000-128,000 SR) per annum. Only in one case was a rooftop villa, in the apartment zone under new zoning regulations, available for rent at an annual rate of \$21,333 (80,000 SR). However, it was found that most of the rented flats were in the mixed-use zone and only three flat are rented in the apartment zone under new zoning regulations, with an annual rent of \$9,333 (35,000 SR), which indicates that flats in the apartment zone were built for owner occupation.

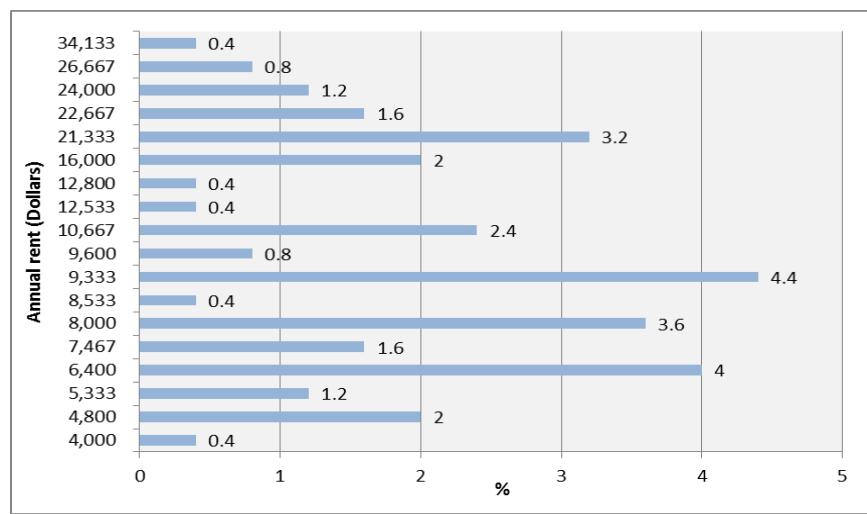


Figure 9.1: Housing rental rates per annum.

Source: Fieldwork, Jeddah, 2010.

9.2.2 Sources of housing finance

The funding source variable is the means in which residents are financially capable of renting or owning their current residence. The financial resources often include the prospective buyer's father. Fathers typically support their sons by giving them money or buying them property such as houses. Personal saving, loans from local commercial banks and interest-free government loans from REDF are also common funding sources, as well as inheritances². Other sources include selling other properties or current dwelling.

Generally, the findings show 68 per cent of the 250 respondents in the three zones financed the purchasing of their dwellings from a range of sources. It was common for respondents to point to multiple sources of funding for their own dwelling and a very common example would be someone who had inherited money, had taken a small bank loan and was also able to contribute an amount from their own personal savings

In a comparison between the three zones in terms of housing finance sources, the respondents in the villa zones relied on other funding sources (51.5 per cent) as

² Mostly people in Saudi Arabia try to avoid bank loan because of the complexity of the process, the interest reaches 3 per cent and it constitutes 60 per cent of the salary, which is over what Cullingworth and Caves (2009) suggested (30 per cent). However, owing to the high demand on housing and lack of the government loan people recently moved to bank loan. In both cases if the head of the household died and he did not pay the loan back, his family will automatically own the property without paying the rest of the loan.

the main source of finance, personal savings (61.3 per cent) as a secondary source or bank loan (25.8 per cent) and REDF (50 per cent) for those who needed third source. However, respondents who financed their dwellings in mixed zones relied on inheritances (41.8 per cent) and other (37.3 per cent) as the main funding sources. Personal savings (71.7 per cent) as a secondary source and in some cases as a tertiary source (63.6 per cent). In distinct contrast, respondents financing of their dwellings in the apartment zones used other along with inheritances – 37 and 22.2 per cent respectively – as their primary funding sources. The residents used both personal savings (54.5 per cent) and bank loans (31.8 per cent) as secondary funding sources.

Table 9.3: Descriptive statistics of source of finance for purchasing in three zones.

	Villa		Mixed-use		Apartment under new Regulations		Total		
	No.	%	No.	%	No.	%	No.	%	
Main source of finance (n=170)	Father	1	3	12	10.9	4	14.8	17	10
	Bank Loan	0	0	3	2.3	3	11.1	6	3.5
	REDF Loan	0	0	0	0	1	3.7	1	0.6
	Inheritance	5	15.2	46	41.8	6	22.2	57	33.5
	Personal Saving	10	30.3	8	7.3	3	11.1	21	12.4
	Other	17	51.5	41	37.3	10	37	68	40
Second source of finance (n=152)	Total	33	100	110	100	27	100	170	100
	Father	0	0	6	6.1	0	0	6	3.9
	Bank Loan	8	25.8	6	6.1	7	31.8	21	13.8
	REDF Loan	3	9.7	7	7.1	0	0	10	6.6
	Inheritance	0	0	5	5.1	2	9.1	7	4.6
	Personal Saving	19	61.3	71	71.7	12	54.5	102	67.2
Third source of finance (n=31)	Other	1	3.2	4	4	1	4.5	6	3.9
	Total	31	100	99	100	22	100	152	100
	Father	0	0	1	4.5	0	0	1	3.2
	Bank Loan	0	0	1	4.5	0	0	1	3.2
	REDF Loan	3	50	6	27.3	0	0	9	29
	Inheritance	-	-	-	-	-	-	-	-
	Personal Saving	3	50	14	63.6	3	100	20	64.5
	Other	-	-	-	-	-	-	-	-
	Total	6	100	22	100	3	100	31	100

Source: Fieldwork, Jeddah, 2010

9.2.3 Housing mobility and housing desires

In the field, no question was asked as to why people wanted to leave their current dwelling units. An insight into residents' motivation may be found in the work of commentators on residential mobility. Speare (1974) suggested that age, duration of residence, home ownership and overcrowding were influential factors. Other commentators found that the motivation is attributed to an individual stage in the

life cycle (Clark and Onaka, 1983; Clark et al., 1984; Moore, 1986; Dieleman and Schouw, 1989). Issues about tenure choice may depend on life path and income (Clark et al., 2003). In addition, size and price of the dwelling (Clark et al., 1996; Clark et al., 2003) and proximity to the workplace are also significant. Dissatisfaction with the physical amenities of the dwelling unit and neighbourhood are push factors for residents' mobility (Ukoha and Beamish, 1997; Clark and Ledwith, 2005; Anderson, 2008).

Residents' housing desires, combined with their ability to act on their desires, represent two variables providing a clear indicator of residents' housing aspirations. The data reveals approximately three-quarters (74.8 per cent) of 246 respondents has no desire to move. Residents who are especially disinterested in moving are living in the villa zones (96.9 per cent) and apartment zones under the new zoning regulations (83.9 per cent). Many households especially, in the apartment or villa zones had recently moved in and/or need to pay off loans before they could move. Less than one-third (30.6 per cent) of respondents living in mixed zone want to move, this was especially true for those living in the villas. Among the residents that do want to move, more than half of residents (59.4 per cent) would like to move to the villa zone, followed by (37.5 per cent) who would like to own a flat in either zones (apartment or mixed-use zones), and only, 3.1 per cent would like to move to rooftop villa.

9.2.4 Duration of residency

It was found that 74 per cent of 249 respondents have lived in their current dwellings for five years or less. This was followed by 20.5 per cent who have lived there from 6 to 10 years, 3.5 per cent from 11 to 15 years and only 2 per cent more than 15 years. The minimum length of residence in villa zones is two years and the maximum found is nine years. The minimum length of residence in mixed zones is one year and the maximum found in one case who is living in villa for 20 years, while the median is approximately five years. Those in the apartment zone were least likely to be long-term residents and this is owing to the fairly recent construction.

9.2.5 Plot and dwelling areas

Plot size is very much linked to the price of the dwelling and as a factor in determining affordability. Twenty four per cent of 34 dwellings in the villa zone have a plot area of 450 square meters, while the largest plot sizes of 1,100 square meters was enjoyed by 8.8 per cent. The mean is 529 square meters and the median is 487.5 square meters with a standard deviation of 201 square meters. In the mixed zone plot sizes ranged from 400 to 1,100 square meters and 25 per cent have a plot area of 600 square meters, with a mean of 617 square meters and a median of 600 square meters and a standard deviation of 127 square meters. There was no question about the plot areas in the apartment zones under the new regulations; the focus was on the flats areas and the area of the rooftop villa. The gathered data show that the minimum flat area in both zones (i.e. apartment and mixed zones) was 150 square meters and the maximum area was 250 square meters, with a mean area of 169 square meters and a standard deviation of 12.8 square meters, while the mean area of dwellings in the apartment zone is 207 square meters and the median 175 square meters with a standard deviation of 64 square meters. The area of rooftop villas is ranged between 200 and 300 square meters.

9.2.6 Number of floors

The number of floors in a single building is one of the most important aspects determining neighbourhood density, and has strong social, physical and economic impacts. The aim of increasing the number of floors is to accommodate population increases, and its corollary housing demand increase. The number of floors includes the rooftop villa in both the apartment and mixed-use zones. It was found that all the dwellings in the villa zones have two storeys, while all the buildings in the apartment zones have six storeys (four storeys containing single units and two storeys containing a rooftop villa). In the mixed zone, it was found that approximately half (49.7 per cent) of the 185 dwellings have two storeys, while 25 per cent have six storeys. As in Chapter 8 the high built density has caused many problems in this zone type, particularly in terms of physical problems such as infrastructure and services, as well as social problems such as the compromising of privacy.

9.2.7 Number of flats per floor

It was found that apartments in both the apartment and mixed-use zones are composed of two to three flats per floor, where the majority (88 per cent) of apartment buildings consist of two dwellings units per floor. Only in one case in the mixed-use zone, there was a villa with two dwelling units (a dwelling unit per floor).

9.2.8 Number of bedrooms and persons per bedroom

The total number of bedrooms includes the main bedroom, boys' bedroom, girls' bedrooms and servant bedroom. The majority (85.3 per cent) of the dwellings in the villa zones consist of four bedrooms and 14.7 per cent consisted of five bedrooms. In the mixed zone, nearly three-quarters (70.3 per cent) of the dwellings had four bedrooms; there is a minimum of two bedrooms in flats for rent. Seven is the maximum number of bedrooms, found in a villa with an area of 1,100 square meters. In the apartment zone about two-thirds (61.3 per cent) of the dwellings have four bedrooms, where three bedrooms is the minimum, constituting 9.7 per cent. Five is the maximum number of bedrooms at approximately one-third (29 per cent). Although, the data shows four is the common number of bedrooms in the three zones, the rooms differ in terms of area.

While it might be supposed that the largest dwellings enabled households to under occupy that is to have more space than they really needed the data reveals that the rate of occupancy per bedroom in the villa zones is higher than the other two zones studied with between 1.5 and 2.5 persons in this accounted for half of the total sample. In the mixed zones, the rate of occupancy is lower ranging from 0.5 to 1.49 person(s) (51.3 per cent), and between 1.5 and 2.5 persons (46.5 per cent). In the apartment zone, the occupancy rate per bedroom is between 0.5 and 1.49 person(s) at (83.9 per cent), and the remaining 16.1 per cent is between 1.5 and 2.5 persons. The discrepancy in occupancy rates between zones can be attributed to the different household sizes and bedroom numbers available in the three zones.

Table 9.4: Descriptive statistics of occupancy rate (persons per bedroom).

Villa		Mixed-use		Apartment under new Regulations		Total		
No.	%	No.	%	No.	%	No.	%	
Less than 0.5	0	0	1	0.5	0	0	1	0.4
0.5-1.49	16	47	95	51.3	26	83.9	137	54.8
1.5-2.5	17	50	86	46.5	5	16.1	108	43.2
More than 2.5	1	3	3	1.7	0	0	4	1.6
Total	34	100	185	100	31	100	250	100

Source: Fieldwork, Jeddah, 2010

9.2.9 Number of parking spaces and number of cars per household

The planning of Saudi cities is car based and each household must own at least one car because of the lack of public transportation. The need to consider where cars will be parked is vital in any zoning regulations. It was found that 44 per cent of 250 respondents have one car, followed by 38.8 per cent with two cars, 15.6 per cent have three cars and only 1.6 per cent have four cars. In the villa zone households owning one car were a small minority (8.8 per cent) and most had two cars (61.8 per cent). In terms of parking spaces in the villa zone, 70.6 per cent of the dwellings have two parking spaces and 11.8 per cent have been allocated one parking space, depending on the size of their villa.

In the apartment zone, 64.5 per cent of the inhabitants own two cars, 32.3 per cent have one car and in one case have three cars. Typically the head of household will have a car as with his son(s) and there will also be a family car used by the paid driver to transport women household members who are forbidden to drive. The new zoning regulations only provide one parking space per dwelling and therefore fail to recognise household need. It is this inadequacy that has left residents no choice but to park their other cars on the street causing congestion. Areas with high-density housing, such as apartment blocks, suffer particularly from high congestion owing to the mismatch between numbers of cars and numbers of parking spaces. The impact is most felt during the festival times and special occasions where visitor traffic adds to local misery. In the mixed-use zone, slightly over one half (52.4 per cent) have one car, followed by those who had two cars (30.3 per cent), and the remaining 15.1 per cent and 2.2 per cent who had three and four cars respectively.

9.3 The Overall Residents Satisfaction

As Amerigo (2002; quoted in Salem, 2007) stated, in order to measure the degree of resident satisfaction with their residential environment, there are three fundamental dimensions that should be considered: the dwelling, neighbourhood and neighbours. Therefore, this section examines resident satisfaction through measuring housing and neighbourhood quality³. The aims of the section are; firstly, to ensure that the households in the three zones are satisfied with zoning regulations that are provided by the local planning authority to control urban development and to ensure residents live in decent housing and built environment. Secondly, the section aims to highlight whether there are any level differences between residents satisfaction in the three zones. The outcome of the residents' satisfaction analysis reveals the current rates of satisfaction with the dwelling units and neighbourhoods, and additionally assesses these findings in relation to the zoning regulations currently in place.

9.3.1 Satisfaction with dwelling units

According to Ukoha and Beamish (1997), housing conditions to some extent reflect the nature of building codes and regulations. Accordingly, this sub-section explores residents' level of housing satisfaction by measuring seven variables, where people in different zones were asked to state their degree of satisfaction with: parking space, size of the dwelling, size of the room, number of rooms, size of the plot, number of floors, set-backs from (rear, access road and sides) in three zones.

Satisfaction with parking space

The allocation of parking space within a dwelling unit is an important factor that should be considered in the zoning regulations by planners because it has a measurable influence on residents' overall satisfaction. Residents were asked to state their level of satisfaction with car parking space(s) allocated by the current regulations for their dwellings. Table 9.5 shows that generally, more than half (56.2 per cent) of the 249 respondents are satisfied with their parking space(s). Those who are living in the villa zone (82.3 per cent) are particularly satisfied as

³ In this research the neighbours dimension is one of the variables to measure the level of residents' satisfaction with their neighbourhoods.

villas neighbourhoods are more spacious naturally allowing for more parking per household. However, a high level of dissatisfaction is more apparent in the apartment zone (67.7 per cent) which can be directly attributed to the new zoning regulations. Further analysis shows that there is a positive significant relation and correlation between satisfaction with parking space and zone type. The fewer the car parking spaces the greater the dissatisfaction.

Table 9.5: The resident's satisfaction with their parking space(s).

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Parking space (n=249)	Satisfied	82.3	57.1	22.6	56.2	
	Neutral	11.8	17.9	9.7	16.1	
	Dissatisfied	5.9	25	67.7	27.7	**
	Mean	3.85	3.3	2.5	3.3	*
	Std. Deviation	0.66	1	0.89	1	

** Highly significance (0.000). $p \leq 0.001$ and * Significance (0.00) $p \leq 0.05$.

People were asked if there any parking difficulties faced by visitors. More than half of the respondents living in the apartment zone claim their guests struggle to find parking spaces. 45.5 per cent of residents living in mixed-use zones said the same. It may be supposed that a denser city will lessen the distance between, amenities and place of work. This contraction might result in less reliance on the car but would need to be prompted by the introduction of an efficient and acceptable public transport system. In Saudi Arabia this is not necessarily an easy issue to tackle since it must also address the issue of gender segregation.

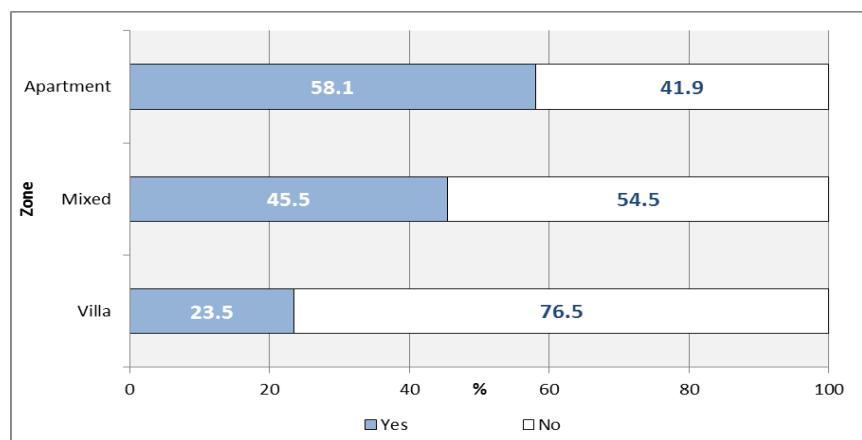


Figure 9.2: Visitors struggle to find parking spaces.

Source: Fieldwork, Jeddah, 2010.

Satisfaction with size of the dwelling

Dwelling size is considered a key factor impacting residents' dwelling satisfaction. As zoning regulations differ between zones and impact the dwelling size in the related zone, residents were asked to state their degree of satisfaction with their dwelling size. In response, the findings in Table 9.6 clearly show that the majority of (80.4 per cent) of the 249 respondents are satisfied with the size of their dwellings, especially, those who are living in the villa zone (97 per cent). The satisfaction might be attributed to the suitability of the dwelling to the size of the resident family. Under a fifth (19.3 per cent) of respondents living in the apartment zone makes up the most dissatisfied with their dwelling size. None of the respondents living in the villa zone reported dissatisfaction with their dwelling size. This shows that Saudis prefer to live in larger dwellings, as a villa, over flat in an apartment block. Additionally, the results of carrying out chi-square and correlation reveal that there is a significant relationship and correlation between residents' satisfaction, the size of dwellings and the zone type. The larger the dwellings the more satisfied the residents are.

Table 9.6: The resident's satisfaction with the size of their dwellings.

Variable	Type of zoning (%)			Total (%)	Chi-Square	r
	Villa	Mixed-use	Apartment under new Regulations			
Size of dwelling (n=249)	Satisfied	97	78.4	74.2	80.4	
	Neutral	3	6.4	6.5	6	
	Dissatisfied	0	15.2	19.3	13.6	*
	Mean	4.2	3.7	3.6	3.75	**
	Std. Deviation	0.48	0.84	0.88	0.86	

** Highly significance (0.000). $p \leq 0.001$ and * Significance (0.00) $p \leq 0.05$.

Satisfaction with size and number of the rooms

The size and the number of rooms in a dwelling are important factors impacting Saudis residents' satisfaction and choice of their dwelling. The results in Table 9.7 illustrate that out of a total of 249 respondents, 77.5 per cent are satisfied with the size of their rooms and the majority (80.8 per cent) are satisfied with the number of rooms in their dwelling. All residents living in the villa zone are satisfied with the size of their rooms and almost all are satisfied with the number of rooms. More than one-fifth (22.6 per cent) of the respondents living in the apartment zone are dissatisfied with their rooms' size and 12.9 per cent are dissatisfied with the number of rooms. In Saudi culture the need for gender

segregation between non-related men and women demands that there are separate sitting rooms (*Majlis*) for men and women who are not part of the nuclear family. Given the ubiquity of servants in Saudi household, there is also a need for their rooms. Further analysis reveals that there is a significant relationship and correlation between residents' satisfaction, the size and number of rooms in dwellings and the type of zones. This means the higher and larger the more satisfied the residents are. It is clear that the larger the dwelling and the more space available, the easier it is to divide space between men and women in ways which are culturally acceptable.

Table 9.7: The resident's satisfaction with the size and number of rooms in their dwellings.

Variables	Type of zoning (%)			Total (%)	Chi-Square	r
	Villa	Mixed-use	Apartment under new Regulations			
Size of rooms (n=249)	Satisfied	100	74	74.2	77.5	
	Neutral	0	7.6	3.2	6	
	Dissatisfied	0	18.4	22.6	16.5	**
	Mean	4.2	3.6	3.5	3.7	
	Std. Deviation	0.48	0.88	0.89	0.86	
No. of rooms (n=250)	Satisfied	97.1	80.6	64.5	80.8	
	Neutral	2.9	7	22.6	8.4	
	Dissatisfied	0	12.4	12.9	10.8	**
	Mean	4.2	3.8	3.5	3.8	*
	Std. Deviation	0.5	0.78	0.77	0.77	

** Highly significance (0.000). $p \leq 0.001$ and * Significance (0.00) $p \leq 0.05$.

Satisfaction with plot size

Table 9.8 shows that generally, (61.4 per cent) of the 249 respondents were satisfied with the size of the plot that their dwellings were built on. Those who were living in both the villa zone (88.3 per cent) and mixed zones (71 per cent) were the most satisfied, while small percentage of respondents (4.3 per cent) living in the apartment zones who are dissatisfied with the dwelling plot size, and significantly none of the respondents in the villa or mixed zones were dissatisfied. Satisfaction with dwelling plot size is attributed to planning regulations in each zone, purchasing ability, and income status. Findings reveal preferences for larger plots and bigger dwelling size. There is a significant relation and positive correlation between resident satisfaction and the size of the plots of their dwellings.

Table 9.8: The resident's satisfaction with the size of dwellings' plots.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Plot size (n=249)	Satisfied	88.3	71	54.9	61.4	
	Neutral	11.7	29	40.8	35.4	
	Dissatisfied	0	0	4.3	3.2	**
	Mean	4	3.5	3.8	3.65	**
	Std. Deviation	0.6	0.6	0.6	0.66	

** Highly significance (0.000). $p \leq 0.001$.

Satisfaction with the number of floors

The number of floors is determined by zoning regulations and has had an impact on residents' dwelling satisfaction. The household heads were asked about their level of satisfaction with the number of floors of their buildings. In response, the findings in Table 9.9 show that generally, more than two-thirds (64.2 per cent) of the 249 respondents are satisfied with the number of floors of their dwellings, especially, those who were living in the villa zone (82.4 per cent). However, the findings show that 29 per cent of the respondents in the apartment zones and 22.3 per cent of the respondents in the mixed-use zones are dissatisfied with the number of storeys in their dwellings. The dissatisfaction is attributed to the planning regulations in each zone, where zones with a high number of storeys increase density, urban intensity and pressure on services and infrastructure. There is a significant relationship and negative correlation between residents' satisfaction and the number of floors in their dwellings and zoning regulations. This means that the more floors the less satisfied the residents are.

Table 9.9: The resident's satisfaction with the number of floors of their dwellings.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
No. of floors (n=249)	Satisfied	82.4	61.4	61.3	64.2	
	Neutral	8.8	16.3	9.7	14.5	
	Dissatisfied	8.8	22.3	29	21.3	**
	Mean	4	3.4	3.4	3.5	(-)
	Std. Deviation	1	0.87	0.95	0.9	**

** Highly significance (0.000). $p \leq 0.001$.

Satisfaction with setbacks

Setbacks include setbacks from access roads, rear and sides of the plot. Saudi scholars (Al-Hathloul, 1981; Salagoor, 1990; Al-Hemaidi, 2001) mentioned that the regulations of setbacks have an impact on residents' satisfaction with their

dwelling. Although setbacks have created outdoor spaces, especially for villas, setbacks have been critiqued for not giving owners the right to use their own property as the owner wishes to exposing the land and building to more direct sunlight, and allowing for visual intrusion from the nearby neighbours. This was obvious in the previous chapter. Residents in different zones were asked to state their level of satisfaction with setbacks of their dwellings in response to these known complaints. In response, the findings of the study in Table 9.10 show that generally, the residents are dissatisfied with the rear and sides setbacks (42.7 per cent) and (45.7 per cent) respectively, while 36.5 per cent of the respondents are satisfied with the setback regulations from access roads. Among the three zones, it was found that residents in the apartment zone are the most dissatisfied. The dissatisfaction is attributed to the fact that setback from the four sides directly effects the apartment block size, in turn directly effecting the dwelling size. Additionally, the table shows that by carrying out chi-square and correlation there is a significant relationship between residents' satisfaction individually with setbacks and type of zones, but there is an insignificant correlation between setbacks, zone type and satisfaction.

Table 9.10: The resident's satisfaction with the setbacks of their dwellings.

Variables	Type of zoning (%)			Total (%)	Chi-Square	r
	Villa	Mixed-use	Apartment under new Regulations			
Set-back from access road (n=249)	Satisfied	39.4	38.4	22.6	36.5	** -
	Neutral	33.3	37.3	32.2	36.2	
	Dissatisfied	27.3	24.3	45.2	27.3	
	Mean	3	3.4	2.5	3	
	Std. Deviation	0.87	0.87	1	0.9	
The rear set-back (n=248)	Satisfied	9.1	12	9.7	11.3	* -
	Neutral	54.6	41.8	35.5	42.7	
	Dissatisfied	36.3	46.2	54.8	46	
	Mean	2.7	2.6	2.3	2.6	
	Std. Deviation	0.68	0.8	0.97	0.8	
Set-back from the sides (n=248)	Satisfied	24.2	16.2	9.7	16.5	* -
	Neutral	33.3	40	29	37.8	
	Dissatisfied	42.5	43.8	61.3	45.7	
	Mean	2.8	2.6	2.2	2.6	
	Std. Deviation	0.96	0.9	1	0.9	

** Highly significance (0.000). $p \leq 0.001$, * Significance (0.00) $p \leq 0.05$ and -Not significance.

Satisfaction with the level of privacy

As has been discussed throughout the thesis privacy is considered an important aspect in the Saudi context, residents were asked to state their degree of satisfaction with the level of privacy afforded in their dwellings. Table 9.11 reveals that generally, (60 per cent) of the 248 respondents are satisfied with the level of privacy, especially, those who are living in the villa zone and in the apartment zone. However, more than half of the respondents living in villas in the mixed zones expressed dissatisfaction with the level of privacy. This can be clearly attributed to the new regulations which has mixed buildings of different heights inevitably causing some households to be and to feel overlooked. There is a significant relationship and correlation between residents' satisfaction, the level of satisfaction and the type of zoning. This indicates that as privacy is increased satisfaction is raised.

Table 9.11: The resident's satisfaction with privacy.

Variable	Type of zoning (%)			Total (%)	Chi-Square	r
	Villa	Mixed-use	Apartment under new Regulations			
Level of privacy (n=248)	Satisfied	100	37	80.7	60	
	Neutral	0	8	16	4.4	
	Dissatisfied	0	55	3.3	35.6	**
	Mean	4	3	3.8	3.3	
	Std. Deviation	0.2	1	0.5	1	

** Highly significance (0.000). $p \leq 0.001$.

The overall dwelling satisfaction

The findings in Table 9.12 show the overall dwelling satisfaction level of respondents. It was found that generally more than half (58 per cent) of the respondents are satisfied with their dwellings, especially, those who are living in the villa zone. However, the findings reveal that respondents in the apartment zone are less satisfied though it should be stated that many of these residents were fairly recently moved in and was still in the process of settling down and their comments might be described as premature in some cases, however there is a significant relationship between residents' satisfaction with their dwellings and type of zoning.

Table 9.12: Overall residents' satisfaction with their dwellings in different zones.

Overall Satisfaction	Type of zoning (%)			Total (%)	Chi-Square
	Villa	Mixed-use	Apartment under new Regulations		
Satisfied	100	52.4	45	58	
Neutral	0	22	22.6	26.4	
Dissatisfied	0	25.6	32.4	15.6	**
Mean	4	3.3	3.2	3.4	
Std. Deviation	0.29	0.76	0.93	0.79	

** Highly significance (0.000). $p \leq 0.001$.

9.3.2 Satisfaction with neighbourhood

According to Vrbka and Combs (1991) and Ukoha and Beamish (1997) if residents are satisfied with their neighbourhood they ignore inadequacies in their housing. This sub-section examines the level of residents' satisfaction in three zones through measuring residential satisfaction with their neighbourhoods' aspects, satisfaction between neighbours and satisfaction with other uses.

Satisfaction with neighbourhood features

This sub-section examines the level of residents' satisfaction with their neighbourhood by measuring eight variables, where people were asked to state their degree of satisfaction with: population density, building height, noise level, light industry, safety and level of security, housing prices (ownership and rental rates), parks, and capacity of the streets to accommodate traffic volume within the neighbourhood.

As mentioned in Chapter 2 population density has a direct impact on the level of satisfaction. Table 9.13 illustrates, the share of respondents who are satisfied with the population density in the villa zone is larger (88.2 per cent) than the other zones. The high dissatisfaction level in the apartment 54.9 per cent and mixed-use 51.9 per cent zones may be attributed to the new zoning regulations, where people in the two zones are concerned about the capacity of the infrastructure to cope with increased density. There is significant relationship and negative correlation between residents' satisfaction with their neighbourhoods and population density. This means that the more population density the less satisfied people are.

Table 9.13: The resident's satisfaction with the population density in their neighbourhoods.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Population density within neighborhood (n=250)	Satisfied	88.2	41.6	32.2	46.8	
	Neutral	11.8	6.5	12.9	8	
	Dissatisfied	0	51.9	54.9	45.2	**
	Mean	4	2.9	2.7	3	(-) **
	Std. Deviation	0.55	1	1	1	

** Highly significance (0.000). $p \leq 0.001$.

In terms of building heights, Table 9.14 shows all the respondents living in villa zones are satisfied, while more than half (59.5 per cent) of the respondents in the mixed zones are dissatisfied with the building heights within their neighbourhoods. This may be attributed to the regulation given that villas and apartment blocks are mixed resulting in a landscape of different building heights with all of the issues that this raises for Saudis. The height variations continue to vary, particularly after the application of the new zoning regulations which has allowed for height diversity. The inconsistencies have compromised the privacy of inhabitants are living in villas as mentioned in Chapter 8. The table shows that by carrying out chi-square and correlation there is a significant relation and correlation between residents' satisfaction and number of storeys within their neighbourhoods.

Table 9.14: The resident's satisfaction with building heights in their neighbourhoods.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Building heights within neighborhood (n=250)	Satisfied	100	32.4	80.7	47.6	
	Neutral	0	8.1	3.2	6.4	
	Dissatisfied	0	59.5	16.1	46	**
	Mean	4.3	2.7	3.7	3.2	**
	Std. Deviation	0.47	0.96	0.86	1	

** Highly significance (0.000). $p \leq 0.001$.

Respondents were asked how they felt about noise levels and more than half (52.8 per cent) said it was acceptable. Those in the mixed zone were more likely to be dissatisfied (38.9 per cent) and those living in villa zones were all satisfied. It may be supposed that noise levels are linked to population density and this explains the high satisfaction found among villa residents, however, 84 per cent

of the residents of the apartment zone work satisfied with noise. The apartment zone is considered to be a high density area but at the time of the research was only partly occupied and this may explain the findings. There is a highly significant relationship and negative correlation between residents' satisfaction with their neighbourhood and noise level. This indicates that as noise increases satisfaction decreases.

Table 9.15: The resident's satisfaction with the noise level in their neighbourhoods.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Noise level within neighborhood (n=250)	Satisfied	100	38.9	83.8	52.8	
	Neutral	0	14.1	16.2	12.4	
	Dissatisfied	0	47	0	34.8	**
	Mean	4	2.9	3.9	3.2	(-)**
	Std. Deviation	0.55	1	0.43	1	

** Highly significance (0.000). $p \leq 0.001$.

Respondents were asked their views on the presence of neighbourhood light industries. Table 9.16 shows that 45 per cent of the total respondents are dissatisfied. The majority (88.2 per cent) of those living in villa zones are satisfied because there are not any light industries in their neighbourhood. More than half (55.5 per cent) of respondents living in mixed zone are dissatisfied about this issue. This may be linked to noise and air pollution created. There is a highly significant relationship and negative correlation between residents' satisfaction with their neighbourhood and noise level. This indicates that the greater the presence of light industry the more dissatisfaction grows.

Table 9.16: The resident's satisfaction with light industry in their neighbourhoods.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Existence of light industry within neighborhood (n=250)	Satisfied	88.2	27.7	77.4	40	
	Neutral	11.8	16.8	6.5	15	
	Dissatisfied	0	55.5	16.1	45	**
	Mean	4	2.6	3.6	2.9	(-)**
	Std. Deviation	0.33	1	0.76	1	

** Highly significance (0.000). $p \leq 0.001$.

Respondents were asked to talk about the level of safety and security within their neighbourhoods. Table 9.17 illustrates that more than two-thirds (63.8 per cent) of the respondents are satisfied and this is especially the case for those living in

the villa zone (81.8 per cent). However, half of the inhabitants living in the apartment zone feel dissatisfied. Residents in these areas are afraid that the high density brought by the new zoning regulations will lead to a deterioration of their neighbourhoods and increase the crime level, thus, leaving the area insecure. Some commentators such as McLaren (1992) and Williams (1999), state that high-density developments are often associated with high level of crime. There is a highly significant relationship but surprisingly there is not correlation between residents' satisfaction with their neighbourhood, safety level and zone type.

Table 9.17: The resident's satisfaction with safety and security in their neighbourhoods

Variable	Type of zoning (%)			Total (%)	Chi-Square	r
	Villa	Mixed-use	Apartment under new Regulations			
Safety and level of security within neighborhood (n=249)	Satisfied	81.8	63.2	46.3	52.8	** -
	Neutral	15.2	15.2	3.2	12.4	
	Dissatisfied	3	21.6	50.5	34.8	
	Mean	3.8	3.5	2.9	3.2	
	Std. Deviation	0.55	0.94	1	1	

** Highly significance (0.000). $p \leq 0.001$ and -Not significance.

All households were asked how they felt about their house prices and this was asked of all whether they were owners or tenants. As Table 9.18 shows 42.2 per cent are dissatisfied with the housing prices and the most dissatisfied with more than 80 per cent with those in the apartment zone. As previous tables have demonstrated apartments are quite expensive and given income levels of some residents represent quite a stretch. Again as discussed in Chapter 7, the professionals were of the opinion that increasing density was leading to higher housing prices. Not surprisingly, there is a highly significant relationship and negative correlation between residents' satisfaction and housing prices within their neighbourhood.

Table 9.18: The resident's satisfaction with prices of buying and renting in their neighbourhoods.

Variable	Type of zoning (%)			Total (%)	Chi-Square	r
	Villa	Mixed-use	Apartment under new Regulations			
Prices of buying and renting within neighborhood (n=249)	Satisfied	25.5	48.4	6.5	39.8	** (-) **
	Neutral	29.4	17.4	9.7	18	
	Dissatisfied	47.1	34.2	83.8	42.2	
	Mean	2.8	3	2	2.9	
	Std. Deviation	0.8	0.9	0.7	0.96	

** Highly significance (0.000). $p \leq 0.001$.

According to Mandeli (2011) parks are an important outdoor use that must be considered by planners because they contribute to well-being and neighbourhood satisfaction. Respondents were asked how satisfied they were with the parks availability in their neighbourhoods. In response Table 9.19 a large proportion of respondents (approximately 80 per cent) are dissatisfied with the parks, especially, those living in the mixed zone (86.5 per cent), followed by 74.2 per cent in the apartment zone, and surprisingly 41.2 per cent are dissatisfied in the villa zone. According to Burton (2000) and Masnavi (2000) greater densification may lead to the issue that green space may be sacrificed, which in turn may lead to a very hard city with no soft green spaces. The Municipality needs to address this deficiency. There is a highly significant relationship and positive correlation between residents' satisfaction and parks allocation within their neighbourhoods. This indicates the fewer the parks or the poorer their quality the less satisfied residents are with their neighbourhoods.

Table 9.19: The resident's satisfaction with parks in their neighbourhoods.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Parks within neighborhood (n=249)	Satisfied	29.8	1	3.2	5.2	
	Neutral	29	12.5	22.6	16	
	Dissatisfied	41.2	86.5	74.2	78.7	**
	Mean	2.9	2	2.2	2	
	Std. Deviation	0.8	0.55	0.7	0.68	

** Highly significance (0.000). $p \leq 0.001$.

Finally, streets' capacity to contain traffic volume inside neighbourhoods is an important aspect influenced by population density and urban intensity, which can lead to traffic congestion and thereby noise pollution. Table 9.20 reveals that 85.3 per cent of those are living in the villa zone are satisfied with the streets capacity to contain the volume of traffic. These streets are the least likely to be congested because of the better car parking and low density. Slightly more than half (51.7 per cent) of residents in the apartment zone are dissatisfied, followed by 48.2 per cent in the mixed zone. This is attributed to high densities in both the apartment and mixed-use zones, which is the result of the zoning regulations. Additionally, the table shows that there is a highly significant relationship and negative correlation between residents' satisfaction and streets' capacity to contain traffic

volume within their neighbourhood. This means that the more traffic volume the less satisfied residents are.

Table 9.20: The resident's satisfaction with streets capacity in their neighbourhoods.

Variable	Type of zoning (%)			Total (%)	Chi-Square	<i>r</i>
	Villa	Mixed-use	Apartment under new Regulations			
Capacity of streets to traffic volume within neighborhood(n=250)	Satisfied	85.3	42	38.7	47.6	
	Neutral	14.7	9.7	9.6	10.4	
	Dissatisfied	0	48.3	51.7	42	**
	Mean	3.9	2.9	2.8	3	(-)
	Std. Deviation	0.45	1	1	1	**

** Highly significance (0.000). $p \leq 0.001$.

Satisfaction between neighbours

The relationship between neighbours is an important factor influencing residents' satisfaction with their neighbourhood (Skjaeveland and Garling, 2002). Figure 9.3 shows that residents living in the villa zone expressed no problems with their neighbours. In contrast, more than half (59.5 per cent) of the respondents living in mixed zone and 26 per cent in the apartment zone have problems with their neighbours. Those who live in villas may rarely be in contact with neighbours and presumably do so on their own terms. Those living in high density are probably more aware of their neighbours lifestyle. Moreover, the apartments bring together people of varying lifestyles that may or may not be compatible and different cultures which may cause friction. Those living in villas in the mixed zones may be experiencing the issue discussed in the previous chapter, that is they suffer the intrusive gaze of their apartment dwelling neighbours.

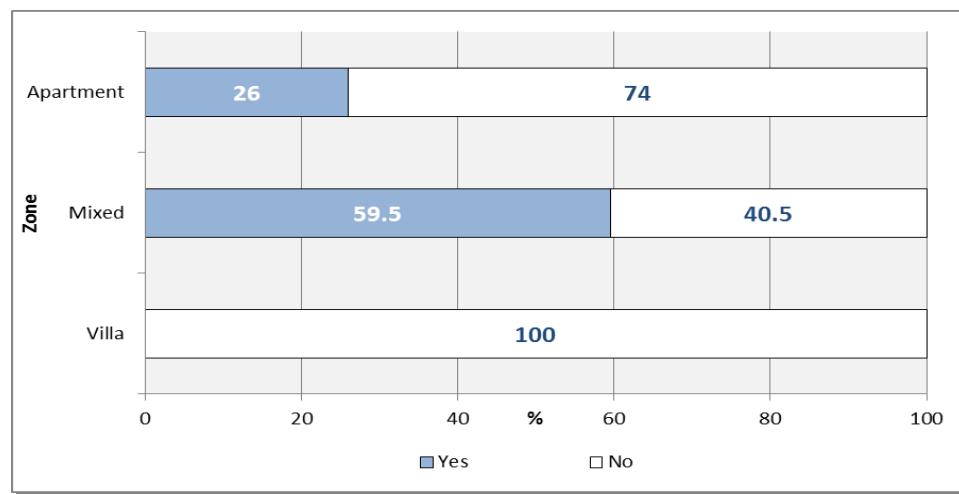


Figure 9.3: Degree of problems between neighbours.

Source: Fieldwork, Jeddah, 2010.

Satisfaction with neighbourhood amenities

This sub-section measure peoples' satisfaction with neighbourhood amenities including: schools and grocery outlets. Figure 9.4 reveals that more than half (53 per cent) of respondents living in the mixed zone and (23 per cent) apartment zone have experienced negative impacts from amenities. While further questions were not asked as it may be surmised that the issue here may relate to noise.

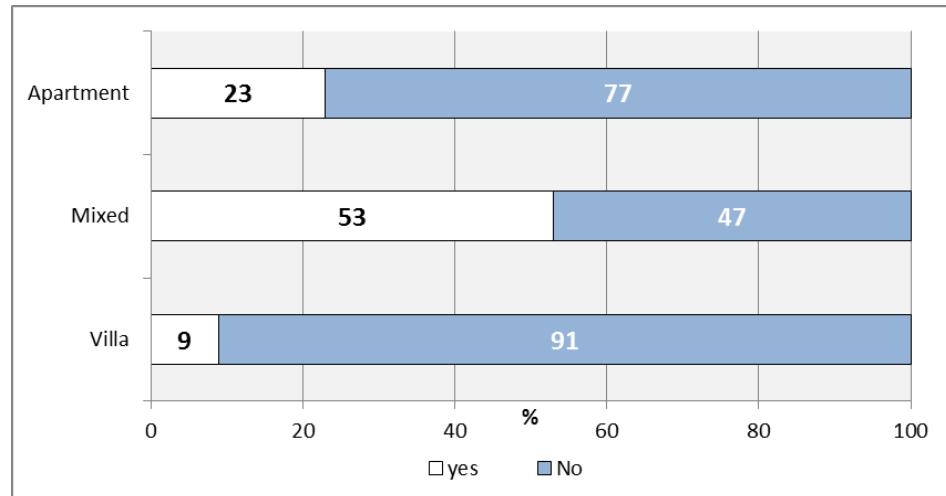


Figure 9.4: Residents' satisfaction with other uses.

Source: Fieldwork, Jeddah, 2010

The overall satisfaction with neighbourhood

The findings in Table 9.21 show the overall level of respondents' satisfaction with their neighbourhoods. Generally, more than one-third (36.8 per cent) of respondents are dissatisfied with their neighbourhoods. In a comparison between the three zones, 47.5 per cent of the residents living in the mixed zone are the most dissatisfied followed by those who are living in the apartment zone (41.5 per cent), while all of those living in the villa zone are satisfied. Analysis using chi-square shows there is a significant relation between residents' satisfaction with their neighbourhood and zoning type.

Table 9.21: Overall resident satisfaction with their neighborhood across zones.

Overall Satisfaction	Type of zoning (%)			Total (%)	Chi-Square
	Villa	Mixed-use	Apartment under new Regulations		
Satisfied	78.8	27.5	23.5	32.8	
Neutral	21.2	25	35	30.4	
Dissatisfied	0	47.5	41.5	36.8	**
Mean	3.8	2.8	2.8	2.9	
Std. Deviation	0.4	0.8	0.8	0.84	

** Highly significance (0.000). $p \leq 0.001$.

9.4 Linking between the Level of Residential Satisfaction and the UGI Model

Table 9.22 illustrates how the level of satisfaction within the three zones corresponds to the UGI. Through the lens of the UGI, the issues of low satisfaction regarding privacy and parking spaces may be attributed to low effectiveness of the Municipality represented by low staffing and poor budgets. There is no equity in terms of building heights and preserving privacy between those living in villas and apartment blocks in the mixed zone, unlike, those living in zones allocated for villa or apartment blocks. The decision of formulating and applying the new zoning regulations in a low density area without participation and consultation with the public led to a high level of dissatisfaction. The level of residents' satisfaction with their neighborhoods and dwellings might change if the Municipality consulted people and allowed them to be part of the decision-making. The Municipality should be held accountable for causing problems between neighbours by mixing different types of residential dwellings with different heights.

Table 9.22: The linkages between residential satisfaction and the UGI model.

UGI	Issues
Effectiveness	<ul style="list-style-type: none"> • Low revenue and budget of the Municipality led to under staffing and inadequate training of staff who implemented changes without considering the fundamental socio-cultural aspect of privacy. • The necessity of parking was also disregarded so that those living in apartment blocks under the new regulations zone owning more than one car were the most dissatisfied with the parking spaces.
Equity	<ul style="list-style-type: none"> • The mix of buildings of different height caused feelings that citizens were not being treated fairly. • Feelings of fairness were clearest in areas allocated for the same residential use and height (villa zone or apartment blocks under the new regulations zone).
Participation	<ul style="list-style-type: none"> • Making decision to mix different type of residential housing with different heights without participation led to low level of satisfaction. • The low level of satisfaction of mixed zone residents with their neighbourhoods in terms of density, building heights and privacy might be attributed to the lack of public participation. • Applying the new zoning regulations without consultation and public participation may lead to a high level of dissatisfaction for those living in apartment blocks with the new regulations, especially in terms of parking spaces and dwellings size.
Accountability	<ul style="list-style-type: none"> • The Municipality should be accountable for its decision to mix residential housing with different heights and the attendant problems of low satisfaction and breaches of privacy.

9.5 Conclusion

This chapter has measured the overall residential satisfaction by analysing the social and housing characteristics and measuring the level of residential satisfaction with their dwellings and neighbourhoods of targeted respondents in three zones. The aim was to explore whether the new zoning regulations are responsive to people's needs. In a comparison between the three zones, it was found that residents in the villa zone are older, have more family members and constitute the highest portion of higher income respondents. Respondents in apartment zones under the new zoning regulations are younger, live in smaller family groups, constitute the highest portion in terms of educated residents, and had lower incomes than those were living in the villa zones.

Residents in all three zones are dissatisfied with dwelling prices in their neighbourhoods. They are discontented with high housing prices. What we understood that residents in apartment zones are the most dissatisfied with their dwellings. Moreover, they are dissatisfied with density, safety and security within their neighbourhoods. The mixed zone residents are least satisfied with their neighbourhoods. They are less satisfied with the heights and current levels of privacy. Thus, those who are living in villas in the mixed-use zone spent a lot on their dwellings and want to move to villa zone because their privacy was compromised. In addition, findings revealed more conflict between neighbours in the mixed zones than other zones and they have experienced negative impacts from additional uses close to where they live. Thus, it seems that the new zoning regulations are not responsive to those living in mixed zones. The following chapter will provides the conclusion of this research, which links the research aims and questions to the research findings and will provides some recommendations for future research.

Chapter Ten: Conclusion and Recommendation

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CHAPTER TEN: CONCLUSION AND RECOMMENDATION

10.0 Introduction

The preceding findings lead to a number of conclusions and recommendations. In this final chapter, the aim is to bring together the overall outcomes of the research on the local planning authority's ability to implement zoning regulations in Jeddah. The chapter addresses the thesis' aims to explore the reasons for densification, the deficiencies in the planning system to implement zoning regulations and the implication of applying zoning regulations and residents' reactions.

The chapter is divided into five main sections. It commences by providing a brief review of the main focus and purpose, questions, aims and objectives that have directed the study and the methodology which shaped it. Reflection and responses to the research questions are provided in the second section. Section three illustrates the research's limitations. The penultimate section provides recommendations to enhance the performance of local planning authority, and thus, the implementation of zoning regulations. The last section suggests areas of future research within the field of urban governance, zoning regulations and compact development.

10.1 Overview of the Research Focus and Methods

As discussed in Chapter 1, Jeddah Municipality adopted a 'smart growth policy' to address issues of urban sprawl and housing affordability in the adoption of new zoning regulations in 2007. The new regulations intended to generate urban intensification and vertical expansion. As a result, four-storey dwellings with a two-storey roof villa and a parking level have been permitted in areas of existing low-rise detached housing. The implementation of the new regulations has caused conflict between stakeholders. The implementation of zoning regulations has exposed inherent weaknesses at the local level. As the local planning authority is responsible for formulating, implementing and enforcing zoning regulations, the research investigates links between urban government capacity and zoning regulation implementation by addressing two key issues: the ability of the local

spatial planning authority in Jeddah to implement zoning regulations and the implications of implementing the new zoning regulations within modern residential areas in Jeddah. Therefore, as stated in the first chapter, the two main research questions are: To what extent is Jeddah's local planning authority able to implement the new zoning regulations to achieve smart growth? What are the implications of applying the new zoning regulations within modern residential neighbourhoods?

To address the research questions, a conceptual framework was constructed to investigate relevant literature, as discussed in Chapter 2. What has been gained from this literature is an understanding of the main four aspects to achieve a good city, which are: urban form, adequate planning regulations, good urban governance and understanding peoples' acceptance and satisfaction. It discussed scholars' perspectives regarding two counter urban forms (i.e. urban sprawl and compact development) and their impacts on the built environment. In addition, it discussed zoning ordinance and its impact on the built environment, and the concept of density. Also, it addressed the issue of transferring and transplanting planning ideas and policies from a country context to another and the importance of cultural values. In terms of governance, various approaches of assessing good governance supported by various international aid agencies were illustrated. It was found that the UN-HABITAT-Urban Governance Index is a holistic approach that can be used for this study. Factors that influence institutional capacity (which includes management and resources capacity) were discussed. It illustrated how to measure resident satisfaction and the importance of acceptance for an urban form. These aspects are discussed in both developed and developing countries.

As stated in Chapter 3, the fieldwork went through four main phases; started by preparation phase for the pilot study, followed by the pilot study, then the evaluation of pilot study and preparation for fieldwork followed by the main fieldwork. This research employed mixed methods and case studies to collect primary and secondary data, in order to scrutinize the current deficiencies in the local planning government, which affects its ability to implement zoning regulations. A multiple approach is useful to compensate the limitation and

capture the strength of both quantitative and qualitative methods. The quantitative part of the research used face-to-face structured interviews in order to obtain objective measures data to apply statistical measurements. Respondents include household members, city officials and professionals who were asked to complete three different face-to-face structured interviews. Meanwhile, the qualitative part was used in order to gain more in-depth information regarding the contemporary situation. It includes observation, attending meetings with the local planning authorities, unstructured interview and focus groups. Secondary data included the collection of newspaper articles, official documents, statistics and maps. Case studies were identified and selected through the Municipal Council.

Residential zones were classified into three categories: villas, apartment blocks with the new zoning regulations and mixed residential zones. In the quantitative analysis, the total numbers within the sample size was determined by purposive sampling; 250 respondents of the residents, 15 officials and 20 professionals were interviewed. The research applied descriptive and inferential statistics to analyse quantitative data and description and thematic text to analyse qualitative data. Based on the data triangulated and analysed the findings of this study have illustrated a number of issues in the planning system at the local level that affect the implementation of zoning regulations and need to be consider in the future. In addition, the study used the UN-HABITAT UGI model to assess the performance of the local planning authority in Jeddah. The methodology used in this study was successful in achieving the aims and objectives of the research and opened new questions for future studies.

10.2 Reflecting on the Research Aims and Questions

The aims of this research were threefold. First, the research aimed to explore the rationale of the Municipality of Jeddah in increasing buildings heights. Second, it aimed to assess the performance of the local government and to identify the deficiencies in the system. Third, it aimed to explore the implications of applying the new regulations and residents' reactions.

Three questions were posed to achieve the aims of the research, as follows:

- What is the rationale of Jeddah Municipality in adopting and applying the smart growth concept?;
- At what standard is the local planning authority in Jeddah performing?;
- What are the implications of applying the new zoning regulation within modern residential neighbourhoods and what are the impacts on local people?

10.2.1 Jeddah Municipality's rationale to increase building height

Investigating the rationale of increasing buildings heights was the first aim of this research. To deal with the first query, there is a need to explore the role of planning has a role to play through the apparatus of zoning regulations in shaping the urban morphology of Jeddah and identifying issues led the Municipality to increase the specified city density in the new master plan. This was investigated by collecting secondary data regarding population and areas dedicated as a vacant land and residential use. The key findings are: 1) zoning regulations imposed by previous master plans have led to massive morphological changes in Jeddah; 2) the forecast is for a substantial increase in population that will lead inevitably to increased housing demand this is in addition to the population increase already experienced and the resultant housing pressure; 3) increasing floor height may be an appropriate coping mechanism to deal with housing demand while paying attention to the need for smart city growth.

The study in Chapter 5 has explored the role of imported planning ideas and regulations in transforming the urban morphology of Jeddah and justifications for the density increase. It has illustrated how Jeddah city like other Saudi cities has according to Salagoor (1990), Adas (2001) and Ur-Rahman (2011b) transformed from an Islamic form that was built according to Islamic principles, the scale of people and livestock, and characterised by an old contained traditional small town with a connected urban mass behind a protective wall to the contemporary fragmented urban landscape based on cars and characterised by super blocks, oversized plots and wide streets. This shift in the urban form and size of the city

was attributed to the dramatic increase in population, the wealth of the country and to imported land use regulations and town planning ideas from Western countries (Salagoor, 1990). The city witnessed a massive urban expansion in six decades from one to 1,765 square kilometre(s) and was accompanied with a massive increase in population of 100 fold. Jeddah has experienced five master plans, which have had strongly influencing city-wide change of the urban landscape and housing types, by introducing alien planning regulations (i.e., zoning, subdivision and building regulations). These regulations subdivided the city into zones.

The first four master plans imported the idea of low-density development leading to urban sprawl. In addition, in the late 20th century the city imported the concept of linear city owing to urban and natural determinations and primarily concerned with ideas of beautification. Thus, modern Jeddah looks more or less like developed global cities characterised by segregated land use, commercial strip development and leapfrog development, complete with the planning problems found in both developed and developing cities. These issues according to Clarion Associates (2000), Arbury (2005), Angel (2008), Jenks (2009b), UN-HABITAT (2009) and Sorensen and Okata (2011) can be presented in urban fragmentation, unsustainable development, high cost of infrastructure and transportation and unaffordable housing. In addition, the early regulations did not allow adequate parking space for apartment buildings.

In line with the historical trend to import Western town planning practices, Jeddah Municipality adopted the concept of a ‘smart growth policy’ in an attempt to control urban expansion and its implications (Bengston et al., 2004). As urban sustainability is the new urban trend for contemporary city development (Shin, 2010), the concept of compact city was considered one of the notable options to achieve sustainability (Gunn, 2003). Therefore, the latest plan attempts to address this issue by encouraging compact development. Jeddah Municipality addressed the issues of urban sprawl, sustainability and affordable housing by being the first city in KSA to adopt the national objective of ‘smart growth policy’ through the application of new zoning regulations adopted in 2007.

The new zoning regulations are bringing forward the idea of a compact city by promoting urban densification and vertical expansion. The belief was that smart growth policy or compact development would ensure sustainability, an efficient use of vacant land, control urban sprawl and provide affordable housing. The new urban form is shaped through the new block buildings, as indicated by the permitted six-storey dwellings with a parking level to solve the issue of parking availability and avoid traffic congestion inside neighbourhoods. However, this master plan raises new questions about its probable limited effectiveness in achieving smart growth because a vital component -form of public transit- has not been addressed by the Municipality.

The study has estimated designated area for future residential use and used different methods to estimate the future population growth by 2055. In addition, the research has estimated the future housing demand and found that floor height from four to five storeys may be an appropriate decision.

Therefore, it can be concluded that Jeddah city imported and adopted Western planning regulations and ideas such as the USA zoning regulations, the concept of linear city, beautifications, low-density development that encouraged urban sprawl and eventually the concept of compact city. These imported regulations and town planning ideas transformed Jeddah from a typical Islamic city to a modern city that looks more or less like developed global cities. As the concept of compact development was as Arbury (2005) described it a radical shift in urban design for cities in the USA, Australia and New Zealand, it is a radical shift in Jeddah too. In addition, the Municipality's decision to increase buildings heights may be attributed to the increase of population and their future housing needs and demands.

10.2.2 The performance of Jeddah Municipality

The exploration of deficiencies in the planning system and the factors influencing the performance of the local planning authority was the second aim of this research. To deal with the second query, there is a need to assess the performance of Jeddah Municipality, to explore the views of both professionals and officials on the Municipality's performance and ultimately to investigate the issues influencing the performance of the Municipality. To achieve this aim, the

research employed the UN-HABITAT index, mixed method and case studies. The key findings are: 1) a number of issues that affect the performance of Jeddah Municipality; 2) Jeddah Municipality is lagging behind other cities around of the world, some of which are poorer than KSA; 3) Jeddah Municipality still suffers from low capacity; 4) Jeddah Municipality is not able to implement zoning regulations, hence, deliver a good city.

This research has attempted to assess the performance of Jeddah Municipality to determine whether there are deficiencies in the planning system at the local level. The research has applied the UN-HABITAT – UGI model in Chapter 6 to reveal that although there is a marked improvement in Jeddah's governance from 2004 to 2010, the overall governance is still weak in comparison to other developed and developing world cities. Equity scores particularly poorly, followed by participation and effectiveness, while accountability scored the highest though there is scope for improvement here too. The findings of Jeddah Municipality correspond with Almarshad's (2011) and UN-HABITAT's (2013) argument that in general the quality of governance in Arab countries is low in compared to other developing countries in terms of participation, equity, accountability and effectiveness, which makes local planning governments in Arab countries incapable of managing the city. In addition, as seen through the lens of the UGI model, the local planning authority has heavy dependency on central government because of its own inadequate revenue base. This supports Al-Hathloul and Mughal's (1999) and Mandeli's (2010) findings, where municipalities in KSA are subject to central government funding and all financial resources are mainly allocated at this tier. Aligned with bigger national and cultural issues, where women are excluded from voting, standing for elections, and there is no clear statement explaining women's' role and rights in urban governance. Though these issues may be dismissed as needing change at the national level as discussions with professionals and officials revealed there was more scope for improvement here than might be first imagined. On the plus side, the Municipal elections were a significant reform in the political system that improved local governance, especially, in terms of participation.

In addition to modelling data, face-to-face structured interview with professionals and officials were employed to gain an insight into how these governance factors were experienced and viewed by key actors, which were discussed broadly in Chapter 7. They identified a number of issues that affected zoning regulation implementation that can be split into two groups: management and resources issues. From the professionals' (architects in private practice) perspective the management problems include: centralisation, over long procedures, corruption, lack of accountability, participation, and a lack of coordination and collaboration. According to UNCHS (1999) the greatest threat to a good governance is corruption. In addition, the application process for building permission and the system for lodging objections to planning decisions are unclear.

The new regulation was formulated and applied without public participation and consultation. Thus, this according to Arimah and Adeagbo (2000) and Bengston et al. (2004) affect the implementation of planning regulations and management growth. Professionals believe that citizens should participate in decisions and feel that this would facilitate their own work and overcome problems of poor awareness among their clients. This supports Shafiei's (2011) argument that good governance depends on the interactions of different stakeholders, where citizens have a voice and decision-makers are obliged to hear and it supports Healey's (2006) argument that public participation in planning is a mutually beneficial process. It could help to avoid any problem in the future as Elliott (2008) suggested. However, officials feel the public participation would merely be a hindrance. A number of professionals and residents showed there willing to participate in planning decisions. Surprisingly, there is a calling for women's' participation in planning decisions. This shows that at least in some sectors of Saudi society, there is awareness that the degree of change would be beneficial.

In terms of resources problems, officials unanimously agreed that there is a deficiency in the Municipality's budget; a lack of qualified staff; poor training and a shortage of staff with responsibility for monitoring and enforcing compliance. This supports Mandeli's (2008) findings that the municipalities in KSA suffer from a lack of financial resource, which is necessary from Leach and Percy-Smith's (2001) perspective to hire, train, retrain staff and provide

equipment. In addition, it supports saudi commentators arguments such as Daghustani (1991), Mashabi (1995), Abdulaal (2007) and Mandeli (2008;2010) that the absence of skilled and qualified staff has weakened the role of the Municipality in preparing, implementing and enforcing master plans. Thus, according to Elliott (2008) if the city does not have available money and trained and qualified staff, then even the best zoning tool will be ineffective and according to Repetti and Prelaz-Droux (2003) it made city management in developing countries more difficult.

For more in-depth investigation of performance issues the study in Chapter 8 has explored the processes in four planning case studies. What was revealed was that decision-making is inconsistent and at times arbitrary. Decisions are based on a poor information base and it is not common practice for the planning officer to make any site visits, so decisions are made purely on the basis of inadequate data. This supports Abdulaal's (2007) argument that the existing municipal data in Saudi Arabia suffers from deficiency, complexity and disorganisation, which hinders municipal officers' ability to make decisions and address urban problems and could lead decision makers to take a wrong decision. In addition, the local planning authority as mentioned by Arbury (2005) must identify and know where intensification should and should not take place before applying the planning regulations. The result of this is planners make decisions without knowing any of the particular neighbourhood context. In the case of an apartment block overlooking a girls' school, it is evident that better information about this neighbourhood or a site visit by the planning officer would have prevented what was seen as a gross decision to allow development. Officials find it difficult to take responsibility which is apparent in an unwillingness to accept that their decisions may have been incorrect and this in turn points to a general lack of confidence among the Municipality staff in applying the new zoning regulations. This may suggest poor levels of qualification or training or that they see their role as simply as giving permission but not having to explain why permission is granted or denied. In short they are functionaries but not educators. Arbitrary decisions do not encourage developers to follow the rules, ultimately serving to undermine confidence in the system which accords with Arimah and Adeagbo (2000).

This is already apparent with professionals talking about breaches of regulations being common which were attributed to cumbersome bureaucracy, the general lack of enforcement and accountability, low fines that do not serve as a deterrent, regulation that make-up or fit with local cultures and the general cultural leaning to ignore rules and regulation. This supports the argument of Arimah and Adeagbo (2000) and Baffour Awuah and Hammond (2014) that the level of compliance depends on the capacity of local planning authorities to enforce the regulations and the availability of necessary equipment to carry out activities such as monitoring of development and detection of violations. In addition, it supports Angle's (2008) argument that it seems that ignoring development controls is one of the attitudes or characteristics of developing countries. There was a lack of formalised public participation which supports Mashabi's (1995), Garba's (2004) and Mandeli's (2008) arguments that there is a lack of public participation. With reference to Arnstein's ladder, Jeddah seems to be oscillated between non-participation and tokenism, which allows citizens to have a voice as demonstrated by some public meetings on municipal affairs but it does not ensure that their voice will be heeded.

It can be concluded that this study has created a platform showing a number of issues in the current planning system at the local level needing to be addressed in the future in order to achieve good urban governance, which is important to improve the implementation of city zoning regulation. It has shown that the failure to implement new zoning regulations in an effective manner in Jeddah is attributed to the weak capacity of the local planning authorities in terms of management and resources, which supports the arguments of Mandeli (2008), Ibrahim and Shaw's (2009) and Song (2012) that to successfully implement the suggested set of zoning regulations there is a need to improve the capacity of the local planning authority. The traditional method for managing city development in Jeddah seems to be ineffective to implement and enforce planning regulations. This supports Rakodi's (2003) argument that traditional planning management in developing countries failed to relate land use regulations to the wide context of urban development and respond to the needs of all social groups. In addition, Jeddah's growing population and size demands change within the Municipality's management to deliver a good city. Thus, according to the UN (1998) there is a

need for an adequate system. This supports what Rakodi (2001), Healey (2002) and Coaffee and Healey (2003), suggested that there is a need to shift from government into governance.

10.2.3 Implications of the new zoning regulations

The third aim of this study was to investigate the implications of the new regulations on the built environment in residential areas and explore peoples' reactions. To deal with the last query, the research explored the current and estimated impacts of the contemporary zoning regulations on modern residential areas, by exploring the opinions of officials and professionals, measuring residents' satisfaction levels within different zones and discussing the role of local residents in the implementation of zoning regulations. This was achieved by face-to-face structured interviews and through case studies. The key findings are: 1) there are both positive and negative impacts of the new regulations; 2) the Municipality failed to consider the cultural importance of privacy – one of the fundamental principles of Saudi society; 3) people who appear to be powerless and have no voice in the planning system are nevertheless powerful and have considerable influence on the implementation of planning decisions; 4) residents who are living in apartment zones under the new regulations are the least satisfied with their dwellings; 5) residents who are living in mixed-use are the least satisfied with their neighbourhoods; 6) in the Saudi context, a blanket mixing of building heights in residential areas is culturally unacceptable.

This research has attempted to clarify the impact of imported planning ideas and the new zoning regulations' application on the built environment, the residents' reaction regarding the implementation of the new regulations and measure the residential satisfaction level in three different zones (villa, apartment with the new regulations and mixed-use). Generally, the professionals in Chapter 7 feel that the Municipality failed to consider the comprehensive studies that set out the possible implications of moving to new zoning regulations. This supports Salsich and Tryniecki (2003) and Garba (2004) arguments that development regulations are implemented without impact analysis to measure the impact on the built environment. This could have been done during the preparation of the plan and the regulations and might have prevented some of the issues found in the case

studies. In terms of positive impacts, professionals and officials agreed that the new regulations have played a major role in increasing development momentum that will, hopefully, control urban sprawl and reduce the cost of infrastructure provision.

In terms of negative aspects, the professionals' agreed that these regulations have increased the plots and dwelling prices which make housing unaffordable, have compromised residents' privacy and failed to address the issue of parking space. This supports what Mandeli's estimated in his work in (2008) that the decision to densify may lead to serious social and ecological problems and lower living standards, which Jeddah Municipality has not anticipated. However, the officials believe the rising house prices can be attributed to inflation particularly in the cost of building materials and that higher demand has led to an increase in market price. The linkage made by the professionals between densification and rising prices is supported by the literature, where according to Song (2012) compact city's policies hold the potential to raising housing and land prices, as well as construction costs, where low and middle income families will be out of the price range. The officials asserted that they had considered issues of privacy but this claims are refuted by the evidence of the case studies. This supports Moustapha (1985), Eben Saleh's (1997), Arimah and Adeagbo's (2000), Al-Hemaidi's (2001) and Tipple (2001) arguments that the imported regulations have failed to consider the norms and values of developing countries, especially, of the Islamic societies such as privacy and generally failed to respond to peoples' needs because they are inconsistent with the cultural orientation.

In order to safeguard their privacy residents were seen to use structures to prevent intrusive gaze. More radically, residents were prepared to object and were able to bring a halt to developments where there was a gross infringement in their opinion of fundamental privacy issues. Theoretically, there is no place for the voice of citizens in the planning system and no mechanisms for their participation and consultation, however, as the case studies demonstrated residents managed to shape what happens on the ground. These infringements of privacy issues were particularly acute in those areas where there was previous villa development which have now been in-filled by apartment blocks.

Duerksen et al. (2009) stresses that planning needs to reflect the society from which it springs and therefore ought to reflect the desires and aspirations of local people. To investigate the extent to which this is happening the study in Chapter 9 explored and measured overall residents' satisfaction level for their dwellings and neighbourhoods with residents in three different zones. Residents in all three zones were dissatisfied with setbacks, housing prices whether they were owners or tenants and the availability of parks. Those living in the apartment zone were the most dissatisfied with their dwellings, especially in terms of room size and parking capacity. In addition, residents living in the apartment zone were dissatisfied with the level of density, and had concerns about neighbourhood security and safety. The low level of satisfaction according to Francescato (2002) affects the success of implementing planning policies.

Those living in the mixed villa and apartment block zone are the least satisfied with their neighbourhoods, pointing to issues of building height, infringement of privacy, noisy environments and congested streets. This conforms to some scholars' arguments such as Cheng (2010) and Lawson (2010) that high-density can cause a lack of visual privacy, which can lead to social problems. In addition, it supports Cheng (2010) argument that high-density frequently causes traffic congestion. Respondents living in mixed-use zones have experienced conflict with their neighbours and negative impacts from neighbouring non-residential uses. In addition, those who are living in villas in mixed zone may be happy with their dwelling but not with their neighbourhood, thus, would like to move to villa zone because their privacy was compromised. This conforms to what Ukoha and Beamish, 1997 suggested in their work.

It can be concluded that this thesis has explored how planning policies, specifically, planning regulations which are rooted in a very different culture and values system are transferred, adopted and imposed on the city of Jeddah without critical analysis have had a negative impact on socio-cultural, economic and development aspects and have not responded to people's needs which supports Njoh (1995) point of view. In addition, this study has shown that local planning authorities in developing world such as Jeddah Municipality are generally bent to import zoning regulations that according to Hoyt (2006) are designed for a

society with different historical, socio-cultural, economic and political context and adopt the regulations without adaptation and impact analysis (Njoh, 1995; Arimah and Adeagbo, 2000), which might fail or aggravate urban problems that was intended to resolve (Clapham and Kintera, 2007). The study supports Njoh (1995) perspective that what is acceptable and adequate communities might not be suitable for another.

The officials believe that the new zoning regulations will deliver benefits, while the professionals feel that the negative impacts outweigh the positives. Three serious problems were identified in the course of this research; firstly, that the Municipality clearly failed to recognise the intrinsic importance of privacy and how they regulations would infringe this; secondly that the decision to implement the zoning regulations in already developed areas led to hostility and linked to this that citizens who are formally excluded from having any voice in planning decisions felt strongly enough to take action that halted development and called into question planning officers decisions. Thirdly, it seems that the decision to mix different residential types and heights, and make them contiguous to each other is unacceptable.

To sum up the study has explored that the predicted benefits from compact policy were not happening as they should have been. This can be attributed to what Bengston et al., 2004; Song, 2012 suggested that the concept of compact city could fail to deliver its promises owing to lack of efficient public management, inappropriate planning regulations and to the lack of acceptability of the compact city concept.

10.3 Research Limitations

As is the case with any research, this study was not without its limitations. The first issue is that owing to time and costs limitations this research could not discuss, explore and analyse each aspect of this study in a more focused and comprehensive way, which makes the results of this study inconclusive. Secondly there was an early intention to apply multiple-regression analysis but lack of data on some issues made this impractical.

10.4 Recommendations for Key Actors

The findings of this research helped to construct its recommendations to key agents to make Jeddah a good city, which congregate in the following four sets.

10.4.1 Spatial planning

First: There has been an over reliance on the ideas of Western planners and academics. Is this the time for Saudi built environment professionals and academics to consider reasserting Saudi values that would inform concepts like smart city? Therefore, the government might consider investigating whether there is a new vision for the sustainable Saudi city that might draw upon traditional urban forms and architectural styles.

Second: The Municipality needs to consider the use of public transport and how this might be provided. According to Elkin et al. (1991) a sustainable city form must have efficient public transport, which Jeddah current does not have. In addition, the Municipality needs to consider transit oriented development.

10.4.2 Delivering successful zoning regulation

First: Those tasked with drawing up regulations should place at the heart of their thinking a rich understanding of the socio-economic and cultural issues. This clear failure to link regulation with the values held by citizens has led to conflict and needs seriously to be addressed

Second: The local planning authorities need to commission impact studies at the stage where plans and regulations are being formulated and then should consult and involve citizens to discuss the zoning regulations before applying them.

Third: The Municipality, Municipal Council and professionals need to estimate and provide appropriate and various densities by using different techniques. In addition, the Municipality needs to agree on densities by involving residents and developers in decision-making.

Fourth: The Municipality needs to simplify regulations to increase understanding. The regulations should be presented in both text and drawing, such as the form-based code (see Chapter 2), to give a powerful visuals of the

place and to make the regulations easier to understand by planners, architects and the general public.

Fifth: Zoning and land subdivision regulations are interrelated. Thus, planners in the Municipality should not work on zoning regulations in isolation from land subdivision regulations and need to link these with housing strategies and policies relate to financing of housing. There should also be clear linkages between these policy areas and transport policy.

Sixth: The Municipality of Jeddah needs to increase its enforcement capacity.

Seventh: Jeddah Municipality needs to identify where new zoning regulations may be implemented because as this research clearly demonstrated a blanket implementation of the regulations is inappropriate.

Eighth: The Municipality of Jeddah needs to clarify the application procedures for the approval of building permission and objection regarding planning decisions.

10.4.3 Building institutional capacity

First: In order to build adequate institutional capacity there is an essential need for sustained reform at all the levels, from national to the local levels, to achieve good governance, thus, good implementation of decisions.

Second: The role of citizens in these processes needs to be examined with care. Firstly, if accountability is to be improved then citizens ought to have a clearer account of the actions of government and to have access to better quality data that supports their understanding of government activity. Secondly, and a further step on, would be finding intelligent and culturally appropriate ways to include citizen voices in planning decisions. Citizens should not be involved just to influence the plan but to shape it as mentioned by Duerksen et al. (2009). A further step and more controversially is it possible for the voice of women to be heard within the processes. Jeddah professionals were clear that there is a need to hear from women and therefore what is recommended is that the possibility of inclusion at least be explored. In all of this, there is a need to review the law of 1977 to give

the Municipal Council the power to promote and encourage participation through public meetings and local hearings.

Third: While action has been taken recently to uncover corruption there is more action to be taken though this might also be supported by instigating a review of public employees' salaries. It was suggested that inadequate salaries led to officers being tempted to take bribes.

Fourth: The Municipality, Municipal councils and other local agencies need to explore their processes of collaboration and coordination. There seemed to be a fragmentation and a general lack of mutual awareness which impedes good decision-making.

Fifth: Owing to massive urban expansion, there is a need to explore the means by which municipalities may be funded. The current overreliance on the centre leads to an unhealthy dependency and their inability to forward plan. Possibly, and this is out with the scope of this thesis there may be issues of taxes and charges for services that could be explored.

Sixth: A clearer and improved revenue base should lead to an investment in human resources for planning. The research found a clear shortage of well-qualified experienced and confident staff operating in the Municipality. There is a need to invest in data software as well as technical training.

Seventh: Planning in Saudi Arabia needs to consider the work cultures in which it operates. The practice of decision-making based on data alone, however the good data, may not lead to the best decisions. It should be established as good practice, where the planning officers need to visit sites and should become familiar with the neighbourhoods that they plan. This familiarity can only come by frequent.

Eighth: Up-to-date digital data, using GIS to generate and analyse might help decision makers to clearly identify situations on the ground and the impact of applying zoning regulations.

Ninth: There is a need to re-evaluate and compare the performance of the Municipality in future period of time, in order to show whether there has been performance improvement.

10.4.4 Measuring satisfaction levels

First: The local planning authority should investigate ways of regularly measuring citizen satisfaction with the quality of their neighbourhoods and dwellings.

Second: As peoples' nature is dynamic and changing within time, what is not accepted today maybe valued tomorrow and vice versa (Mandeli, 2011). Therefore, there is a need to measure the level of residents' satisfaction to those living in apartment under the new regulations with their dwelling and neighbourhood.

10.5 The Way Forward

It is possible from the research findings to point to future studies. How Jeddah continues to respond to the international concept of smart city provides opportunities for future research. If as this researcher hopes, what emerges is a vision of a sustainable city that enables citizens to enjoy a modern life but in a way that is rooted in Islamic values not Western values would be a fascinating process to explore. It will be interesting to investigate more about the sustainable city by using simulation software such as 'Urban Modelling Interface' (UMI) to measure to what extent the proposed urban form is sustainable.

Further in-depth study is needed for more study regarding the relationship between transportation, land use and density. Further study is needed to investigate the impact of the new regulations on public services. GIS spatial and 3D analyst could be employed in future research to explore and investigate the impact of the new regulations.

The issue of how to create affordable housing is another area of complexity that the current iteration of smart city has failed to address. It would be fascinating to explore precisely what vision of a sustainable city would create dwellings that will both acceptable and affordable to arrange a citizen groups.

Further research could be conducted to evaluate the performance of the Municipality in another future period of time. It would be of interest to assess two other Municipalities; one is local such as the Municipality of Riyadh and the other one is regional such as the Municipality of Dubai. A comparison between these two municipalities with Jeddah could be revealing of each municipalities strengths and weaknesses.

It seems to be increasing acceptance that citizen participation is happening and ought to be formalised because it is a positive step. It would be very interesting to explore what mechanisms are tried and what is deemed to be both culturally and politically acceptable. The further issue of the inclusion of women's voices in this would be a further step forward in democratising planning and in the slow journey of women to their greater acceptance as social actors. While none of these changes can be expected in the short term the direction of travel would seem to be encouraging.

Finally, additional study is needed to investigate the extent to which residents are satisfied with their dwellings and neighbourhoods, especially in apartment under the new regulations and mixed-use zones. Future research should ensure that there is no missing data for the application of multiple-regression analysis. In addition, it will be interesting to investigate the relationships among those living in one block of an apartment with the new regulations and how they mingle with each other.

10.6 Conclusion

The results of this research show that, although there is a progress in Jeddah Municipality's performance, it is still poor but with time and commitment may achieve what could be described as good urban governance. The research supports the policy of densification but with the caveat that this cannot be achieved in all areas and that radical change should not be attempted without impact analysis and depths of consultation. In addition, public transportation should be considered. Finally the research has demonstrated that, in spite of citizens *de jure* exclusion from participation in planning they are *de facto* an influential force in the implementation of planning decisions and this needs to be recognised and formalised.

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Appendices

Appendix 1: Qawa'id Fiqhiya – Islamic Principles in Arabic and English

These are cited (Besim S. Hakim and Zubair Ahmed-2006)

1	Harm should be eliminated Do not harm others, and others should not harm you. (U,A1) It is mandatory to commit to the lesser of two harms. (M) Harm must not be alleviated by an equal or greater harm, but by a lesser harm. (A2) Repulsion of evil should be addressed before inviting goodness. (A3, M, I) If two evils are confronted, one affects religious matters and the other is worldly in nature, the priority should be to repulse the former. (A3) If two evils are confronted, one is greater than the other, the priority should be to repulse the former. (A3,I) Sometimes a prohibition might be allowed to avoid a greater one. (M) Repulsing evil for ushering goodness is encouraged.	الضرر يزال لا ضرر ولا ضرار وجوب إرتكاب أخف الضررين الضرر لا يزال بضرر أشد منه أو يساويه وقيام لزム إرتكاب أخف الضررين درء المفاسد مقدم على جلب المصالح إن تعارضت مفاسدان إحداهما دينية والآخرى دنيوية إذ تعارضت مفاسدان إحداهما أكبر من الآخرى فدرء المفسدة الكبرى أولى قد يباح الممنوع لتفع ما هو أعضم منه يسوغ لدفع مفسدة تجلب مصالحة الامور بمقاصدها الاعمال بالنباتات كتمان العيوب خش محرم	1
2	Affairs are determined by their intent Deeds are judged by their intentions. (A1) Concealment of defects is deception, and that is prohibited. (I)	ما أصله الإباحة الشك في الشرط مانع من ترتيب المشروك عليه	2
3	Certitude cannot be dismissed by doubt The basis is for allowance. (M) A doubtful condition cannot be used for assigning responsibility. (I)	الشك لا يزول بالشك ما أصله الإباحة	3
4	Hardship ushers relief After confinement there is accommodation. (A1, M) To avoid difficulties, the Sharia allows many pressing necessities. (A1)	المشقة تجلب التيسير ما ضيق شيء إلا اتسع	4
5	Custom has the weight of law Convention has ascendancy. (M) Rules differ in response to different conditions and times. (A1) Each era ushers in new conditions, which necessitates its own requirements. (M) Whatever new changes occur in customs should be recognized, and whatever is abandoned should not be recognized. (M) Rules based on custom change with changes in that custom. (I)	العادة ممحكمة العادة غلبة تختلف الأحكام لاختلاف الأحوال و الازمان لكل زمان أحوال تتجدد و إقتضاءات تتغير مهما تجدد في العرف أعتبر ومهما سقط انتقض	5
الحكم بالعادة يتغير بغير العادة			

Appendix 2: Meetings at the Municipality and Municipal Council

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
1	Discuss ambiguities in the new zoning regulations.	<p>Discrepancies amongst the interpretations of the new regulations between the two departments are leading to inconsistency.</p> <p>A regulation exists to govern plots within an area above or below 400sqm. However, it is unclear which regulation applies to a plot of 400sqm.</p> <p>Difficulties in translating the regulations into drawings by the architects, especially, with respect to the car parking level regulation.</p> <p>The LPD suggested that they would cooperate with architectural offices by listening to their suggestions to find a solution for parking issues.</p>	<p>The head of the LPD revealed that their intention is to consider all the comments and issues that have been posed and will discuss them in detail with the consultant and ask the latter to make the regulations clearer and easier to understand by both the BPD staff and architects as well as allow no chance for discrepancies.</p> <p>The ambiguity issues in the new regulations have caused the BPD officers to conflict and be unable to clarify the regulations to architects.</p> <p>This was a good governance example by the Municipality where cooperation and coordination between the departments to develop the LUR in a good shape was achieved.</p>	<p>Ambiguity, inconsistency and discrepancy in the regulations.</p> <p>Coordination and collaboration between departments.</p>	<p>Staff of the Local Planning Department (LPD).</p> <p>Staff from the Building Permissions Department (BPD).</p>	Municipality

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
2	<p>Explain the purpose for the new zoning regulations.</p> <p>Explain the concept of zoning regulations.</p> <p>Predict and discuss the implications of the new zoning regulations in detail, so the Municipality can improve the regulations in the future.</p>	<p>Jeddah was the first city in Saudi Arabia to have a zoning map and textbook.</p> <p>Purpose of the new regulations is to solve issues in the previous master plans such as those relating to urban and social fragmentation.</p> <p>The Chairman of the Council gave explanation of the concept of zoning regulations and FAR.</p> <p>Concept of the new master plan (2004) is to implement smart growth by encouraging the city to expand vertically as a compact city, instead of growing horizontally through encouraging the concept of FAR.</p> <p>Professionals believe that increasing the density and building heights will affect infrastructure efficiency, compromise privacy, increase carbon dioxide emissions and noise pollution, affect safety and increase properties prices.</p> <p>The Municipality's staffs believe the new regulations will control urban sprawl, strengthen relationships between neighbours, reduce traffic congestion, and encourage developers to provide housing.</p> <p>The Municipality argued that the increase in prices is due to the high demand for housing and the increase of the prices of building materials and is not a result of the new regulations.</p>	<p>Professionals in general and some of the Council members anticipate that the negative impacts of the new regulations outweigh the positive.</p> <p>Some professionals and Council staff believe that the Municipality did not consider some aspects, particularly social aspects such as privacy, and economic aspects such as housing prices.</p> <p>Some of professionals and Council staff believe that the new regulations are inconsistent with poor people's income but the regulations were more adequate to developers and those of the middle to high-income strata.</p> <p>Municipality staff rebuked against the professionals' claim.</p> <p>Municipality staff disagreed and claimed that the positive impacts of the new regulations outweigh the negative impacts.</p>	<p>Participation and collaboration between local authorities and professionals from both the public and private sectors.</p> <p>The purpose of the new zoning regulations.</p> <p>Implications of the new zoning regulations from different perspectives.</p>	<p>The Council Chairman and some of its members.</p> <p>Mayor of Jeddah Municipality.</p> <p>Staff of Local Planning Department.</p> <p>Professionals from public and private sectors (e.g., academics, architects, developers and planners).</p>	Municipal Council

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
3	<p>Illustrate and explain new amendments in some sections in the new zoning regulations textbook.</p> <p>Discuss with the architects about any further enquiries related to new zoning regulations.</p>	<p>The LPD head clarified some regulations and answered questions related to the LUR.</p> <p>Architects were dissatisfied with the waiting period for building permits issuance and asked about the reasons for the long waits.</p> <p>The head of the LPD clarified for the architects issues related to building permission are the jurisdiction of the BPD not LPD.</p> <p>Regarding the regulations for the roof villas, questions were posed by the architects asking for clarification on some terms as well as the percentage allowed.</p> <p>An evaluation form was distributed to measure the attendees' satisfaction with services provided by the Municipality.</p>	<p>Some ambiguities remain in zoning regulations.</p> <p>Architects were dissatisfied with the waiting period for building permit issuance.</p> <p>There is lack of understanding and/or confusion amongst architects regarding the duties of Municipality's departments.</p> <p>The head of the LPD promised to consider the comments and issues related to the new regulations posed by the architects and to discuss them with the consultant to make the regulations clearer.</p> <p>The sense of collaboration and participation between the Municipality and the architects by involving the architects in decisions related to zoning regulations to improve them and enhance the Municipality services is considered another attempt to provide effective governance.</p>	<p>Ambiguities with new regulations from the view of architects.</p> <p>Dissatisfaction with the Municipality's services in terms of the building permission issuance period.</p> <p>Collaboration and participation between the Municipality and architects in decision-making.</p>	<p>Staff of the Local Planning Department (LPD).</p> <p>Architectural offices.</p>	Municipality

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
4	<p>Find the reasons for having a new master plan with new regulations.</p> <p>Understand the difference between the previous master plan and the new plan.</p> <p>Understand the stages of the regulations preparations.</p> <p>Find about the cost of the master plan and zoning regulations</p> <p>Find the possible implications of the new regulations.</p> <p>Investigate reasons behind issues that emerged after applying the new regulations.</p> <p>Investigate issues related to the Municipality's performance.</p>	<p>Previous 1987 master plan is out dated because unresponsive to the everyday and future needs of the city; the old plan also encourages urban sprawl.</p> <p>Spatial strategy of the county prepared in 2001; Structure plan in 2003 and adopted by the MOMRA in 2004; Master plan of the city in 2004; Zoning regulations in 2005 and adopted by MOMRA in 2006.</p> <p>Preparation of the new master plan and zoning regulations cost eight million riyals</p> <p>Positive effects of the regulations are: control of urban sprawl, infrastructure cost reduction, accommodating family structures, and encourages and supports investment.</p> <p>Lack of awareness amongst residents.</p> <p>The consultant believes that only planners should deal with the residents and the city needs and issues, where the residents do not have means to respond to their and the city needs</p> <p>Poor Municipality performance due to corruption, poor law enforcement, resources and coordination and cooperation between the Municipality's departments as well as other local agencies.</p>	<p>The consultant showed the positive effects of the new regulations and did not mention the negative impacts.</p> <p>Previous master plan was unsuited to the people and city's current and future needs.</p> <p>There is a need to increase the density</p> <p>The hasty preparation of the new regulations has greatly affected the overall effectiveness of the new regulations.</p> <p>Saudi society is generally resistant to new ideas and practices.</p> <p>Excluding people participation.</p> <p>Municipality has performed poorly in implementing the new regulations.</p>	<p>Factors affecting the success of the new regulations.</p> <p>Positive impacts of the new regulations.</p> <p>Process of creating the new master plan and new regulations.</p> <p>Comparison between the previous master plan with the new plan.</p> <p>The cost of the new master plan</p> <p>Issues relating to planning system at the Municipal level.</p>	<p>Municipality Consultant from the Al-Beeah Consultant Office (ACO).</p>	<p>Municipality</p>

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
5	<p>Discuss issues emanating from applying the new zoning regulations in two neighbourhoods, namely, Al-Ayen and Al-Salam.</p> <p>Discuss the status quo of land use in the two neighbourhoods.</p> <p>Discuss the reasons for changing the old regulations and applying the new ones.</p> <p>Discuss the reason for failing to inform the Municipal Council of the latest amendments to the new zoning regulations.</p>	<p>Villa owners object to the Municipal Council about the new regulations.</p> <p>Villas owners are concerned new building will compromise their privacy.</p> <p>The two neighbourhoods were previously zoned residential with a maximum height of two floors and lot coverage of 50% but without specifying which residential type.</p> <p>Municipality increased the building height in response to some residents' and developers' requests.</p> <p>Municipality blames the architects for not considering privacy in their designs.</p> <p>Municipality depends on old records and maps from GoogleEarth to obtain data about the current state of the land use in the two neighbourhoods.</p> <p>The Al-Ayen subdivision encompassed 121 villas of one to two storeys, 12 apartments with three storeys, 11 buildings under-construction and 66 vacant plots, representing 57%, 6%, 5% and 32% respectively of the total land use.</p> <p>The Al-Salam subdivision encompasses 94 villas with one or two storeys, 6 apartments with three storeys, 33 buildings under-construction and 107 vacant plots, representing 39%, 2%, 14% and 45% respectively of the total land use.</p> <p>Municipality decided to increase the number of storeys in the Al-Salam neighbourhood as the majority of the land is still vacant and based on the principle of equity the Municipality has treated the Al-Ayen similarly.</p> <p>Regarding the update issue the head of the LPD claimed that the zoning text could be downloaded from the Municipality website and they regularly update the information.</p>	<p>The issue remained unresolved; the Municipal Council and the Municipality staff decide to arrange another meeting to resolve the issue with the Mayor of Jeddah.</p> <p>Municipal Council was unconvinced with the Municipality's justifications for changing the regulations.</p> <p>The Municipal Council insists on updates of any changes in the zoning regulations before applying them.</p>	<p>Lack of resources.</p> <p>Lack of responsibility and accountability.</p> <p>Cooperation and coordination between the Municipality and the Municipal Council.</p> <p>Implications of the new regulations.</p>	<p>Municipal Council</p> <p>Local Planning Department (LPD)</p>	<p>Municipal Council</p>

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
6	<p>Discuss the methods that were used by the Municipality to increase the density in the two neighbourhoods.</p> <p>Provide acceptable solutions for both parties of aforementioned case</p>	<p>Municipality did an intensive study of planning regulations and standards in other countries such as the USA, Hong Kong and Dubai before preparing and applying the new regulations.</p> <p>The average population density in the USA is 450 persons/hectare and 350 persons/hectare in KSA and the Municipality decided that the average population density in Al-Salam should not exceed 330 persons/hectare and 286 persons/hectare in Al-Ayen.</p> <p>Largest building permits issued in Al-Salam and Al-Ayen was in 2001, with 22 and 19 building permits respectively.</p> <p>Fewest building permits issued in Al-Salam was in 2006 and 2007 with 7 building permits and 2 building permits in Al-Ayen in 2007 and 2009.</p> <p>Options reduce the block from 7 storeys to four with no parking level or roof villa.</p> <p>Municipality decided to stop the developers from building until the problem is resolved.</p> <p>Mayor requested that the Municipal Council discuss these solutions with the residents and the developers in the two neighbourhoods</p>	<p>A proposed solution was suggested.</p> <p>Reduced rates of building permit issuances relates to the centralisation of permissions process.</p> <p>No compensation for developers' sour investments.</p> <p>Municipal Council decides to hold a public hearing for the first time in KSA with residents and developers to discuss options and possible solutions.</p>	<p>Importing foreigner regulations.</p> <p>The presence and involvement of the Mayor to discuss the issues regarding the new regulations considered a good intention from the Mayor side</p> <p>Coordination and cooperation between the Municipality and the Municipal Council.</p> <p>Relation between zoning and subdivision regulations.</p> <p>Lack of confidence from the Municipality side.</p>	<p>Chairman of Municipal Council and some Council Members.</p> <p>Mayor of Jeddah and the Local Planning Department (LPD)</p>	Municipal Council

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
7	<p>Listen to the residents and the developers respective perspectives.</p> <p>Discuss solutions proposed by the Municipality.</p> <p>Find mutually satisfactory solutions.</p>	<p>The Council tried to find a compromise between the wishes of the developers and the residents in order to achieve to a mediatory solution.</p> <p>Villas' residents were concerned about privacy.</p> <p>Higher fences were erected in order to protect the privacy of the villas residents from new blocks.</p> <p>Alterations made by villa residents were not aesthetically pleasing from their view</p> <p>Villas' residents do not trust developer or new tenants, claiming that the new tenants would record their families and promulgate it on YouTube.</p> <p>Villas' residents believed the developers are simply concerned with making a profitable return on their investment and do not care about the residents' general wellbeing.</p> <p>Both parties blamed the Municipality for the conflicting between the two parties</p> <p>Developers accused the residents of jealousy of their potential profits.</p> <p>The Municipality's decision incurred developers' financial losses.</p> <p>The developers suggested building four storeys plus a parking level instead of seven; however, the residents refused their suggestion.</p> <p>Developers raised a question about who is going to compensate them for their investment that turned sour.</p>	<p>Municipal Council called for another meeting but in the meantime suspended the developers' building permission.</p> <p>A month later the decision was to allow the developers to build a maximum of four floors with a maximum height of 16m, with no allowance for a parking level or roof villa.</p> <p>Municipality attempt a good governance by calling a public hearing and employing principles of collaborative planning.</p> <p>Municipality seems the common source of the problem.</p> <p>There was a good attempt by the Municipality to achieve governance through public hearing.</p>	<p>Lack of trust.</p> <p>Compromising privacy.</p> <p>Participation and public hearing.</p> <p>Transparency.</p> <p>Accountability.</p>	<p>Chairman of Municipal Council and some Council Members.</p> <p>Residents and developers of the Al-Ayen and Al-Salam neighbourhoods.</p>	Municipal Council

No.	Aim	Points of information	Result	Themes	Attendees	Place
8	Give voice to Jeddah's residents and listen to their needs	<p>People complained about the lack of infrastructure, high pollution and poor road quality and maintenance.</p> <p>Public meetings increased citizens' satisfaction, which made them feel they could play a positive role in the community.</p> <p>Men and women attended the meeting; however, women were secluded in a separate room from the men.</p> <p>The Chairman of the Council, some Council Members and some attendees were supportive of allowing women to participate in the public meetings but that they should be separated from men.</p> <p>Expressions on the faces of some men and Council members showed signs of discomfort with the women's participation.</p> <p>The negative impacts of the new regulations in terms of compromising privacy, increasing pressure on infrastructure development and maintenance as well as spiralling property prices were raised.</p> <p>Weak performance of the Municipality in terms of the long process to grant building permissions and inspections was an issue raised.</p>	<p>The Chairman of the Council promised that the Council would consider their point of views and needs and would discuss them with the Municipality.</p> <p>The Chairman of the Council was frustrated because he was expecting more attendees, especially from the professionals' side (i.e. academics and private sectors).</p> <p>There was a good attempt by the Municipality to achieve governance through public meeting and equity.</p>	<p>Equity in genders.</p> <p>Public participation.</p> <p>Transparency.</p> <p>Planning issues.</p> <p>Zoning issues.</p>	<p>Municipal Council</p> <p>Jeddah's residents (Monthly meeting held on every last Thursday of the month, a weekend day in KSA).</p>	<p>A King Abdul-aziz University's hall</p>

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
9	Discuss possibility of changing the local street's zone.	<p>proposal from a group of residents who wanted to change the zone on a local street from residential to residential and commercial</p> <p>Residents claimed they bought the land under the belief that the area was mixed-use, namely because there are other mixed-use zones with the same street width in other districts.</p> <p>The Council Chairman consented with researcher that residents' justifications were illogical because you cannot buy a residential plot and use it for commercial uses because it was assumed mixed-use. The area is surrounded by mixed-use zones, so there is no need to increase the intensity of uses in the area. It seemed the people were owners or speculators with special interest to benefit from increasing property values.</p>	<p>People want to change the zoned uses according to their own interests.</p> <p>The Council Chairman and the researcher made and initial agreement to reject the residents request and suggested that before giving the final decision for this case, that the council conduct a physical survey of the area in contest.</p>	<p>Role of the Municipal Council.</p> <p>People with special interests.</p> <p>Discretion.</p>	<p>The Council Chairman and some Council Members</p>	Municipal Council
10	Discuss the issue of privacy due to applying the new zoning regulations in two districts, namely, Obhur and Al-Rabwah	<p>The Obhur district is a wealthy area primarily comprised of large villas.</p> <p>Objections regarding the new buildings related to the compromising of residents' privacy.</p> <p>Obhur residents stopped a person from building a 20 storey tower through the Council and the Municipality, however, this person was able to revoke the residents appeal</p> <p>Al-Rabwah residents further objected to three apartment buildings under construction in accordance with the new regulation that would compromise the privacy in their villas.</p> <p>Although there is already one occupied apartment in accordance with the new regulations, the three buildings have building permissions from the Municipality and two of the apartment blocks were nearly finished being built (i.e. built the parking kevel, four repeated storeys and started with the piles to build the roof villa) the Municipal Council believed that those two buildings should be stopped immediately.</p>	<p>The Council promised the representatives to discuss the issue with the Municipality and to do their best to see how they could stop these regulations in Obhur.</p> <p>The Council Chairman insisted that the building stop in Al-Rabwah because the building was having a negative impact on the local residents.</p>	<p>Corruption.</p> <p>Arbitrary decision-making.</p> <p>Power.</p> <p>Responsiveness.</p> <p>Compromising privacy.</p>	<p>Council Chairman, and some Council Members</p> <p>Two resident representatives living in Obhur</p>	Municipal Council

No.	Aim(s)	Points of information	Result(s)	Theme(s)	Attendee(s)	Place
11	Listen to the foreigners' needs and perspectives regarding issues related to Jeddah	<p>Foreigners represent 30% of Jeddah's total population.</p> <p>There are 135,000 Palestinians residing in Jeddah.</p> <p>Public was pleased with public meetings, which give them the opportunity to participate in the decision-makings processes in Jeddah and make them feel they belong to the Saudi society.</p> <p>People complained about the lack of infrastructure, high pollution and the lack of road and street maintenance</p> <p>One of the issues raised was the impact of the new regulations on the city in terms of increasing property prices, pressure on infrastructure, crime rates as well as compromising others' privacy.</p> <p>Zoning regulations are one of the pivotal issues in Jeddah, where the Council is working hard with the Municipality to solve the aforementioned issues</p>	<p>The Council Chairman promised public to consider their point of views and to discuss them with the Municipality.</p> <p>There was a good attempt by the Municipality to achieve governance through public participation.</p>	<p>Equity between foreigners and citizens.</p> <p>Participation.</p> <p>Transparency.</p>	<p>Council Chairman and some Council Members</p> <p>Palestinian Attaché and 10 Palestinians</p>	Municipal Council
12	Discuss the issue of privacy due to applying the new zoning regulations in a neighbourhood named Al-Naghi.	<p>90% of the built neighbourhood are villas</p> <p>Villas with height of one to two floors and apartments with three floors.</p> <p>Objections regarding the new buildings related to the compromising of residents' privacy.</p>	<p>The Council Chairman promised to discuss this with the Municipality and find a solution.</p> <p>The Chairman of the Council asked the researcher to go with one of the Council members to meet the residents and check the situation.</p>	<p>Responsiveness.</p> <p>Compromising privacy.</p> <p>Arbitrary decision-making.</p>	<p>Council Chairman and some Council Members</p>	Municipal Council

Appendix 3: Structured Interview

University of Newcastle
School of Architecture, Planning
and Landscape

King Abdul-Aziz University
Faculty of Environmental Design
Urban and Regional Planning Department



Structured Interview (The Head of Household)



Dear Respondent,

This interview is one of the prerequisites of a doctoral research study on “**Examining the effectiveness of the new land use regulations in Jeddah, Saudi Arabia**”. The researcher will collect data about the inhabitants and their neighbourhoods which will illustrate their living conditions, needs and aspirations. In addition it will reflect residents’ acceptance and satisfaction with the contemporary land use regulations. The main aim of this interview is to hear the people’s voice by finding out to what extent these regulations are responsive to the people’s needs and desires. The research seeks to support improvements in the inhabitants’ built environment. However, its effectiveness will depend upon the cooperation of respondents, their enthusiasm for participating in the interview, and also upon the accuracy of their answers.

If you can kindly give the researcher a few minutes of your valuable time, please answer the following questions as accurately as you can on the bases of your knowledge and experience. There are no right or wrong answers, the researcher simply looking for your perspective and all information will be kept strictly confidential.

Thanks For Your Cooperation

Questionnaire No.	Subdivision Name		
Date	Street Name		
Interviewee’s Name	Housing Unit No.		
Time	From:	To:	Floor No.
District Name	Lift		1. Yes 2.No
Type of Housing	1.Villa	2. Flat (Apartment)	3. Traditional House 4. Roof Top Villa
Type of LUR	1.Old LUR	2. New LUR	3. Mixed (the Old and New LUR)
Type of Density	1.High	2. Medium	3. Low

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Part One: Neighbourhood Character and Socio-Cultural Aspects

A) Neighbourhood Character:

1- Are you satisfied with the following within your neighborhood:

	1. V. dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. V. satisfied	99. Don't know
1-1 Population density within your neighbourhood	1.	2.	3.	4.	5.	99.
1-2 Height of buildings	1.	2.	3.	4.	5.	99.
1-3 Noise level	1.	2.	3.	4.	5.	99.
1-4 Existence of light industry	1.	2.	3.	4.	5.	99.
1-5 Safety and level of security	1.	2.	3.	4.	5.	99.
1-6 The price of buying and renting houses	1.	2.	3.	4.	5.	99.
1-7 Parks within your neighbourhood	1.	2.	3.	4.	5.	99.
1-8 Adequacy of streets for volume of traffic	1.	2.	3.	4.	5.	99.

B) Socio-Cultural Aspects:

2- Do(es) your guest(s) struggle to find a parking space when they visit you?

Yes		1
No		2

3- In general, are there any problems between you and your neighbors? (If you select *Yes* please specify the problems)

Yes		1
No		2

.....

.....

4- Are there any uses in your neighborhood that are close from your dwelling and had and a negative impact on it? (If you select *Yes* please specify the use and the problem)

Yes		1
No		2

.....

.....

5- **Is there a neighborhood committee/council?** (If you select *Yes* please answer Q6 but if you select *No* go to Q 7)

Yes		1
No		2

6- **Are you a member of the neighborhood committee or council?** (If you select *No* go to Q 8)

Yes		1
No		2

7- **Do you want to establish a neighborhood committee/council?** (If you select *Yes* go to Q 8)

Yes		1
No		2

8- **Are you interested in participating in neighborhood affairs?** (If you select *No* go to Q9)

Yes		1
No		2

9- **Why you do not want to be a member?**

Not interested		1
Waste of time		2
You do not have time (Busy)		3
Other (Specify).....		4

Part Two: Dwelling Unit Characteristics

10- **How satisfied are you with the following:**

	1. V. dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. V. satisfied
10-1 Parking space	1.	2.	3.	4.	5.
10-2 Size of the dwelling	1.	2.	3.	4.	5.
10-3 Size of rooms	1.	2.	3.	4.	5.
10-4 No. of rooms	1.	2.	3.	4.	5.
10-5 Size of the plot	1.	2.	3.	4.	5.
10-6 Number of floors	1.	2.	3.	4.	5.
10-7 Set back from access road	1.	2.	3.	4.	5.
10-8 Set back from rear (from the adjacent neighbour's property boundary)	1.	2.	3.	4.	5.
10-9 Set back from the sides	1.	2.	3.	4.	5.
10-10 Privacy	1.	2.	3.	4.	5.
10-11 Size of lift	1.	2.	3.	4.	5.

11- Specify the HOH status: (If you select please go to Q12, but if you select No go to Q18)

Owner and plot owner		1	Go to 12
Owner but non plot owner		2	Go to 12
Tenant		3	Go to 18

12- The cost of the dwelling:

11-1 Plot Price		SR	1
11-2 Building or Flat		SR	2
11-3 Total Cost		SR	3

13- How did you finance the construction of your current dwelling? (Please place in rank order and if you select *loan* please answer Q.14-17)

Your Father	What is the main source of finance?		1
Bank loan	What is the second main source of finance?		2
REDF loan	What is the third main source of finance?		3
Inheritance			
Personal saving			
Other (please specify)			

14- What is the total amount of the loans? SR 1

15- How much do you pay monthly? SR 1

16- What is the interest rate? % 1

17- Over how many years do you have to repay the loans? years 1

18- How much do you pay annually for renting? SR 1

19- When did you bought or rent it? 1

20- What is the size (area) of the dwelling?

Plot		m2	1
Building or Flat		m2	2

21- Number of floors including roof-top villa 1

22- If it is an apartment, how many flats in each floor? 1

23- How many parking spaces are assigned to your dwelling unit? 1

24- If you live in an apartment, is there Mezzanine?

Yes		1
No		2

25- Is there a room for the driver? (If you select No go to Q27)

Yes		1
No		2

26- How do the drivers room distributed?

A room for each dwelling		1
A room for more than one dwelling (please specify the No. of dwelling).....		2

27- Is there a room for the guardian/sentry?

Yes		1
No		2

28- Do you use your accommodation for another use besides residency?

Yes (please specify the use)		1
No		2

29- Are there any other uses apart from residency taking place in the building? (If you select No

then please go to Q.31)

Yes		1
No		2

30- Type of use in the building (Please indicate number)

Commercial (please specify)		1
Light industry (please specify).....		2
Recreation (please specify)		3
Other (please specify).....		4

31- Number of rooms:

Master bedroom		1
Bedroom		2
Living room		3
Male Salon (Majles)		4
Female Salon		5
Dining room		6
Kitchen		7
General storage room		8
Toilet		9
Servant's room		10
Other (please specify).....		11
Total		12

32- Do you want to move to other accommodation in the future? (If you select Yes then please go to

Q.33)

Yes		1
No		2

33- What type of accommodation do you want to move to?

Villa		1
Roof Top Villa		2
Flat		3

Part Three: Municipal Affairs**34- To what extent do you agree that the following factors have an influence on the effectiveness of land use regulations?**

	1. S. agree	2. Agree	3. Neither agree nor disagree	4. Disagree	5. S. disagree	99. Don't know
34-1 Participation (inhabitants and professionals) has strong influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
34-2 Peoples' level of satisfaction (Residents' Acceptance) has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
34-3 Transparency in LUR has strong influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.

35- Could you please answer the following questions:

	1. Yes	2. No	3. Don't know
35-1 Does the Municipality's inspector visit your neighbourhood?	1.	2.	3.
35-2 Do you want to participate in planning decisions?	1.	2.	3.
35-3 Have you ever participated with your opinion or proposal through one of these websites (MOMRA, Jeddah Municipality and Municipal Council)?	1.	2.	3.

36- Are you aware of the new LUR? (If you select Yes please specify what do you know about it?)

Yes		1
No		2

37- Did you face or experience any trouble with the Municipalities' inspectors? (If you select Yes please specify what it was about?)

Yes		1
No		2

38- **Did you have any experience with the Municipality?** (If you select *Yes* please answer the questions from Q39-43 but if you select *No* go to Q45)

Yes	1
No	2

39- **When was your last experience with the municipality?**

	1
--	---

40- **What was it about?**

Building permission	1
Paying a fine	2
Appealing against a decision	3
Other (please specify)	4

41- **How good was your last experience with the Municipality?**

Excellent	1
V. good	2
Good	3
Fair	4
Poor	5

42- **How clear was the process?**

V. clear	1
Clear	2
Medium Clear	3
Ambiguous	4
V. ambiguous	5

43- **Did one of the Municipalities' staffs explain it to you probably?**

Yes	1
No	2

44- **In any of your dealings with the Municipality, did you experience any corruption?**

Yes	1
No	2

45- **Do you support the idea of the female's participation or voice in decisions about (LUR) such as: increasing the density of residential uses?**

Yes	1
No	2

46- **What form should she go for meeting:**

Mixed-meeting (male and female but in separated seats)	1
Not mixed (only females)	2
It does not matter	3

Part Four: Head of Household Information

47- Number of persons living with you in the dwelling unit (Please indicate number)

Wife	1
Male children (under 10years)	2
Female children (under 10years)	3
Male (10 years or over)	4
Female (10 years or over)	5
Relatives	6
Servants	7
Total Number	8

48- Nationality of HOH:

Saudi	1
Non- Saudi (Please specify the state/ country)	2

49- Marital Status of HOH:

Single	1
Married	2
Divorced	3
Widowed	4

50- Age of HOH (years):

Under 25	1
25 – 29	2
30 – 34	3
35 – 39	4
40 – 44	5
45 – 49	6
Over 49	7

51- Level of education completed by HOH:

Uneducated	1
Can read and write	2
Primary school	3
Intermediate school	4
Secondary school	5
Technical school	6
College	7
University and above	8

52- How many cars are used for your dwelling?

1

53- How much money comes into this household every month?

Less than 1,000 SR	1
1,000 – 1,999 SR	2
2,000 – 2,999 SR	3
3,000 – 3,999 SR	4
4,000 – 4,999 SR	5
5,000 – 5,999 SR	6
6,000 – 6,999 SR	7
7,000 – 7,999 SR	8
8,000 – 8,999 SR	9
9,000 – 9,999 SR	10
10,000 – 12,000 SR	11
More than 12,000 SR	12

At the end of this interview, I would like to thank you for your valuable time and cooperation



Structured Interview (Jeddah Municipality)

Dear Sir,

This interview is one of the prerequisites for a doctoral research study on **“Examining the effectiveness of the new land use regulations in Jeddah, Saudi Arabia”**. The researcher will collect data about municipality roles and responsibilities regarding land use regulations in Jeddah. In addition, the capacity of the planning system to apply and implement the current regulations will be explored. The main aim of this interview is to discover to what extent these regulations are effective, by focusing on management, resources and the regulations themselves. The research is intended to support future improvements in the planning system and built environment. However, this will depend upon the cooperation of respondents, their enthusiasm for participating in this interview, and also upon the accuracy of their answers.

If you can kindly give the researcher a few minutes of your valuable time, please answer the following questions as accurately as you can, according to what is relevant to your work and experience. There are no right or wrong answers, the researcher simply looking for your perspective and all information will be kept strictly confidential.

Thanks For Your Cooperation

Questionnaire No.		Department Name	
Date		Floor No.	
Time		Interviewee's Name	
Position		Total No. of Employee	

Mansour Rifaat M. Helmi
Postgraduate Research Student
University of Newcastle upon Tyne – UK

Mobile No.: 0555-676-669

Part Two: Management

A) General Questions related to Management:

54- To what extent do you agree that the following factors have an influence on the effectiveness of land use regulations?

	1. S. Disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. S. Agree	99. Don't know
1-1 It is important for the LUR legislator to consider the conflict between Socio-economic and cultural before setting LUR	1.	2.	3.	4.	5.	99.
1-2 Centralization of power and authority has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-3 Coordination between departments and other local agencies is an important factor that can influence on the effectiveness of the LUR	1.	2.	3.	4.	5.	99.
1-4 Participation (inhabitants and professionals) has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-5 It is important that law enforcement, implementation and monitoring work or activate in an appropriate manner to make LUR more effective	1.	2.	3.	4.	5.	99.
1-6 It is important that employees who operate LUR have a good future career path	1.	2.	3.	4.	5.	99.
1-7 Planning process and permission (bureaucratic overload) has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-8 The number of employees who enforce and operate LUR has no impact on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-9 The quality of personnel carrying out LUR (Skills and qualifications of the municipality's employees) is an important factor that can affect the LUR	1.	2.	3.	4.	5.	99.
1-10 Corruption at the local government has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-11 Municipality's Budget and Revenue has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-12 It is important that data and information is available and accessible for decision making	1.	2.	3.	4.	5.	99.
1-13 Peoples' level of satisfaction (Residents' Acceptance) has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-14 Market forces can affect the effectiveness of LUR	1.	2.	3.	4.	5.	99.
1-15 Clarity and transparency in the LUR has no influence on the its effectiveness	1.	2.	3.	4.	5.	99.
1-16 Commitment and integrity of personnel charged with implementing and monitoring the LUR can affect the effectiveness of LUR	1.	2.	3.	4.	5.	99.

55- Please indicate your level of agreement with each of the following statement:

	1. S. Disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. S. Agree	99. Don't know
2-1 The LUR is easy to understand by those who are in charged with implementing and monitoring the LUR	1.	2.	3.	4.	5.	99.
2-2 The LUR is not easy to understand by clients (Arch.)	1.	2.	3.	4.	5.	99.
2-3 The LUR is easy to understand by clients (Residents)	1.	2.	3.	4.	5.	99.
2-2 There is no clarity and transparency in the planning system and in LUR	1.	2.	3.	4.	5.	99.
2-3 There is commitment and integrity among those who are in charged with implementing and monitoring the LUR	1.	2.	3.	4.	5.	99.
2-4 There is a poor data and information for decision making	1.	2.	3.	4.	5.	99.
2-5 The process for issuing building permission take too much time	1.	2.	3.	4.	5.	99.
2-6 Editing and approving LUR take too much time	1.	2.	3.	4.	5.	99.
2-7 There is a lack in the IT services that enable the Municipality to control and follow documents and requests.	1.	2.	3.	4.	5.	99.
2-8 There is a lack of manpower in your department	1.	2.	3.	4.	5.	99.
2-9 There is inadequacy in finance (budget and revenue)	1.	2.	3.	4.	5.	99.
2-10 There is a lack in the quality of employees (skills and qualifications) who carry out the LUR	1.	2.	3.	4.	5.	99.
2-11 There are flaws in law enforcement	1.	2.	3.	4.	5.	99.
2-12 Compliance with residents Socio-economic	1.	2.	3.	4.	5.	99.
2-13 There is a lack of cooperation between the Municipality and MOMRA	1.	2.	3.	4.	5.	99.
2-14 There is cooperation between the Municipality and Municipal Council	1.	2.	3.	4.	5.	99.
2-15 There is cooperation between the Municipality and other local agencies	1.	2.	3.	4.	5.	99.
2-16 There is no clarity and transparency in the LUR	1.	2.	3.	4.	5.	99.

56- Do you think the management will be better if it was decentralized? Could you please justify your answer?

Yes		1
No		2

57- Are the following statements correct:

	1. Yes	2. No	3. Don't know
4-1 The head of the department is tested for his position	1.	2.	3.
4-2 The participation of architects' offices in planning (through land use regulations - LUR) would improve the existing situation	1.	2.	3.
4-3 Involving inhabitants in LUR would improve the existing situation	1.	2.	3.
4-4 Females participation or voice is important in LUR decision making	1.	2.	3.
4-5 The Municipal Council has a strong influence on LUR decisions	1.	2.	3.
4-6 The other local agencies such as Electrical Company has a strong influence on the LUR decisions	1.	2.	3.
4-7 People complaining about the new LUR	1.	2.	3.
4-8 Architects complaining about the new LUR	1.	2.	3.

It is widely acknowledge that there is a degree of corruption in our system, can I ask you therefore, the following questions:

58- Why there are usually problems and flaws at the implementation stage?

.....
....

59- Where does it occur?

Building height	The main appearance for corruption	1
Set back		2
Parking space		3
Usages		
Extensions		
Other (please specify)		

60- Where does it happen?

In Local Planning Dept.	The main place for corruption	1
In Building Permission Dept.		2
In Monitoring and Inspection Dept.		3
In Sub-Municipalities		
Other (please specify)		

61- How does this impact on the effectiveness of the LUR?

V. strong	1
Strong	2
Neither Strong or poor	3
Poor	4
V. poor	5

Part Three: Land Use Regulations**D) Local Development Department:** (for those who are working at LDD)**62- How would you define LUR?**

.....
.....

63- What do you do in a case, where, two neighbors living next to each other one of them build a villa (2 Floors) before applying the new LUR and the other want to build an apartment (7 floors) after applying the new LUR, what is the action that you should take? (Could you please justify your answer)

Follow the LUR	1
Follow the Islamic principle	2

.....
.....

64- Is there any discretion in the LUR? (if you select Yes please answer Q 12-14 and if you select*No go to Q 15)*

Yes	1
No	2

65- In what kind of situation or case there will be discretion?

	1. Yes	2. No	3. Don't know
12-1 When it contradicts with Islamic Principles	1.	2.	3.
12-2 When it is analog to a case law or precedent	1.	2.	3.
12-3 According to the Mayor perspective	1.	2.	3.
12-4 According to the Municipal Council perspective	1.	2.	3.
12-5 According to the Local Planning Dept. view	1.	2.	3.
12-6 Other (please specify).....	1.	2.	3.

66- Who authorize the discretion? 1

67- If someone has a plot area 399 square-meters and he wants to apply for building permission for the same building regulations for plot area 400 square-meters, do you make distinction for him/her?

Yes		1
No		2

68- What are they complaining about in the LUR (for both residents and architects)?

.....

.....

69- Do you agree that the new LUR more effective than the old one in terms of the following:

	1. S. Disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. S. Agree	99. Don't know
16-1 Controlling the city's urban sprawl	1.	2.	3.	4.	5.	99.
16-2 Declining the cost of infrastructure	1.	2.	3.	4.	5.	99.
16-3 Providing open spaces	1.	2.	3.	4.	5.	99.
16-4 Improving aesthetical values	1.	2.	3.	4.	5.	99.
16-5 Preservation of open spaces	1.	2.	3.	4.	5.	99.
16-6 Reducing the amount of noise pollution	1.	2.	3.	4.	5.	99.
16-7 Providing safety and level of security	1.	2.	3.	4.	5.	99.
16-8 Declining the price of plots	1.	2.	3.	4.	5.	99.
16-9 Reducing population density	1.	2.	3.	4.	5.	99.
16-10 Preserving privacy	1.	2.	3.	4.	5.	99.
16-11 Increasing the No. of building construction	1.	2.	3.	4.	5.	99.
16-12 Providing flexibility in building design by applying FAR	1.	2.	3.	4.	5.	99.
16-13 Setting clear and adequate roles for the plot size	1.	2.	3.	4.	5.	99.
16-14 Designating inadequate set back from access road	1.	2.	3.	4.	5.	99.
16-15 Designating adequate set back from rear	1.	2.	3.	4.	5.	99.
16-16 Providing inadequate percentage for the plot coverage	1.	2.	3.	4.	5.	99.
16-17 Providing adequate car space for the dwellings	1.	2.	3.	4.	5.	99.

Part Five: Recommendations for the Future Planning System

70- To what extent do you agree with the following statements as means to improve the capacity of the planning system, thus, make LUR more efficient and effective:

	1. S. Disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. S. Agree	99. Don't know
17-1 The Municipality should pursue public participation and involve people in decision making and provisional	1.	2.	3.	4.	5.	99.
17-2 The Municipality should not provide more training for its employees	1.	2.	3.	4.	5.	99.
17-3 The Municipality should increase the number of high calibre or qualified (skills and qualifications) staff	1.	2.	3.	4.	5.	99.
17-4 The MOMR should guarantee a good future carrier path for the Municipality's employees	1.	2.	3.	4.	5.	99.
17-5 There should not be an annual evaluation process for the municipality	1.	2.	3.	4.	5.	99.
17-6 The MOMRA should not give more power and authority to the Mayor	1.	2.	3.	4.	5.	99.
17-7 The Municipality should deal with Saudi consultants	1.	2.	3.	4.	5.	99.
17- 8 The Municipality should not deal with Arab (Muslims) consultants	1.	2.	3.	4.	5.	99.
17-9 The Municipality should deal with foreign (western or eastern) consultants	1.	2.	3.	4.	5.	99.
17-10 The Municipality should provide accessible and update data and information	1.	2.	3.	4.	5.	99.
17-11 The Municipality should not use the Urban Observatory for decision-making support	1.	2.	3.	4.	5.	99.
17-12 The Municipality should get benefits from using different software to support their decisions and IT technology to improve the planning system and procedures	1.	2.	3.	4.	5.	99.

Part Six: Personal Information

71- What is your level?		1
72- What is your higher level of education?		1
73- What is your major?		1
74- How long have you been working at the municipality (to the nearest year)?	Years	1
75- How long have you been working in your current department (to the nearest year)?	Years	1
76- How long have you been working in your current position (to the nearest year)?	Years	1
77- What functions do you carry out in the department?	

*At the end of this interview, I would like to thank you for your valuable time and
cooperation*



University of Newcastle
School of Architecture, Planning
and Landscape

King Abdul-Aziz University
Faculty of Environmental Design
Urban and Regional Planning Department



Questionnaire with the Professionals

Dear Sir,

This interview is one of the prerequisites for a doctoral research study on **“Examining the effectiveness of the new land use regulations in Jeddah, Saudi Arabia”**. The main aim of this interview is to collect data on the perspective of professionals regarding contemporary land use regulations in Jeddah. In addition, their opinion about the planning system at the local level in its capacity to apply and implement the current regulations, and its performance in doing so, will be explored. The research is intended to support future improvements in the planning system and built environment. However, its effectiveness will depend upon the cooperation of respondents, their enthusiasm for participating in this interview, and also upon the accuracy of their answers.

If you can kindly give the researcher a few minutes of your valuable time, please answer personally the following questions as accurately as you can on the bases of your knowledge and experience. There are no right or wrong answers, the researcher simply looking for your perspective and all information will be kept strictly confidential.

Thanks For Your Cooperation

Questionnaire No.		Office / Organization	
Date		Interviewee's Name	
Time		Position	

Mansour Rifaat M. Helmi
Postgraduate Research Student
University of Newcastle upon Tyne – UK

Mobile No.: 0555-676-669

Part One: Municipality and Municipal Council Performance

A) Municipality:

78- How good is the performance of the municipality in terms of the following:

	1. Poor	2. Fair	3. Good	4. V. good	5. Excellent	99. Don't know
1-1 Decisions related to LUR	1.	2.	3.	4.	5.	99.
1-2 Conditions related to Arch. Offices	1.	2.	3.	4.	5.	99.
1-3 Building permission procedures	1.	2.	3.	4.	5.	99.
1-4 Law enforcement	1.	2.	3.	4.	5.	99.
1-5 Implementing and monitoring LUR	1.	2.	3.	4.	5.	99.
1-6 The way that LUR has been explained and interpreted for you	1.	2.	3.	4.	5.	99.
1-7 Clarity and transparency in the planning system and in LUR	1.	2.	3.	4.	5.	99.
1-8 IT services that enable you to follow your documents or requests	1.	2.	3.	4.	5.	99.
1-9 Availability of accessible data and information about LUR and procedures	1.	2.	3.	4.	5.	99.
1-10 The quality of personnel carrying out LUR (Skills and qualifications of the municipality's employees)	1.	2.	3.	4.	5.	99.

79- Could you please answer the following questions:

	1. Yes	2. No	3. Don't know
2-2 Do you think there is adequate cooperation between the Municipality and Arch. offices?	1.	2.	3.
2-3 In general do you think that the new land use regulations are responsive to Jeddah's residents' needs?	1.	2.	3.
2-4 Did the municipality ask your opinion about the new LUR?	1.	2.	3.
2-5 Have you ever participated with your opinion or proposal through the MOMRA, Municipality and Municipal Council websites?	1.	2.	3.

80- Did you ever experience any corruption within the Municipality?

Yes		1
No		2

81- Do you think the management will be better if it was decentralized? Why?

Yes	<input type="checkbox"/>	1
No	<input type="checkbox"/>	2

.....
.....
.....

82- How often do your initial drawings get rejected by the Municipality for non-compliance with the new LUR?

Always	<input type="checkbox"/>	1
One out of 20	<input type="checkbox"/>	2
One out of 15	<input type="checkbox"/>	3
One out of 10	<input type="checkbox"/>	4
Never	<input type="checkbox"/>	5

83- How long does it take this office to get building permission from the Municipality 1

84- Do you want to comment on that? (If you select Yes please write your comments)

Yes	<input type="checkbox"/>	1
No	<input type="checkbox"/>	2

.....
.....
.....
.....

85- Have you ever attend any of the Municipalities' meetings? (If you select Yes please answer Q9and 10, however, if you select No please go to Q11)

Yes	<input type="checkbox"/>	1
No	<input type="checkbox"/>	2

86- How many times did you participate in the Municipalities' meetings to discuss the LUR (up to now)? 1

87- Did you find the Municipalities' meetings useful?

Yes	<input type="checkbox"/>	1
No	<input type="checkbox"/>	2

88- Do you want to attend the Municipalities' meetings to discuss about the LUR? (If you select No please answer Q12)

Yes	<input type="checkbox"/>	1
No	<input type="checkbox"/>	2

89- Why you do not attend the Municipalities' meetings if you want to?

Not interested	1
Waste of time	2
I did not receive invitation	3
I do not have time	4
The time is not a suitable for you	5
Other (Specify).....	6

B) Municipal Council:**90- Is the role of the Municipal Council Clear to you regarding the Contemporary LUR?**

Yes	1
No	2

91- Have you ever attend any of the Municipal Councils' meetings to discuss about the LUR? (If you select Yes please answer Q16and 17, however, if you select No please go to Q18)

Yes	1
No	2

92- How many times did you participate in the Municipal Councils' meetings to discuss the LUR (up to now)?

	1
--	---

93- Did you find the Municipalities' meetings useful?

Yes	1
No	2

94- Are the Municipal Council decisions effective regarding the Contemporary LUR?

Yes	1
No	2

95- Do you want to attend the Municipal Councils' meetings to discuss the LUR? (If you select No please answer Q19)

Yes	1
No	2

96- Why you do not want to attend the Municipal Councils' meetings if you want to?

Not interested	1
Waste of time	2
I did not receive invitation	3
I do not have time	4
The time is not a suitable for you	5
Other (Specify).....	6

Part Two: Land Use Regulations

97- To what extent do you agree that the following factors have an influence on the effectiveness of land use regulations?

	1. S. Disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. S. Agree	99. Don't know
20-1 It is important for the LUR legislator to consider the conflict between Socio-economic and cultural before setting LUR	1.	2.	3.	4.	5.	99.
20-2 Centralization of power and authority has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-3 Coordination between departments and other local agencies is an important factor that can influence on the effectiveness of the LUR	1.	2.	3.	4.	5.	99.
20-4 Participation (inhabitants and professionals) has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-5 It is important that law enforcement, implementation and monitoring work or activate in an appropriate manner	1.	2.	3.	4.	5.	99.
20-6 It is important that employees who operate LUR have a good future career path	1.	2.	3.	4.	5.	99.
20-7 Planning process and permission (bureaucratic overload) has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-8 The number of employees who enforce and operate LUR has no impact on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-9 The quality of personnel carrying out LUR (Skills and qualifications of the municipality's employees) is an important factor that can affect the LUR	1.	2.	3.	4.	5.	99.
20-10 Corruption at the local government has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-11 Municipality's Budget and Revenue has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-12 It is important that data and information is available and accessible for decision making	1.	2.	3.	4.	5.	99.
20-13 Peoples' level of satisfaction (Residents' Acceptance) has no influence on the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-14 Market forces can affect the effectiveness of LUR	1.	2.	3.	4.	5.	99.
20-15 Clarity and transparency in the planning system and in LUR has no influence on the effectiveness of the LUR	1.	2.	3.	4.	5.	99.
20-16 Commitment and integrity of personnel charged with implementing and monitoring the LUR can affect the effectiveness of LUR	1.	2.	3.	4.	5.	99.

98- How clear is the LUR?

V. clear		1
Clear		2
Good		3
Ambiguous		4
V. ambiguous		5

99- Did you find it easy for you to produce an architectural drawing in conformity with the Municipality's LUR?

Yes		1
No		2

100- Are you satisfied with the following:

	1. V. dissatisfied	2. Dissatisfied	3. Neutral	4. Satisfied	5. V. satisfied	99. Don't know
20-1 The new land use regulations	1.	2.	3.	4.	5.	99.
20-2 The old land use regulations	1.	2.	3.	4.	5.	99.
20-3 Set back from access road	1.	2.	3.	4.	5.	99.
20-4 Set back from rear (from the adjacent neighbour's property boundary)	1.	2.	3.	4.	5.	99.
20-5 Set back at the sides	1.	2.	3.	4.	5.	99.
20-6 FAR	1.	2.	3.	4.	5.	99.
20-7 Building Height	1.	2.	3.	4.	5.	99.
20-8 Increasing Density	1.	2.	3.	4.	5.	99.
20-9 Plot size (area m²)	1.	2.	3.	4.	5.	99.
20-10 Plot coverage (%)	1.	2.	3.	4.	5.	99.

101- How much does an apartment drawing with the new LUR cost? SR. 1

Yes		1
No		2

102- Do you think that the positive impacts of the new LUR on the city outweigh the negative impacts?

Yes		1
No		2

103- Do you support the idea of the female's participation or voice in (LUR) decisions?

Yes		1
No		2

Part Three: Recommendations for the Future Planning System

104- Please indicate your level of agreement with each of the following statements as means to improve the capacity of the planning system, thus, make LUR more efficient and effective:

	1. S. Disagree	2. Disagree	3. Neither agree nor disagree	4. Agree	5. S. Agree	99. Don't know
27-1 The Municipality should pursue public participation and involve people in decision making	1.	2.	3.	4.	5.	99.
27-2 The Municipality should provide more training for its employees	1.	2.	3.	4.	5.	99.
27-3 The Municipality should increase the number of high calibre staff	1.	2.	3.	4.	5.	99.
27-4 The Municipality should raise employees' salary	1.	2.	3.	4.	5.	99.
27-5 There should be an annual evaluation process for the municipality	1.	2.	3.	4.	5.	99.
27-6 The MOMRA should give more power and authority to the Mayor	1.	2.	3.	4.	5.	99.
27-7 The Municipality should deal with Saudi consultants	1.	2.	3.	4.	5.	99.
27- 8 The Municipality should use Arab (Muslims) consultants	1.	2.	3.	4.	5.	99.
27-9 The Municipality should use foreign (western or eastern) consultants	1.	2.	3.	4.	5.	99.
27-10 The Municipality should provide accessible and update data and information	1.	2.	3.	4.	5.	99.
27-11 The Municipality should use the Urban Observatory for decision-making support	1.	2.	3.	4.	5.	99.
27-12 The Municipality should get benefits from using different software to support their decisions	1.	2.	3.	4.	5.	99.

Part Four: Office Information and Experience with the Municipality

105- What is your highest level of education completed?

1

1

106- What is your major?

	Years
	Years

1

1

107- How long have you been working (to the nearest year)?

108- How long have you been dealing with the Municipality?

*At the end of this interview, I would like to thank you for your valuable time
and cooperation*

Discussion Questions

109- What do you think about the new land use regulations?

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110- Where are the problems with the new LUR?

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111- What do you think about the Municipality (positives and negatives)?

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.....

Appendix 4: The letter to the UN-HABITAT

Dear Sir/Madam,

I am a Saudi Student doing a PhD degree at Newcastle University in the school of Architecture, Planning and Landscape, under Dr Graham Tipple supervision. My thesis entitled “The Role of Local Planning Authority in the Implementation of Zoning Regulations in Jeddah” focuses on assessing the local urban governance (i.e. the Municipality) in my home town Jeddah in Saudi Arabia. I have used the UN-HABITAT “Urban Governance Index”, as a tool for assessing the local planning governance in Jeddah. This study is the first that assesses the local planning governance in Saudi Arabia by using the UN-HABITAT “Urban Governance Index”, which has proven incredibly useful.

Having used the indicators in the Saudi context, I found myself confused regarding the 3 (Rs) in the 3 sub-indicators. The first is in sub-indicator 1, “local government revenue per capita”. The second one is in sub-indicator 2, “Ratio of actual recurrent and capital budget”. The last one is in sub-indicator 3, “Local government revenue transfers”. These three sub-indicators are under the main indicator “Effectiveness”. My understanding is as follow:

1. In the Saudi context, Municipality total budget (TB) consists of (the Municipality Revenue (R) + Transfer income or Budget from the Central Government (T)).
2. I applied the 1st sub-indicator to get the revenue per capita. In it, I considered R which is, according to the UGI, “The collected annual income, both capital and recurrent” as the “Revenue” and the total population is P for an average of 3 years. So $LGR = R/P$ or in my case $LGR =$ the Municipality Revenue divided by the Population of Jeddah. Is this correct?
3. I applied the 2nd sub-indicator to get the ratio. In it, I considered R which is, according to the UGI, “Recurrent includes income derived on a regular basis” as the “Revenue” and C which is, according to the UGI, “Capital includes fixed income, that is derived after allocation of funds from internal or external sources” as the “Transfer Budget from the Central Government”. So $RRC = R/C$ or, in my

case $RRC = \text{Revenue} / \text{Transfer Budget from the Central Government (R/T)}$. So, if I consider, for instance, that $\text{Revenue} = 5$ million and the $\text{Transfer Budget from the Central Government} = 10$ million, then $5/10 = 0.5$. But I am not sure if this is correct?

4. I applied the 3rd sub-indicator to get the percentage. In it, I considered R which is, according to the UGI, “Total local government revenue (transfers and non-transfers)” as the “Revenue” ($R+T$), which is the total budget TB . T , according to the UGI, “Income originating from higher levels of government” as in my case the “Transfer Budget or originated income from the Central Government” T . So, $LGT = T/R * 100$ or, in my case, $LGT = T / (\text{Total budget (TB)}) * 100$. So, if I consider, for instance, the $\text{Revenue} = 5$ million and the $\text{Transfer Budget from the Central Government} = 10$ million, then $10 / (10+5) * 100 = 66.7\%$. But if I used $T/R * 100 = 10/5 * 100 = 200\%$. So, which is correct?

Could you please explain to me what the differences are between the 3 (Rs) in term of the Saudi context as defined in point 1 above?

Best Regards,

Mansour Helmi

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Appendix 5a: Equations

Annual Urban Expansion Rate:

$$ARU = \frac{U_i - U_j}{i - j} \times 100\%$$

Where: ARU [%/year]= is the annual urban expansion rate; and U_i and U_j are the total urban areas of the study at time i (current year) and time j (former year).

Annual Growth Rate:

$$P_{t+n} = (t^* \text{ the annual growth rate%}) + t$$

Where: P = population;

t = a time index (current year); and

P_{t+n} = Population (n) units of time (t).

The Linear (Straight-Line) Model:

$$P_{t+n} = P_t + b(n)$$

Where: P = population;

t = a time index (for instance, years, or decades);

P_{t+n} = Population (n) units of time (t);

n = number of units of time (in years, decades, etc.); and

b = average growth increment per unit of time.

$$b = \frac{\sum_{t=2}^d (P_t - P_{t-1})}{m}$$

Where: m = the number of historical intervals over which the average is calculated; and

d = the date of the latest data in the historical record being analyzed.

The Exponential Curve Projection Model:

$$P_{t+n} = P_t(1 + r)^n$$

Where: P = population;

t = a time index (for instance, years, or decades);

P_{t+n} = Population (n) units of time (t);

n = number of units of time (in years, decades, etc.);

m = the number of historical intervals over which the average is calculated; and

r = the average percentage of increase each time period.

$$r = \frac{1}{m} \sum_{t=2}^d \frac{P_t - P_{t-1}}{P_{t-1}}$$

Appendix 5b: Satisfaction Equations

1. Satisfaction index for housing components

This has been measured by using equation (1):

$$SIC = \frac{\sum_{i=1}^N y_i}{\sum_{i=1}^N Y_i} \times 100$$

Where:

SIC : the satisfaction index of a respondent with the component c , of the residential environment,

N : the number of variables being scaled under c ,

y_i : the actual score by a respondent on the i th variable; and

Y_i : the maximum possible score that i could have on the scale used.

2. Residential neighbourhood satisfaction index

It is the sum total of the component satisfaction indices equation (2).

$$SIR = \frac{\sum_{i=1}^{N1} pdi + \sum_{i=1}^{N2} bhi + \sum_{i=1}^{N3} ni + \sum_{i=1}^{N4} ssi + \sum_{i=1}^{N5} hpi + \sum_{i=1}^{N6} pi + \sum_{i=1}^{N7} sti}{\sum_{i=1}^{N1} PDi + \sum_{i=1}^{N2} BHi + \sum_{i=1}^{N3} Ni + \sum_{i=1}^{N4} SSi + \sum_{i=1}^{N5} HPi + \sum_{i=1}^{N6} Pi + \sum_{i=1}^{N7} STi} \times 100$$

Where:

SIR : the satisfaction index of a respondent with residential environment including $N1, N2, N3, N4, N5, N6$ and $N7$: the number of variables selected for scaling under each component of residential neighbourhood,

pdi (population density index), bhi (building heights index), ni (noise index), ssi (safety and security index), hpi (housing price index), pi (parks index) and st (street index) are the actual scores of a respondent on the i th variable in the component,

PDi , BHi , Ni , SSi , HPi , Pi and STi are the maximum possible scores for the i th variable in the dwelling unit features and neighbourhood facilities components.

Appendix 6: The Local Urban Governance Assessment of Jeddah

2010

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Effectiveness	1	Local government revenue per capita (LGR)	37.3	$(\log X - \log \text{min}) / (\log \text{max} - \log \text{min})$ Min= 2.3 and max= 1,340	0.44	0.25	0.11
	2	Ratio of recurrent and capital budget (RRC)	0.36	$(\log X - \log \text{min}) / (\log \text{max} - \log \text{min})$ Min= 0.09 and max= 8.37	0.31	0.1	0.03
	3	Ratio of mandated to actual tax collected (TC)	0	C/M	0	0.1	0.00
	a	Mandated tax to be collected	0%	-	0.50	-	-
	b	Actual tax collected	0%	-	1	-	-
	4	Local government revenue transfer (LGT)	74%*	$(0-25\% = 1, 25-50\% = 0.75, 50-75\% = 0.5$ and $75-100\% = 0.25$	0.5	0.1	0.05
	5	Predictability of transfers in local government budget (PoT)	No= 0	X	0	0.1	0.00
	6	Published performance delivery standards (PPDS)		PPS * S/T (0*0/4)	0	0.15	0.00
	a	Published performance delivery standards (PPS)	No= 0	-	-	-	-
	b	No. of key services for which the PPDS is present (S)	0	-	-	-	-
	c	Total No. of key services for which PPDS should be present (T)	4	-	-	-	-
	7	Consumer satisfaction survey (CSS)	Yes= 1	X	1	0.1	0.10
	8	Vision Statement effective (VSE)		$(0.5*VS) + (0.5*PP) = (0.5*1) + (0.5*1)$	1	0.1	0.10
	a	Vision statement(VS)	Yes= 1	X	-	-	-
	b	Vision statement drafted through a participatory process (PP)	Yes= 1	X	-	-	-
Total							0.39

*According to the UN-Habitat $(LGT) = (T/R)*100$. However, using the UN-Habitat will not give us the percentage, therefore, we need to use $T/(TB)*100$. T= income originated from higher government, R= revenue and TB (Total Budget) = R+T.

2007

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Effectiveness	1	Local government revenue per capita (LGR)	37	$(\log X - \log \text{min}) / (\log \text{max} - \log \text{min})$ Min= 2.3 and max= 1,340	0.44	0.25	0.11
	2	Ratio of recurrent and capital budget (RRC)	0.38	$(\log X - \log \text{min}) / (\log \text{max} - \log \text{min})$ Min= 0.09 and max= 8.37	0.32	0.1	0.03
	3	Ratio of mandated to actual tax collected (TC)	0	C/M	0	0.1	0.00
	a	Mandated tax to be collected	0%	-	0.50	-	-
	b	Actual tax collected	0%	-	1	-	-
	4	Local government revenue transfer (LGT)	72%	(0-25%=1, 25-50%=0.75, 50-75%=0.5 and 75-100%=0.25)	0.5	0.1	0.05
	5	Predictability of transfers in local government budget (PoT)	No= 0	X	0	0.1	0.00
	6	Published performance delivery standards (PPDS)		PPS * S/T (0*0/4)	0	0.15	0.00
	a	Published performance delivery standards (PPS)	No= 0	-	-	-	-
	b	No. of key services for which the PPDS is present (S)	0	-	-	-	-
	c	Total No. of key services for which PPDS should be present (T)	4	-	-	-	-
	7	Consumer satisfaction survey (CSS)	No= 0	X	0	0.1	0.00
	8	Vision Statement effective (VSE)		$(0.5*VS)+(0.5*PP) = (0.5*1)+(0.5*0)$	0.5	0.1	0.05
	a	Vision statement(VS)	Yes= 1	-	-	-	-
	b	Vision statement drafted through a participatory process (PP)	No= 0	-	-	-	-
Total							0.24

2004

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Effectiveness	1	Local government revenue per capita (LGR)	24	(log X –Log min)/(log max –log min) Min= 2.3 and max= 1,340	0.37	0.25	0.09
	2	Ratio of recurrent and capital budget (RRC)	0.53	(log X –Log min)/(log max –log min) Min= 0.09 and max= 8.37	0.39	0.1	0.04
	3	Ratio of mandated to actual tax collected (TC)	0	C/M	0	0.1	0.00
	a	Mandated tax to be collected	0%	-	0.50	-	-
	b	Actual tax collected	0%	-	1	-	-
	4	Local government revenue transfer (LGT)	65%	(0-25%=1, 25-50%=0.75, 50-75%=0.5 and 75-100%=0.25)	0.5	0.1	0.05
	5	Predictability of transfers in local government budget (PoT)	No= 0	X	0	0.1	0.00
	6	Published performance delivery standards (PPDS)		PPS * S/T (0*0/4)	0	0.15	0.00
	a	Published performance delivery standards (PPS)	No= 0	-	-	-	-
	b	No. of key services for which the PPDS is present (S)	0	-	-	-	-
	c	Total No. of key services for which PPDS should be present (T)	4	-	-	-	-
	7	Consumer satisfaction survey (CSS)	No= 0	X	0	0.1	0.10
	8	Vision Statement effective (VSE)		(0.5*VS)+(0.5*PP) = (0.5*1)+(0.5*0)	0.5	0.1	0.10
	a	Vision statement(VS)	Yes= 1	-	-	-	-
	b	Vision statement drafted through a participatory process (PP)	No= 0	-	-	-	-
Total						0.23	

2010

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Equity	1	Citizens charter for basic services (CCS)		$CC*S/T$	0.50	0.2	0
	a	Citizens' charter (CC)	No= 0	X	-	-	-
	b	No. of key services for which the CC is present (S)	3	-	-	-	-
	c	Total no. of key services for which CC should be present (T)	3	-	-	-	-
	2	Percentage of women councillors (WC)	0%	$X * 2/100$	0	0.2	0
	3	percentage women in key positions (WK)	0.03%	$X * 2/100$	0.0006	0.1	0.00006
	4	Percentage households with water connection (HH.wat)	98%	$X/100 = 98/100$	0.98	0.15	0.15
	5	Existence of pro-poor policy (PPC)	No= 0	X	0	0.1	0.00
	6	Is water price is cheaper for poor settlements? (WP)	No= 0	X	0	0.1	0.00
	7	Incentives for informal market (IM)		Any one of a, b or c	1	0.15	0.15
	a	Street vending not allowed	Yes= 1	-	-	-	-
	b	Street vending with restrictions	Yes= 1	-	-	-	-
	c	Public fairs, municipal market	Yes= 1	-	-	-	-
Total							0.30

2007

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Equity	1	Citizens charter for basic services (CCS)		$CC*S/T$	0	0.2	0
	a	Citizens' charter (CC)	No= 0	X	-	-	-
	b	No. of key services for which the CC is present (S)	2	-	-	-	-
	c	Total no. of key services for which CC should be present (T)	4	-	-	-	-
	2	Percentage of women councillors (WC)	0%	$X * 2/100$	0	0.2	0
	3	percentage women in key positions (WK)	0%	$X * 2/100$	0	0.1	0
	4	Percentage households with water connection (HH.wat)	95%	$X/100 = 95/100$	0.95	0.15	0.14
	5	Existence of pro-poor policy (PPC)	No= 0	X	0	0.1	0.00
	6	Is water price is cheaper for poor settlements? (WP)	No= 0	X	0	0.1	0.00
	7	Incentives for informal market (IM)		Any one of a, b or c	1	0.15	0.15
	a	Street vending not allowed	Yes= 1	-	-	-	-
	b	Street vending with restrictions	Yes= 1	-	-	-	-
	c	Public fairs, municipal market	Yes= 1	-	-	-	-
Total							0.29

2004

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Equity	1	Citizens charter for basic services (CCS)		CC*S/T	0	0.2	0
	a	Citizens' charter (CC)	No= 0	X	-	-	-
	b	No. of key services for which the CC is present (S)	0	-	-	-	-
	c	Total no. of key services for which CC should be present (T)	4	-	-	-	-
	2	Percentage of women councillors (WC)	0%	X * 2/100	0	0.2	0
	3	percentage women in key positions (WK)	0%	X * 2/100	0	0.1	0
	4	Percentage households with water connection (HH.wat)	90%	X/100 = 90/100	0.90	0.15	0.14
	5	Existence of pro-poor policy (PPC)	No= 0	X	0	0.1	0.00
	6	Is water price is cheaper for poor settlements? (WP)	No= 0	X	0	0.1	0.00
	7	Incentives for informal market (IM)		Any one of a, b or c	1	0.15	0.15
	a	Street vending not allowed	Yes= 1	-	-	-	-
	b	Street vending with restrictions	Yes= 1	-	-	-	-
	c	Public fairs, municipal market	Yes= 1	-	-	-	-
Total							0.29

2010

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Participation	1	Elected council (EC)	0.5	X	0.5	0.15	0.075
	2	Locally elected Mayor (LEM)	No= 0	X	0	0.15	0
	3	Voter turnout (VT)	30%	X/100 = 30/100	0.3	0.3	0.09
	4	Peoples' forum (PC)	Yes= 1	X	1	0.15	0.15
	5	Civic associations PER 10,000 POP (CA)	2.3	(log x – log min)/(log max – log min) Min= 0.49 and max= 72.79	0.31	0.25	0.069
Total							0.38

2007

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Participation	1	Elected council (EC)	0.5	X	0.5	0.15	0.075
	2	Locally elected Mayor (LEM)	No= 0	X	0	0.15	0
	3	Voter turnout (VT)	25%	X/100 = 25/100	0.25	0.3	0.075
	4	Peoples' forum (PC)	Yes= 1	X	1	0.15	0.15
	5	Civic associations PER 10,000 POP (CA)	2.3	(log x – log min)/(log max – log min) Min= 0.49 and max= 72.79	0.31	0.25	0.076
Total							0.38

2004

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Participation	1	Elected council (EC)	0	X	0	0.15	0
	2	Locally elected Mayor (LEM)	No= 0	X	0	0.15	0
	3	Voter turnout (VT)	0%	X/100 = 0/100	0	0.3	0
	4	Peoples' forum (PC)	No= 0	X	0	0.15	0
	5	Civic associations PER 10,000 POP (CA)	1.9	(log x – log min)/(log max – log min) Min= 0.49 and max= 72.79	0.27	0.25	0.067
Total							0.07

2010

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Accountability	1	Formal Publication (FP)		Average (CT+BA)	0.5	0.2	0.1
	a	Formal publication: contracts and tenders (CT)	Yes= 1	X	-	-	-
	b	Formal publication : budget and account (BA)	No= 0	X	-	-	-
	2.1	Control by higher Govt. (CG)		Average (CLG+RC)	0.5	0.07	0.035
	a	Control by higher Govt. close local government (CLG)	No= 1	X	-	-	-
	b	Control by higher Govt. Removal of councillors (RC)	Yes= 0	X	-	-	-
	2.2	Local government authorities (LGA)		Average (SLT+SUC+BF+CP)	0.5	0.08	0.04
	c	Local government: set local tax levels (SLT)	No= 0	X	-	-	-
	d	Local government: set user charges for services (SUC)	Yes= 1	X	-	-	-
	e	local government: borrow funds (BF)	No= 0	X	-	-	-
	f	Local government: choose contractors for projects (CP)	Yes= 1	X	-	-	-
	3	Codes of conduct (CoC)	No= 0	X	0	0.1	0
	4	Facilities to receive complaints (FRC)		Average (OA+EF)	1	0.1	0.1
	a	official appointed to receive complaints on public authorities (OA)	Yes= 1	X	-	-	-
	b	Exclusive facility to receive complaints on corruption (EF)	Yes= 1	X	-	-	-
	5	Anti-corruption commission (ACC)	Yes= 1	X	1	0.15	0.15
	6	Personal Income and assets (PIA)		(0.75*Ave PIA=FIA) + 0.25*IAM	0	0.15	0.00
	a	Disclosure of personal income and assets (PIA)	No= 0	X	-	-	-
	b	Disclosure of family's income and assets (FIA)	No= 0	X	-	-	-
	c	Income and assets regularly monitored (IAM)	No= 0	X	-	-	-
	7	Regular Independent audit (RIA)	1	X	1	0.15	0.15
Total							0.58

2007

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Accountability	1	Formal Publication (FP)		Average (CT+BA)	0.5	0.2	0.1
	a	Formal publication: contracts and tenders (CT)	Yes= 1	X	-	-	-
	b	Formal publication : budget and account (BA)	No= 0	X	-	-	-
	2.1	Control by higher Govt. (CG)		Average (CLG+RC)	0.5	0.07	0.035
	a	Control by higher Govt. close local government (CLG)	No= 1	X	-	-	-
	b	Control by higher Govt. Removal of councillors (RC)	Yes= 0	X	-	-	-
	2.2	Local government authorities (LGA)		Average (SLT+SUC+BF+CP)	0.25	0.08	0.02
	c	Local government: set local tax levels (SLT)	No= 0	X	-	-	-
	d	Local government: set user charges for services (SUC)	No= 0	X	-	-	-
	e	local government: borrow funds (BF)	No= 0	X	-	-	-
	f	Local government: choose contractors for projects (CP)	Yes= 1	X	-	-	-
	3	Codes of conduct (CoC)	No= 0	X	0	0.1	0
	4	Facilities to receive complaints (FRC)		Average (OA+EF)	1	0.1	0.1
	a	official appointed to receive complaints on public authorities (OA)	Yes= 1	X	-	-	-
	b	Exclusive facility to receive complaints on corruption (EF)	Yes= 1	X	-	-	-
	5	Anti-corruption commission (ACC)	No= 0	X	0	0.15	0
	6	Personal Income and assets (PIA)		(0.75*Average PIA=FIA) + 0.25*IAM	0	0.15	0.00
	a	Disclosure of personal income and assets (PIA)	No= 0	X	-	-	-
	b	Disclosure of family's income and assets (FIA)	No= 0	X	-	-	-
	c	Income and assets regularly monitored (IAM)	No= 0	X	-	-	-
	7	Regular Independent audit (RIA)	1	X	1	0.15	0.15
Total							0.41

2004

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Accountability	1	Formal Publication (FP)		Average (CT+BA)	0.5	0.2	0.1
	a	Formal publication: contracts and tenders (CT)	Yes= 1	X	-	-	-
	b	Formal publication : budget and account (BA)	No= 0	X	-	-	-
	2.1	Control by higher Govt. (CG)		Average (CLG+RC)	0.5	0.07	0.035
	a	Control by higher Govt. close local government (CLG)	No= 1	X	-	-	-
	b	Control by higher Govt. Removal of councillors (RC)	Yes= 0	X	-	-	-
	2.2	Local government authorities (LGA)		Average (SLT+SUC+BF+CP)	0.25	0.08	0.02
	c	Local government: set local tax levels (SLT)	No= 0	X	-	-	-
	d	Local government: set user charges for services (SUC)	No= 0	X	-	-	-
	e	local government: borrow funds (BF)	No= 0	X	-	-	-
	f	Local government: choose contractors for projects (CP)	Yes= 1	X	-	-	-
	3	Codes of conduct (CoC)	No= 0	X	0	0.1	0
	4	Facilities to receive complaints (FRC)		Average (OA+EF)	1	0.1	0.1
	a	official appointed to receive complaints on public authorities (OA)	Yes= 1	X	-	-	-
	b	Exclusive facility to receive complaints on corruption (EF)	Yes= 1	X	-	-	-
	5	Anti-corruption commission (ACC)	No= 0	X	0	0.15	0
	6	Personal Income and assets (PIA)		(0.75*Average PIA=FIA) + 0.25*IAM	0	0.15	0
	a	Disclosure of personal income and assets (PIA)	No= 0	X	-	-	-
	b	Disclosure of family's income and assets (FIA)	No= 0	X	-	-	-
	c	Income and assets regularly monitored (IAM)	No= 0	X	-	-	-
	7	Regular Independent audit (RIA)	No= 0	X	0	0.15	0
Total							0.26

Appendix 7: Modifying the UGI Model - 2010

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Effectiveness	1	Local government revenue per capita (LGR)	37.3	$(\log X - \log \text{min}) / (\log \text{max} - \log \text{min})$ Min= 2.3 and max= 1,340	0.44	0.4	0.18
	2	Ratio of mandated to actual tax collected (TC)	0	C/M	0	0.1	0.00
	a	Mandated tax to be collected	0%	-	0.50	-	-
	b	Actual tax collected	0%	-	1	-	-
	3	Local government revenue transfer (LGT)	73%	$(0-25\% = 1, 25-50\% = 0.75, 50-75\% = 0.5$ and $75-100\% = 0.25$	0.5	0.4	0.20
	4	Predictability of transfers in local government budget (PoT)	No= 0	X	0	0.1	0.00
Total							0.38

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Equity	1	Citizens charter for basic services (CCS)		CC*S/T	0.50	0.1	0
	a	Citizens' charter (CC)	No= 0	X	-	-	-
	b	No. of key services for which the CC is present (S)	3	-	-	-	-
	c	Total no. of key services for which CC should be present (T)	3	-	-	-	-
	2	Percentage of women councillors (WC)	0%	$X * 2/100$	0	0.4	0
	3	percentage women in key positions (WK)	0.03%	$X * 2/100$	0.0006	0.4	0.00006
	4	Existence of pro-poor policy (PPC)	No= 0	X	0	0.1	0.00
Total							0

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Participation	1	Elected council (EC)	0.5	X	0.5	0.15	0.075
	2	Locally elected Mayor (LEM)	No= 0	X	0	0.15	0
	3	Voter turnout (VT)	30%	X/100 = 30/100	0.3	0.3	0.09
	4	Peoples' forum (PC)	Yes= 1	X	1	0.15	0.15
	5	Vision Statement effective (VSE)		(0.5*VS)+(0.5*PP) = (0.5*1)+(0.5*0)	0.5	0.25	0.188
	a	Vision statement(VS)	Yes= 1	-	-	-	-
	b	Vision statement drafted through a participatory process (PP)	No= 0	-	-	-	-
Total							0.50

Index	No	Indicator	Data (X)	Formula	Result	Weight	Total
Accountability	1	Formal Publication (FP)		Average (CT+BA)	0.5	0.1	0.05
	a	Formal publication: contracts and tenders (CT)	Yes= 1	X	-	-	-
	b	Formal publication : budget and account (BA)	No= 0	X	-	-	-
	2.1	Control by higher Govt. (CG)		Average (CLG+RC)	0.5	0.07	0.035
	a	Control by higher Govt. close local government (CLG)	No= 1	X	-	-	-
	b	Control by higher Govt. Removal of councillors (RC)	Yes= 0	X	-	-	-
	2.2	Local government authorities (LGA)		Average (SLT+SUC+BF+CP)	0.5	0.08	0.04
	c	Local government: set local tax levels (SLT)	No= 0	X	-	-	-
	d	Local government: set user charges for services (SUC)	Yes= 1	X	-	-	-
	e	local government: borrow funds (BF)	No= 0	X	-	-	-
	f	Local government: choose contractors for projects (CP)	Yes= 1	X	-	-	-
	4	Facilities to receive complaints (FRC)		Average (OA+EF)	1	0.1	0.1
	a	official appointed to receive complaints on public authorities (OA)	Yes= 1	X	-	-	-
	b	Exclusive facility to receive complaints on corruption (EF)	Yes= 1	X	-	-	-
	7	Consumer satisfaction survey (CSS)	Yes= 1	X	1	0.15	0.15
	5	Anti-corruption commission (ACC)	Yes= 1	X	0.5	0.20	0.10
	a	The existence of anti-corruption commission	Yes= 1	X	-	-	-
	b	Is the anti-corruption commission active?	No= 0	X	-	-	-
	6	Personal Income and assets (PIA)		(0.75*Ave PIA=FIA) + 0.25*IAM	0	0.15	0.00
	a	Disclosure of personal income and assets (PIA)	No= 0	X	-	-	-
	b	Disclosure of family's income and assets (FIA)	No= 0	X	-	-	-
	c	Income and assets regularly monitored (IAM)	No= 0	X	-	-	-
	7	Regular Independent audit (RIA)	1	X	1	0.15	0.15
Total							0.63