CARDIFF UNIVERSITY

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Urban land policies, with an emphasis on undeveloped land

Case Study of Riyadh – Saudi Arabia

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ABSTRACT

Riyadh has experienced massive urban growth, it was the fastest growing city in the world between 1970 and 1990 - the population increased by 100% between 1976 and 1987, yet even today much of the urban area remains undeveloped.

The need for efficient use of urban land has attracted great interest from both practitioners and academics. Some studies focus on identifying more efficient use by analysing containment tools and increasing densities. Others concentrate on undeveloped land, especially urban-rural fringe and brownfield sites. Although these studies mostly seek to curb sprawl with more efficient use of land, they have crucial knowledge gaps and limitations. They deal with undeveloped land on the basis that there has not initially been a failure in development (urban-rural fringe sites are new areas, while brownfield sites have previously been developed). In fact, a large proportion of urban undeveloped land 'white land' can in some urban contexts be bypassed without development - virgin land - which can threaten the efficient use of urban land. In addressing this gap, this study explores and investigates the causes of the emergence and continuing existence of the phenomenon of white land, about which little is known.

Using an interpretive epistemology, a single case study of Riyadh and 40 semi-structured interviews and documentation, the data analysis shows three interconnected key categories that can interpret this phenomenon, sociocultural, economic and political. One of the most important findings is that the failure to develop white land can be attributed to non-market factors and interpretive positions (discretion and how it is affected by culture, conflict of interest, power struggles, trust matters, and social ties), where the centralised role of the state can be vital in orienting and allocating the land market, with little influence of market-based considerations. One interesting finding shows urban sprawl and white land are not easily contained by an Urban Growth Boundary (UGB) when there is insufficient consideration of reflecting the UGB in a different built environment; introducing the UGB involves non-market interpretive positions. The main argument is a call for innovating accepted models, which includes the non-market factors explored in this thesis, to re-centre them around an acknowledgement that practices are more diverse than when models were developed.

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Abbreviations

AM: Ariyadh Municipality

BECM: Bureau of Experts at the Council of Ministries

BG: Board of Grievances

LGP: Land Granting Programme

MEP: Ministry of Economy & Planning

MH: Ministry of Housing

MJ: Ministry of Justice

MMRA: Ministry of Municipality & Rural Affairs

RCRC: Royal Commission for Riyadh City

REDF: Real Estate Development Fund

UEL: Urban Environs Limit

UGB: Urban Growth Boundary

UL: Urban Limit

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CHAPTER 1 :   Introduction

1.1   Research problem and importance of this study

Land is generally fixed in supply, and therefore many studies focus on the importance of effective use of scarce urban land (e.g. see Ricardo 1891; Neutze 1987; Balchin et al. 1995; Evans 1999; Harvey and Jowsey 2004). However, anyone who visits the capital city of Saudi Arabia (Riyadh) can clearly notice many 'spots' of undeveloped land within the urban fabric of the city (i.e. white land[1]). These spots of white land exist in a large proportion, which may make the visitor realise this fact even before the aeroplane lands in King Khalid International Airport. Such white land can exist in the form of both subdivided pieces of land and non-subdivided tracts of land, as shown in Figure 1. What explains this phenomenon?

Figure 1: Urban land allocated for development yet remains undeveloped
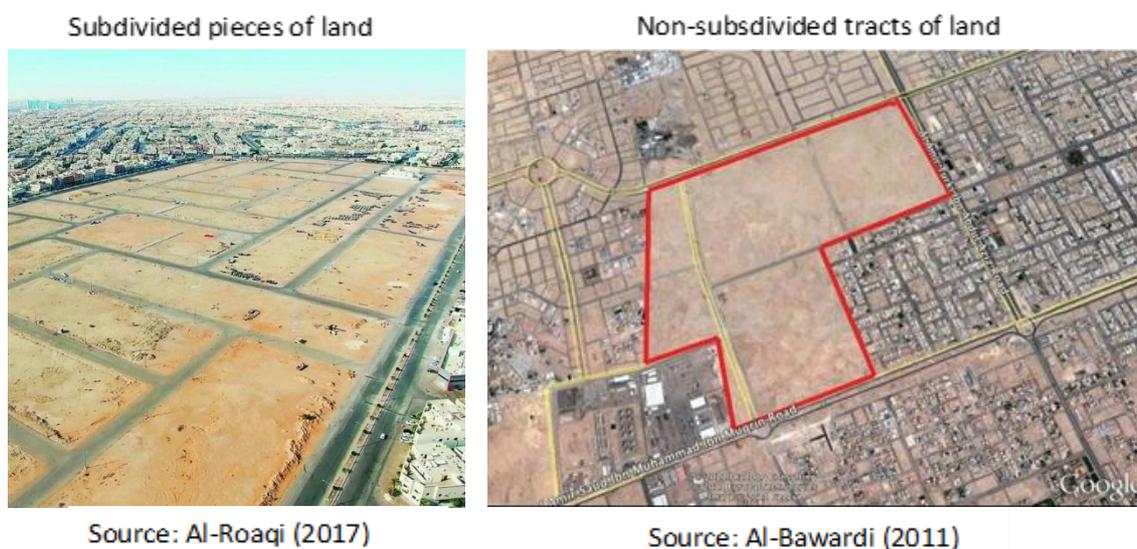
Undeveloped land can be an issue that threatens cities from different directions. More importantly, it can be a serious challenge to ensuring the sustainability of land due to its fixity in supply (Ricardo 1891), an issue that becomes prioritised in the political agenda in many nations (e.g. UN-HABITAT 2011; Bentley 2017). Unless cities benefit from

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[1] Based on different definitions, this study refers to white land as any land within the urban boundaries that has not been previously developed, whether subdivided or not (for more details, see Section 2.5.2).

inner land, the continuous population growth could damage the open spaces and exacerbate the issue of urban sprawl (e.g. Peiser 1989; Paulsen 2014).

Many studies, which are interested in urban land development, have focused on mechanisms that boost development in the already built-up areas of cities and curb sprawl, for example by introducing containment tools such as urban growth boundary (UGB) (e.g. Brueckner 2000; Ewing et al. 2014), imposing tax on undeveloped urban land (e.g. Abrams 1964; Dwyer 2014; Amirtahmasebi et al. 2016), compulsory purchasing of land (e.g. Evans 1999; Altes 2014), or by changing the land use and raising the density of it (e.g. Balchin et al. 1995; Burgess and Jenks 2002; Dixon 2006). Nevertheless, such studies mostly neglect investigating fully why there are undeveloped inner-city areas in the form of white land. This investigation is vital as it can ease the path towards rational policies for encouraging inner-city development. Therefore, this process of investigation is the main focus of this study, instead of concentrating on creating practical tools to encourage developing inner-city lands.

In the developing world, withholding land from development can sometimes occur (Abrams 1964). In particular, the cities of the Arab Gulf tend to grow in a way that leaves a large proportion of white land (e.g. Hamouche 2004; Kaganova et al. 2005; Rizzo 2014; Abou-Korin and Al-Shihri 2015; Al-Muttawa; 2016; Ababsa 2020; Mansour et al. 2020). This means that the markets here have not originally developed this type of land (i.e. virgin land), which can be a key difference from the nature of brownfield sites, where the latter have previously been developed (Dixon 2006). In fact, the existence of undeveloped urban land can be associated with market failure in many cultures (e.g. Coase 1972; Anderson 1993; Brueckner 2000; Enns 2002; Irwin and Bockstael 2004; Kim 2011), but is this always the case?

There are some studies that have partly tried to explain why land markets sometimes fail, for example due to imperfect competition, monopoly and negative externalities (e.g. Castle 1965; Klosterman 1985; Anderson 1993; Evans 1999; Batabyal 2000; Brueckner 2000; Cohen and Winn 2007; Evans 2004; Harvey and Jowsey 2004; Kim 2011). However, studies exploring and analysing potential non-market factors preventing white land from development have not been previously undertaken, a gap in

knowledge that has not been addressed. In other words, different relevant theories and bodies of literature (e.g. location theory, features of land market, potential impacts of actors in land market, concepts related to market and planning failure) will be employed for the purpose of studying how they work in a different cultural context. Thus, and besides the potential market factors, filling this gap in knowledge (i.e. exploring any potential non-market factors that can give rise to a failure to develop white land) will be the task of this thesis, and it is important for three reasons:

- As ensuring the sustainability of supply is seen as essential in the political agenda in many nations (Bentley 2017), this study can enrich the literature by exploring the potential causes behind the existence of urban land that is allocated for development yet remains undeveloped, which has not fully been investigated.

- As urban sprawl is viewed as environmentally, economically and socially damaging (e.g. Williams 1999; Brueckner 2001; Weng 2001; Speir and Stephenson 2002; Ewing et al. 2003; Garcia and Riera 2003; Raza et al. 2016), exploring the causes against developing inner land can help in curbing urban sprawl as well as supporting some other concepts of 'looking inward', such as 'smart growth' and 'infill development' (Varma 2017).

- Although some previous studies have produced important contributions to the literature (e.g. how land is allocated and the reasons for market and planning failure), they were conducted in particular worlds, mainly the developed nations. Alexander (1992) asserts that planning theories have emerged, and can function, in democratic societies. These societies tend mostly not to behave with religious motives or be affected by tight social norms (O'Reilly et al. 1991). They, thus, might not fit some other cultures without some vital considerations. One aspect of the importance of this study is that it is conducted in an urban context that does not separate religion from state, where Islam in Saudi Arabia is the only accepted religion, and both followed by the Saudi society and adopted by the government in its political decisions (BECM 1992; Saudi National Portal 1992; At-Twaijri et al. 1996). This assumes that this study is expected to produce some distinct findings, which may then be applicable and comparable in contexts with

similar attributes (the key attributes of the case study - Riyadh - are listed in the following section).

1.2   A brief outline about Riyadh and the reasons for selecting it as a case study

Riyadh is the capital of Saudi Arabia (Ministry of Foreign Affairs 2010). King Abdulaziz' re-conquering of Riyadh in 1902 became a turning point and start of a new era for the region, where competition for political power and conflict between leaders/tribes ended with the creation of a unified political entity, an absolute monarchical system (Saudi National Portal 1992). One factor that facilitated people's acceptance of this shape of governance was the adoption of *Sharia* (Islamic law) by the government (Saudi National Portal 1992), as Saudi society tends to be Muslim (e.g. Pharaon 2004).

Historically, Riyadh by 1930 was a small town with a population of 27,000 and an area of only 1 km^2 (RCRC 1997a). It experienced massive urban growth and was described as the fastest growing city in the world between 1970 and 1990 (Al-Oteibi 1993). The population today has reached about seven million (RCRC 2019). The beginning of the fast growth took place in the 1950s (Garba 2004). The oil boom also started immediately afterwards, which helped to boost growth (the oil boom can also be another factor that facilitated people's acceptance of this shape of governance). One underlying aspect here is that the planning process started after urban growth and development took place (e.g. the first master plan 'Doxiadis' was introduced in the 1970s, see Section 4.3). More significantly, in the late 1980s, the UGB was introduced, which is seen as the actual start of the official planning that can control urban development (e.g. RCRC 1997a; Hathloul 2017).

The UGB consists of a large area that is the Urban Environs Limit (UEL) as well as two urban limits that are reviewed regularly (RCRC 1997a). However, it seems that the UGB has not addressed all the problems related to urban growth and development as Riyadh is still sprawling and one may infer here that further land is needed to satisfy the

increasing population (e.g. RCRC 2003; Hathloul 2017). Interestingly, however, a report conducted by RCRC (2010) shows that the percentage of white land in Riyadh is too high; about 77 % from the UEL, approximately 58 % from the Urban Limit for 2030 (UL2), and roughly 49 % from the Urban Limit for 2015 (UL1).

One can derive from the above description, related to Riyadh – Saudi Arabia, the key attributes of the case study, as follows:

- It is a very fast-growing city.
- Both the society and the political system are affected by Islam as the only adopted religion.
- It exists in a context where the political system is monarchical (i.e. the king is the overall ruler), with the centralised system prioritised in the governance process.
- It exists in a context where the national economy is mainly dependant on oil, as the dominant factor of the national macroeconomy, and where there is little dependency on taxes as an income.

However, while the above features can exist in any Gulf countries/cities, the researcher has selected Riyadh as the case study for two reasons.

 The first relates to the significance of Riyadh in respect to the research question. Riyadh is by far the largest city in terms of both area (approximately 5400 km^2) and population (about seven million), not only in Saudi Arabia, but also in the Gulf (RCRC 2010; Almahdy 2020). The large area here can refer to the supply side, while the high population to the demand side (i.e. the market forces are significant in any urban development processes). This implies that Riyadh, according to Al-Mogren (2016), is the perfect indicator, as a very extreme example, to describe the side effects of the phenomena of Gulf urbanism. In particular, the high proportion of white land that Riyadh accommodates, as explained earlier, can make it a fertile ground to investigate this phenomenon. In support of the previous statistics about the proportion of white land, the GIS and remote sensing techniques in Figure 2 depict how white land, from the urban area extension until 2017, is clearly visible.

The second reason is practicality. In general, the proximity and the familiarity of the researcher to/with the urban context there can facilitate the process of conducting this research, especially accessibility to resources. This proximity and familiarity can also mean conducting the work in Riyadh would not consume as much time and money as if it was carried out in other urban contexts.

Figure 2: Development form
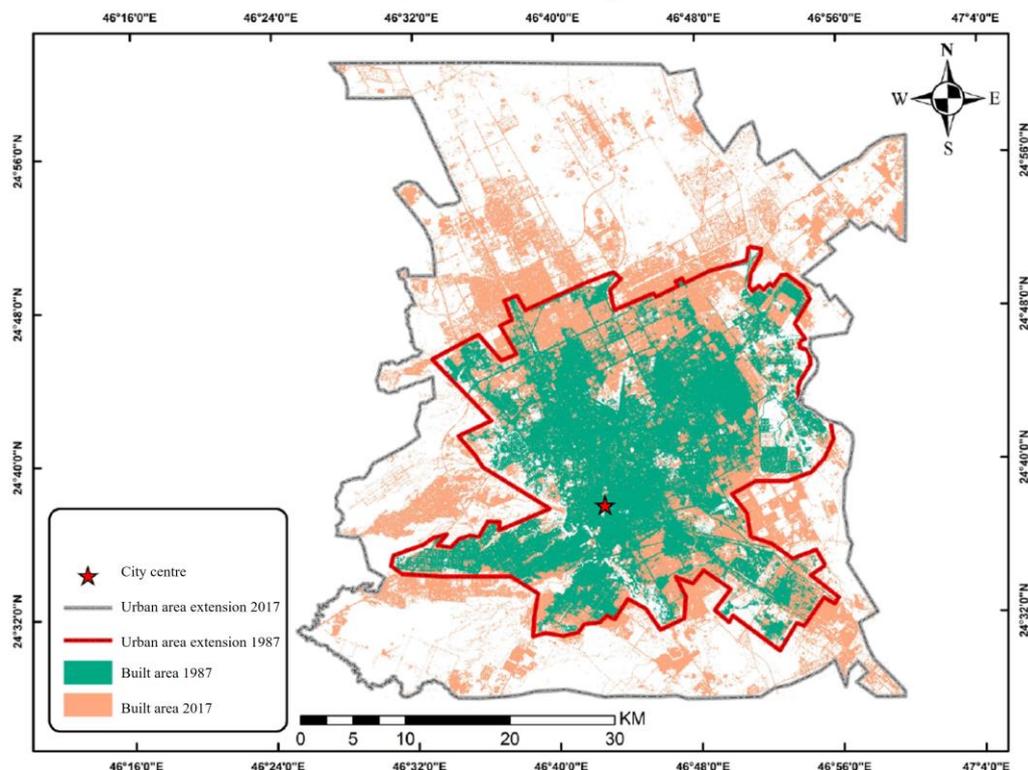
Source: Taken and adapted from Al-Tuwaijri, 2018.

1.3   The research question, aim, and objectives

The research gap identified previously led to the formulation of an overarching aim and one main research question. This research aims, as a contribution to knowledge, to employ and link different bodies of literature for the purpose of exploring and explaining the potential causes of the emergence and continuing existence of white land. Careful examination of this phenomenon can help to answer the research question of this study.

The research question is: what explains the existence of a large proportion of white land in the Arab Gulf cities? To answer the research question and achieve the aim above, three objectives need to be considered.

The research objectives:
- To explore the potential challenges and obstacles causing white land, which are often out of landowners' control.
- To investigate the potential opportunities causing white land, which are often derived from the landowners' will.
- To contribute to theory (context and methods) on non-market factors affecting urban land development.

The first research objective above relates to the research question by investigating and exploring not only the obstacles that are out of landowners' control and can cause white land, but also the challenges that may not legally prevent landowners from development, but development might not be the right decision to them owing to some failure (e.g. uncertainty). The second objective, however, is related to the research question in terms of examining any possible opportunities causing white land, which usually include causes derived from the landowners' will (these two objectives will be the main headings when discussing the findings later in Chapter 8, where the third objective above will extend on the two first objectives).

1.4 Structure of the thesis

With the exception of this chapter, this thesis is split into eight main chapters, as described below.

Chapter two aims to review the literature (theories and concepts) that can partly help in investigating and understanding the proliferation of white land. It attempts to discuss the complex issues that can affect land development, including location theory, the features of land market and the potential influences of actors in land, and market/planning failure and the key elements of them. These concepts, first and foremost, have been developed in a theoretical framework. This framework not only

underpins the consideration of the contextual culture, but also adds the political (rules and regulations) and economic factors (e.g. financial level) as 'inputs' influencing the culture.

This has enabled the researcher, whether in this chapter or in the remainder of the thesis, to explain how such (Western) concepts may provide insufficient consideration to be used analytically in distinct contexts, especially related to Gulf urbanism, due to the different culture (e.g. these concepts tend to ignore the sociocultural factors in the Gulf, including the political and economic factors, and consequently fail to deeply understand the causes behind the existence of white land). Thus, these three elements (sociocultural, economic, and political) are the main themes in discussing the empirical findings later.

Chapter three defines and justifies the study methodologies applied in this research. As the outline of Chapter 2 above places a great emphasis on understanding the contextual culture to examine the white land phenomenon, this chapter justifies the adoption of a realist ontology paired with an interpretive epistemology as suitable paradigms for this study. It then provides a detailed description of why qualitative methods, specifically a single case study design, are used. Next, the use of documentation and semi-structured interviews are explained as two qualitative components that fit this study. This chapter also gives information about how the data are analysed, namely through thematic analysis. In addition, some ethical considerations and research limitations are highlighted with an explanation of how they have been overcome or alleviated.

Chapter four presents an outline of the related information about sociocultural, political, and the economic factors that can influence the Saudi context. Simultaneously, the processes of urban planning and development in Saudi Arabia in general and Riyadh in particular are described and analysed in terms of how the above three factors can influence them, especially the approach of allocating land. Likewise, some influential land-use planning tools are explained, with an emphasis on the UGB in Riyadh, ending with clarifying some new initiatives that have been introduced recently for the purpose of enhancing the market performance.

Chapter five analyses the first, out of three parts of the empirical chapters. The analysis in this chapter focuses on economic and funding issues. In other words, it examines the potential causes that can lead to keeping land away from the market without development, from an economic and funding viewpoint. These issues (i.e. economic and funding) have some opportunities that can encourage withholding land, and on the other hand challenges that can be obstacles to its development, as clarified in this chapter.

Chapter six gives information about how the government intervention in the land market can lead to introducing some decisions or implementing some planning tools that increase the percentage of white land. The land policies in this chapter are explained nationally and locally. This chapter also analyses a key point regarding the potential impacts of the governance system, especially the centralised shape, on the effectiveness of land administration.

Chapter seven analyses some interpretive positions that can bring about not developing land. Particularly, it explains the issues arising from discretion and its connection with ambiguity of systems and procedures, conflict of interest, power struggles, which all can damage the trust factor. Furthermore, the possible impacts stemming from social ties are explored, with an emphasis on how they contribute to the way of selecting housing location.

Chapter eight discusses the main findings that can cause white land by linking and comparing them with the literature review. While the empirical chapters separately analyse the findings based on some different themes (i.e. economic and funding, government intervention role and interpretive positions), this chapter discusses the key findings based on categories that represent the objectives of this study, namely the potential challenges and obstacles causing white land, the potential opportunities causing white land, and the exploration of non-market factors affecting urban land development. This method can provide distinct insights into the process of discussing these findings with the literature review.

Chapter nine is the final chapter that summarises the thesis, highlighting the main findings, and more importantly clarifying the contribution to knowledge. It explains the theoretical contribution, emphasising how non-market factors can play a major role in

the emergence and existence of white land. It also outlines empirical (context) and methodological contributions. Afterwards, some ideas for shaping recommendations are suggested, and some suggestions for future research are outlined. This chapter ends by demonstrating the study limitations and difficulties encountered.

CHAPTER 2 :   Literature review: urban land development and the factors affecting it

2.1 Introduction

'White land', the term adopted in this study requires a theoretical framework to understand its emergence and continuing existence. The theoretical framework will cover the complexity of issues that affect land development, especially the sociocultural, economic, and political factors and identify a main gap. This gap, according to Alsulaiman (2018), lies in the distinct nature of white land that differentiate it from what have mostly been discussed in the literature, which has focused on undeveloped land that is located by the urban-rural fringe sites (e.g. Kim 2010; An et al. 2011; Ott et al. 2012; Zhang et al. 2012; Yao and Pretorius 2014) as well as the brownfield land (e.g. Dorsey 2003; Kushner 2005; Dale and Newman 2009; Rérat 2012; Newton and Glackin 2014; Song et al. 2019).

This study concentrates on white land as a virgin land within the UGB - little research has covered this subject (for more about white land definition, see Section 2.5.2). This assumes that the motivations behind the existence of white land can totally differ from urban-rural fringe sites and brownfield land, a gap in knowledge this study aims to fill. The chapter will start with explaining the impact of sociocultural factors on the built environment. Significantly, this section represents the overarching theme, which not only influences dealing with land development, but also the economic and political factors, which can influence and be influenced by it. Next, and deriving from the vital impact of sociocultural factors, theorising the process of urban land development will justify the relevant theories, concepts and body of literature important to the aim of this study.

Based on the theoretical framework in Section 2.2.1, three key elements will be discussed and analysed. First, the demand side in Section 2.3, through which the discussion of urban location theory of how land is allocated will be explained. Urban spatial structure normally evolves from the interaction and the competition on land

(Irwin and Bockstael 2002). The potential impacts of competing on land (i.e. the demand side) will later be employed to explore whether they can affect the existence of white land.

As land allocation theories focus more on the demand side (i.e. competition for land), Section 2.4 and 2.5 will approach the supply side. Particularly, they will examine the unique features of land and, as a result, how the actors treat it, especially developers and landowners. This is important to explore why these actors may delay the development process or even withhold land. Section 2.5 will also demonstrate how the actors' dealing with land is affected by the sociocultural factors.

Next, Section 2.6 will discuss the possible implications resulting in both market failure and planning failure, specifically 1) externalities, with an emphasis on the need for intervention through planning and, conversely, the potential misuse of urban containment tools that might exacerbate the issue of unaffordability and social exclusion, and 2) imperfect competition, within which imperfect information and monopoly behaviour can play a major role (e.g. Klosterman 1985; Halleux et al. 2012; Ewing et al. 2014). While these three elements will centre around understanding the phenomenon of white land, the chapter will finish off by highlighting some underlying issues related to the impact of governance structure, trust issues, and interpretation and discretion in the administrative scope on land development.

2.2   The impact of culture on the built environment

It is essential from the outset to clarify the role and the key influences of culture in shaping the built environment, giving the researcher the logic to criticise some previous studies conducted in totally different contexts and, similarly, to justify the investigation process of the existence of white land in a specific cultural context (i.e. Gulf context). In the beginning, what does culture mean?

Kroeber and Kluckhohn (1952) have given many definitions of culture, it is out of the scope of this research to review them all. Culture in this study means the way of thinking, based on some rooted traditions and behaviours that shape social practices

(Hofstede 1983). Indeed, there is a strong connection between the words 'social' and 'culture'. This connection can be derived from the argument that the social life and activities of human beings produce culture and culture in turn shapes social life (e.g. Vygotsky et al. 1993; McGlonn-Nelson 2005). Tellis et al. (2009, p.6) defines culture as a "set of attitudes and practices that are shared by the members of a collective entity". This definition suggests that the *sociocultural* factor is associated with practices across *culture* (e.g. Han and Northoff 2008; Ordóñez and Marconi 2012). The word 'practices' is significant here as it reflects how land is treated by actors (for more details about how culture and sociocultural factors are interrelated, see McGlonn-Nelson 2005; Han and Northoff 2008; Rowan 2009; Ordóñez and Marconi 2012).

Given the above, the word 'sociocultural' is adopted in this study. Any sociocultural aspect, regardless of its location or time, has influences (inputs) that affect it, and has manifestations (outputs) that result from it. Among the influences in any sociocultural contexts are the religion, rules and regulations (the law), financial level (wealth and poverty), geography, history, education, media, openness to other cultures and so on. These influences produce the manifestations. Among these manifestations in any sociocultural contexts are the language of speech, housing, dress, food, manner of engagement, rituals of marriage and divorce, death and mourning ceremonies, hospitality etiquette, and manner of dealing with people (e.g. Geertz 1973; Hofstede 2001; Hofstede et al. 2010; Deresky 2014; Najm 2015). This argument suggests that the way actors deal with land can also be a fundamental output of the rooted culture.

Drawing from the above 'inputs', there are three key influences related to the sociocultural factor that can affect land development, particularly in the Gulf urbanism. They are the role of religion, rules and regulations, and the financial level.

The religion

Culture, through "shared motives, values, beliefs, identities … [that] are transmitted across age generations" (HOUSE et al. 2002, cited in Similä 2013, p.89), essentially takes religious matters into consideration as a main sociocultural branch (e.g. Korman 2015). According to Rees (2017), there are evident interlinkages between religion and

culture, where the former represents a system under the sociocultural umbrella. This implies that religion can transfer into sociocultural issues (for more details and example, see Weber et al. 2009; Foucault 2013) which consequently leave an imprint on the cityscape through religious structures such as the worship places (Park 2004).

Similarly, and in respect to Islam, it gives people a way of life in all aspects (e.g. economic, social, legal, and political) that guides their social relations, behaviours and acts (Al-Khalifa et al. 2015), which transfer into the treatment of the built environment. For example, in the Gulf region, the urban fabric of cities is often affected by the traditional Muslim built environment (Marçais 1928). Scholars have spent effort to explain how the religion of Islam affects the sociocultural element in the Gulf and then their built environment, for instance how the city is established based on the mosque, how to maintain privacy based on building regulations and so on (for more details about how Islam affects the built environment, see Marçais 1928; Abu-Lughod 1987; Akbar and Shaw 1988; Al-Hemaidi 2001; Raymond 2005).

One should note that the literature reviewed here mostly focus on the direct impact of religion on the city fabric (i.e. cityscape). However, there have been very few empirical studies that explain how political, economic and social structures, which can be impacted by religion, can affect the process of land development, one gap that this study aims to consider. Most studies and theories related to land development have been carried out in nations that have strict religion-state separation (this chapter will discuss some related studies and theories). This study, however, will be conducted in a context that does not separate religion and state, to investigate any potential effects on land development.

Platteau (2008) clarifies, that even when religious and political functions seem to be combined, religion is the handmaiden instead of the producer of politics. This view is important as it depicts religion as flexible in a way that maintains the public interest, but it is not necessarily that politics reflect such flexibility. In this case, the government intervention may lead to what is known as 'planning failure', which will be discussed in Section 2.6. Therefore, rules and regulations drawn by government, represent the second influence (input) that affects the sociocultural factor, and will be discussed in the

following part.

Rules and regulations, and the financial level

While the previous explanation about sociocultural factors has an acceptance of multiplicity, the study of institutions refers more directly to the ways power reproduces itself, or changes, in specific institutional contexts (Ostrom 2010). To illustrate, Haworth (1957), who concludes that institutional theory is a structural theory of the city, argues that the human action that stems from sociocultural events (e.g. religion, family, art, education, etc.) have a major role in constituting the city, often through 'formal rules'. Due to the complex activities, participated in by dissimilar individuals, particular transformations of the land are produced leading to the establishment of rules and regulations, such as property systems (Haworth 1957). This implies that the institutions can be the linkage between sociocultural issues and the process of formalising them.

In support of the above argument, almost all of the different definitions that Ostrom mentioned are linked with 'formal rules'. For instance, institutions are defined by Riker (1982), cited in Ostrom (1986, p. 3) as "rules about behaviour, especially about making decisions". Charles Plott (1979), cited in Ostrom (1986, p. 3) defines institutions as "the rules for individual expression, information transmittal, and social choice …". Ostrom (1986), regards institutions as synonym to the term 'political structure' (i.e. the traditional rules that have later become politically structured). Figure 3 shows the connection between institutions and sociocultural factors, which were previously clarified, where both are originally influenced by the outcome of human action. What distinguishes institutions from sociocultural factors is that they represent human products but through deciding which sociocultural elements and norms should prevail in our society, and subsequently we can design our institutions politically (e.g. March and Olsen 1983; North 1990; Lowndes 2001; Lowndes 2005; Yolles 2019). The components of sociocultural factors and institutions ultimately produce a specific planning culture (Figure 3).

Planning culture is a reflection of institutions and sociocultural elements in which they are embedded (e.g. Sanyal 2005, cited in Taylor 2013, p. 689; Pallagst 2010; Getimis

2012). To put it differently, while planning culture is often connected with planning as a 'physical' activity, it reflects the non-material elements related to sociocultural and institutions (Figure 3). Thus, according to Faludi (2005), planning culture has a relationship to institutions and sociocultural factors in each individual nation, rather than being an independent variable (though planning culture can in turn influence these institutions sometimes when the planning practices in a given context are derived and/or imported from styles/models that are applied in a dissimilar context, where the planning culture of context A may affect the institutions in context B, for more details see Sanyal (2005a)). Additionally, not only the components of sociocultural factors and institutions, but also the economic changes, Sanyal (2005b) argues, can contribute to the planning culture as shown in Figure 3 (this argument supports the previous explanation about the potential influences of the financial level on culture).

Figure 3: Factors affecting land development
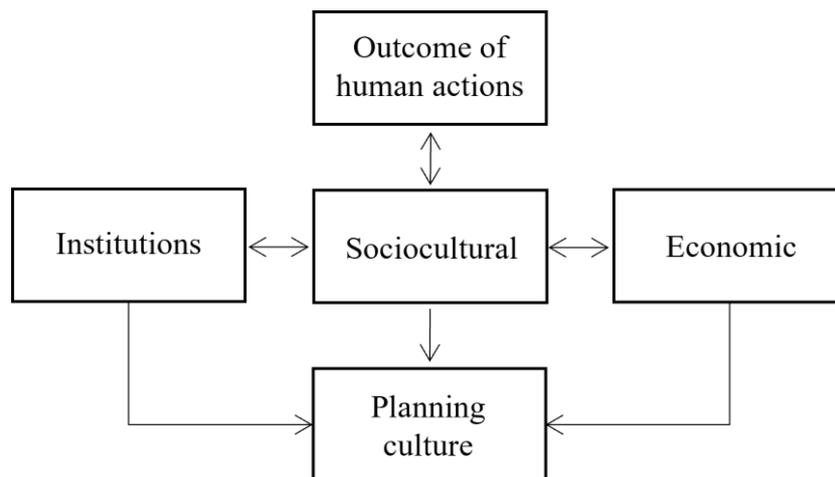
Accordingly, the role of planning system on its own is not a measurement of its impact on the urban fabric, but the role of planning culture, with an emphasis on the nature of power, rules and regulations, that shape the planning system (for more details, see Othengrafen's and Reimer's 2013; Stead et al. 2015). This is to argue that the role of political noticeably impacts on rules and regulations in the Gulf urbanism process. Salama (2015) explains in detail the historic situation in the Gulf region, where both the local knowledge and tribal traditions were vital elements in developing settlements.

Wars and conflicts between tribes would occur, and therefore the amount of land gained varies from one tribe to another, but the tribal leader was responsible for land allocation, resolving issues related to land and ownership (Salama 2015). The leader's decisions here, according to De Montequin (1980), cited in Salama (2015), are derived from sociocultural norms, and thus applied as laws.

The above way of taking decisions, as Salama (2015) argues, has been substituted with modern governance, where the top officials have a major hand in the process of land allocation and urban development. Indeed, Akbar and Shaw (1988) clarify that what characterises the modern governance in the Gulf region is the bureaucratic centralisation, in most cases, in regulating the property market and in the process of decision-making in planning urban development. Two factors have facilitated this transition in governance and created a more stable political system in the region, especially 1) the adoption of *Sharia* in the legislation process, which facilitated people's acceptance of modern governments that do not separate religion and state (for more details about the importance and role of Islam in the Gulf, see the precedent section) and 2) the economic boom that has affected the welfare in the area and the population financial level (the financial level represents the third influence (input) that affects the sociocultural factor).

Since the middle of the last century, the oil boom in the Gulf region not only accelerated the process of urbanisation, but also brought about a change in the social culture, from extreme poverty to wealth[2] (Riad 1981). This change was a result of a considerable increase in the individual financial level, which has affected the culture towards housing (for more details about how the GNP per capita increased dramatically, see Riad 1981). As only an example, houses with extended families pre-oil phase was very common and culturally acceptable. This prevailing patten began to diminish quickly post-oil phase to become, for example in Saudi Arabia, 33% in 1996 and 20% in 2004 (RCRC 2015). Bahammam (2013) finds out that the culture of extended families turns into nuclear families when there is a financial ability.

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[2] This argument criticises the theory of Oscar Lewis, who thinks that 'poverty' can change but the 'culture of poverty' would not change (for more details, see Lewis 1966). The work of Lewis has further been criticised (for more details, see Gajdosikiene 2004; Gorski 2008; McDermott 2020).

In summary, this section briefly outlined three significant factors that can influence the sociocultural context in many societies, especially in the Gulf region (i.e. religion, rules and regulations, and the financial level). This means that sociocultural (including religion), economic (including the financial level), and political settings (including rules and regulations) can contribute to establishing the planning culture as a final product (Getimis 2012), where the effect of economic and political settings correlate with the sociocultural factor. This correlation supports the aim of this study by considering the potential influences of the above factors in giving rise to the creation of white land, where white land here can represent a part of the final product in the built environment.

2.2.1   Theorising the process of urban land development

It was useful to discuss the sociocultural impact on the built environment first because it gives a base that religion, rules and regulations, and the financial level can be a source of influences (inputs) on it. This suggests a conceptualisation that the review of the literature, in the rest of this chapter, will be embedded partly in sociocultural characteristics even when the discussion is related to other factors.

Key words were used, while searching the literature, in three different databases, Google Scholar, Scopus and Cardiff University's database. The key words are: undeveloped land (and its potential synonyms, i.e. vacant, idle and white land), urban development, land market, location theory, urban land economics, market failure, and planning failure. Dealing with land tends to involve complex issues; applying only one holistic theory would not contribute to describing, explaining or addressing the identified issue (the proliferation of white land), and thus various bodies of literature review in this case "act as a proxy for theory. In many instances, theory is latent or implicit in the literature" (Bryman 2016, p. 20). Therefore, based on the key words used, the researcher found developing any land is often subject to market forces (i.e. supply and demand), the factors that may cause failure in land development, and the role of government intervention to address failure (e.g. Wilson and Schulz 1978; Mills 1981; Klosterman 1985; Neutze 1987; Balchin et al. 1995; Wrigley and Wyatt 2001; Evans 2004; Harvey and Jowsey 2004; Kim 2010; Cheshire et al. 2014; Bentley 2017).

Figure 4 illustrates the theoretical framework to help understand the phenomenon of white land where, based on the searching process above, previous literature has not investigated. As shown in Figure 4, demand for land will be outlined through location theory of neo-classical models, which show how the public compete for land. The features of land market, as well as the impacts and roles of the relevant actors in land (i.e. developers and landowners) will then be explained as a crucial element in the supply side. Finally, the role of government intervention, due to market failure, will be justified, and also the potential implications of this intervention on land will be identified through planning failure.

Significantly, the previous argument in Figure 3 clarifies how planning culture can reflect the final product of human action through their institutions (political), sociocultural and economic activities. Thus, it can be argued, derived from the earlier argument in Section 2.2, that the planning culture is a physical activity of planning on land through reflecting sociocultural, political and economic outcomes of human actions, as depicted in Figure 4. In other words, the planning culture was the outcome in Figure 3 but the heading in Figure 4, where the various concepts of the literature operate under the umbrella of planning culture by their associations with the three factors related to outcome of human actions (i.e. sociocultural, political and economic) (Figure 4). This means that the theoretical framework underpins these three key factors, which the rest of the thesis will consider.

Figure 4: A suggested theoretical framework for land development
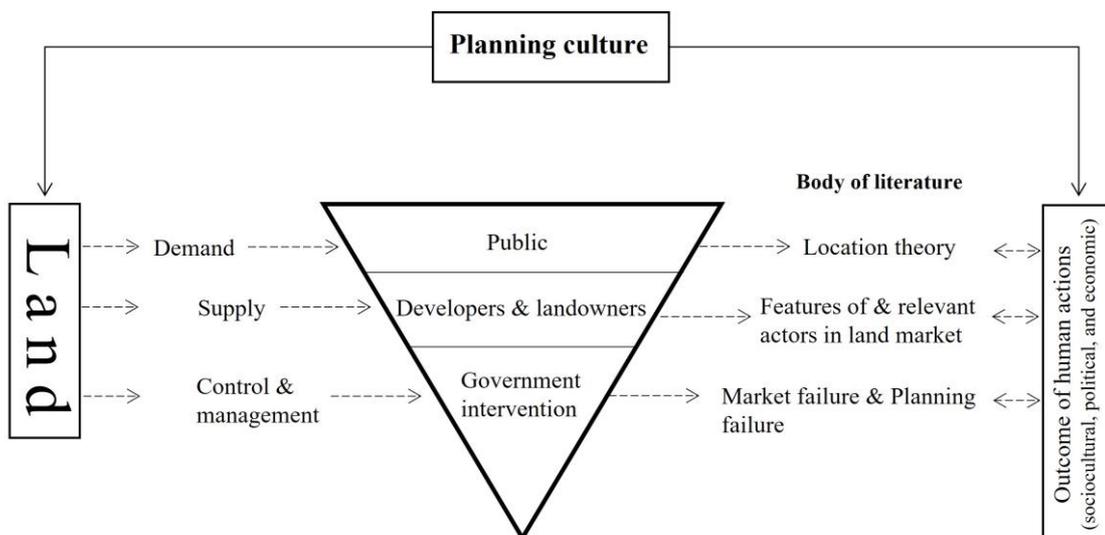
Besides the importance of the body of literature in Figure 4 (i.e. location theory, features of & relevant actors in land market, and market & planning failure) in understanding and investigating the existence of the phenomenon of white land, one job of the literature is to briefly highlight how these various concepts relate to, or ignore, sociocultural factors and/or the power of institutions in terms of government intervention in land markets. This is important as the thesis will later mostly focus on and analyse the role of power and sociocultural factors in land development.

Generally speaking, the theoretical framework above, with its various theories and models, is rooted in specific cultural contexts, mostly in the West (though they may include valuable and transferable elements if applied appropriately in other contexts). It can, thus, be a cultural product in itself to shape the way they do planning, and not an objective approach at looking at things. This view is supported by Ostrom (2010), who found that the early scholarly effort, which was later criticised, was to use simple models and mistakenly fit the whole world into them. This led Ostrom (2010, p. 642) to strongly believe that policies of "one size fits all" are not efficient. Similarly, Mazza (2002) identifies that diversification makes designing a grand theory challenging as it is more likely to weaken creating a comprehensive vision, as the diversification relates to sociocultural situations of each planning system, which can affect the built environment differently.

As only an example, Othengrafen and Reimer (2013) demonstrate that urban sprawl does not occur in some countries that apply particular spatial plans but does occur in others with the same spatial plans applied. The Gulf region has its own culture, but concurrently accepts some imported planning ideas maybe without re-elaborating nor re-politicising (e.g. see Lieto 2015) (the researcher will analyse the possible implications of some imported planning ideas on the proliferation of white land later in Section 2.6.1). The following section will discuss the potential effects of location theory on land development.

2.3   Urban location theory

The importance of urban location theory stems from the focus on the demand side for land, which contributes to the aim of this study by examining whether demand can result in further white land and how. The location theory is that allocating resources is subject to the market ability, through the price system, to correct itself, when every individual seeks their own interest without any intervention or control by the government (Kennedy 2009). In this abstract theory, the focus is on market-based considerations; it is assumed that the nearer the land to the central areas the higher value it is due to the maximum accessibility (Haig 1927, cited in Wendt 1957; Kivell 2002). The theory relies on the comparison between land rent and transport cost. Location theory has been developed by explaining some potential factors that can influence the demand on land (i.e. competition for land).

Haig attempted to explain the underlying influence of transport cost on land rent. He argued that the cost of relatively accessible areas will be increased by their landowners until they become equal to the total cost of both outer land plus transport (Wrigley and Wyatt 2001). Haig thinks that reducing transport cost is the greatest criterion for planning a city as it would minimise the value of central locations and, as a result, all the urban areas in the city (Wendt 1957). Wingo (1961), cited in Ayeni (2017) agrees with the important impact of the cost of the journey to work, and therefore selection of the residential site by households takes this factor into consideration.

It was argued later by Alonso that each household has a particular budget that they can spend on goods, as a result every individual household will consider, based on their requirements, the balance between consumed space of land (its rent) and commuting costs (Ayeni 2017). Assuming a monocentric urban form, Alonso states that there is a diminution of rents moving outward from the city centre in order for higher costs of transport to be offset (Wrigley and Wyatt 2001; Yankaya and Celik 2004; Kabba and Li 2011). It is a trade-off process that aims to maximise utility for households. In this process, based on the essence of Alonso's assumption, each piece of land is obtained by the highest bidder, where the financial level increases with the distance from the city centre (Wheaton 1977).

Muth's contribution was that when the financial level increases, it creates a culture for households through consuming and enjoying more land, as land rent falls at a high rate compared to a low rate of increase in commuting costs moving outwards (e.g. see Wilson and Schulz 1978; Cheshire et al. 2014). This suggests that those who dwell far from the city centre are prepared to pay a sum of money for land that is similar to those who live in more expensive land in the city centre, but with enjoying more space. This assumes that financial level, which was argued earlier in Section 2.2 to be one input that affects culture, may result in a sociocultural output for allocating land based on financial level.

There are also other factors that primarily focus on the consideration of utility of households in the site selection. Public services and environmental quality were suggested by Siegel as significant factors in the trade-off process, where the former would be available in the central areas and the latter in the outer (Sen 2013). Harvey and Jowsey (2004) also explain some non-monetary factors and how they can pull households outwards, such as prestige of location, tastes, age and number of children, where younger families would need more space, and thus the suburbs would be attractive, while older people would not. However, pulling householders outwards has a limit defined by the location theory. In brief, householders tend to bid in a way that ensures the maximum profit of given sites. This competition of householders (i.e. residential use) dominates but at the same time diminishes moving outwards until it is substituted by the rural use (e.g. Wheaton 1977; Alonso 1964, cited in Balchin et al. 1995).

It is true that the above location theory has been criticised for a long time due to its possible deficiencies (e.g. see Clark 1986; Smith 1989; DeVerteuil 2000). One major fault is explained by Form's model (1954) who found that considering the sociocultural structure has greater influences in understanding land-use planning. However, both the debates criticising the location theory and the literature of location theory itself, with its factors discussed above, have not explained how land development can fail. It has not been demonstrated how the process of competition for land can result in further white land, a gap that needs to be filled. One objective of this study is, thus, to examine any other factors that may cause white land through demand (i.e. site selection).

As discussed previously, location theory mainly relies on the price system concept where the market has the ability to correct itself (Harvey and Jowsey 2004), and therefore all its assumed factors respond accordingly. This implies that the impact of planning culture seems to be secondary here, where market-based considerations tend to be primary. This is because this process does not mainly rely on government intervention; outcome of human actions can be less, where the responses in the built environment often follow the market and the price system. This lack of links with the sociocultural factors and institutions can affect the ability of location theory to explain the process of land development in some dissimilar case studies, as will be analysed later in the empirical chapters.

Another criticism, the above assumption (the price system concept where the market has the ability to correct itself) may not consider the impact of possible external factors. There is some quantitative evidence that prices of land usually move together with the macroeconomic fluctuations, where the former tends to be subject to the latter (Liu et al. 2013). One explanation of this link, according to Liu et al. (2013) is that companies, for example, normally use land as a valuable asset to fund their business investment, for instance by mortgaging it. This implies that the amount of loan that companies can take out is subject to how much the land they own is estimated to be worth. This suggests that when there is an economic recession, then land must be evaluated with less value, which reflects the money they can borrow during a financial crisis and vice versa (for more details, see Fischer 1993; Ferderer 1996; Haddow et al. 2013; Liu et al. 2013).

Based on the above argument, while the studies related to macroeconomic fluctuations have mostly focused on the correlation between land prices and external factors, little research has considered the relationship between this correlation and land development by generating further white land, a gap that needs to be filled. The Gulf region context can be a fertile ground to investigate this correlation and its impact on white land, as it mostly depends on oil revenues, an external factor that is highly subject to economic fluctuations. In contrast, as only an illustration, countries that produce oil largely but macroeconomically rely on industry, such as the USA and Russia, are not heavily affected by price fluctuations of oil, nor is the increasing price of oil regarded as positive to their GNP growth. This is because, according to Ferderer (1996), the

increases in oil price result in a decline in the production process, which can lead to higher levels of unemployment.

One final criticism of the location theory is drawn by Webster (2015), which, again, places considerable significance on the sociocultural effect, where the models of location theory were not introduced outside a given sociocultural context (i.e. in the West). Thus, it is a western view that supports this approach to planning, as was explained earlier. For this reason, Webster (2015) argues that the location theory models, with their hindrances, are not as useful as focusing on patterns and structures that arise from individual behaviour (e.g. individual behaviours that affect land supply). Thus, while the potential factors affecting demand have been explained in this section through the explanation of location theory, the features of land market including the important issues that are connected to the supply side are discussed in the next section, which can explain the behaviour behind withholding land.

2.4   Features of land market

The models of location theory do not identify the availability of land supply and its restrictions, as withholding land can damage the process of competition for land (Neutze 1987). Considering the unique features of urban land is key for the target of understanding why land, as a good, differs from other generic goods, and establishes a distinct culture. What fundamentally characterises it differently from other types of goods is; its connection with non-financial factors, immobility (durability), fixity in supply with its implications regarding land prices and imposing taxes on land, and the external factors leading to market failure (e.g. externalities, uncertainty etc.) (factors of market failure will be discussed in Section 2.6.1).

Firstly, what differentiates land from other assets is that it is sometimes associated with non-financial factors, such as the household utility. This is Evans' (1983) argument, that social attachment to the land (use value) can sometimes exceed the value of exchange, even when there are some financial gains. Land, on the other hand, is also connected with financial factors owing to it being permanent and immobile (Doebele 1987). This fixity in location not only add preference for land instead of other types of movable

assets (Evans 1999), but also make a given land itself to be heterogeneous (i.e. the quality of it varies from location to another) (Harvey and Jowsey 2004). Due to its durability (Hui 2012), rights tend to exist for a long period of time (Webster and Lai 2003). Real property, in this sense, does not just involve users, but also investors who seek annual yields.

The above two points (i.e. non-financial factors and durability) challenge the argument of Cheshire and Sheppard (1997), who assume in their model that, with the exception of the British case (planning permission), land supply is elastic. If such permission is available, land, Cheshire and Sheppard wrongly assume, will be developed when its price exceeds its value in agricultural use, exactly as argued in the location theory. In fact, they neglect consideration of actors' behaviours and their sociocultural characteristics, particularly landowners, which can bring about withholding land, whether because of financial and/or non-financial factors (for more details, see Section 2.5.2).

Accordingly, it seems that planning culture sometimes fails to consider carefully and reflect the sociocultural factors. This is to argue that, although the features of land in terms of immobility (durability), fixity in supply (discussed in the following paragraph), and its connection with non-financial factors are often the same objects throughout the world, the actors' behaviours (i.e. outcome of human actions) would respond differently to such objects. The actors' responses here would, as was clarified in Section 2.2, rely on their way of thinking, based on some rooted traditions and behaviours that shape social practices, where 'practices' reflect how land is treated by them (for more details, see Section 2.2). The actors' responses (often landowners) would also be outputs that are affected by the contextual rules and regulations, where the latter are one of the influences in any culture, as was demonstrated in Section 2.2.

Moreover, what characterises land resources, not least in terms of value, is that they are, generally, limited and cannot be increased[3] (Paciorek 1013). Ricardo (1891) clarifies this issue by stating that land, dissimilar to manufactured commodities, is fixed in supply and refers only to natural resources as a gift from nature. In other words, rental prices of land are determined only by demand through population growth, credit

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[3] With the exception of land reclamation from, for example, the sea.

availability, inflation or increased affluence (Balchin et al. 1995), and any profit over land is regarded as a surplus because it is provided by nature. However, Evans (1999) criticises those who do not carefully consider the thesis of Ricardo, that the land supply is fixed. Evans argues that any additional supply through relaxation can influence land prices and vice versa, emphasising the role of planning controls.

Planning permission in the UK is deemed to be a critical factor in reducing elasticity, resulting in higher land prices (Cheshire and Sheppard 1997; Evans 1999; Bentley 2017). This is because, Cheshire et al. (2014) clarify, any elasticity in supply (i.e. through planning permission) brings about proportionally much higher prices for even a slight increase in demand. The example of Balchin et al. (1995) is that the increased values of urban property in Britain between the 1950s and the 1980s were due to a rise in demand, compared with sluggish reaction by supply. Demand can be the core determining factor of rental prices, and subsequently of capital value not because the supply does not affect, but due to the slow reaction to the rises or falls in demand, which can cause lag-time resulting in 'leapfrog' in development (Markusen and Scheffman 1978; Balchin et al. 1995).

Any increase in land price is not necessarily to be followed by an increase in supply. Instead, the increased price might reduce the supply (Drabkin 1977). This is, according to Drabkin, because land tends to be withheld from the market by its owners, when new development is expected, in the hope that continuous increases in the values, over time, will achieve greater profits in the future. This means that landowners sometimes regard land as a reliable investment and withhold. Meanwhile, land prices, as a result will increase as they are not subject to the quantity of land existing, but rather to the amount of land available in the market.

The above debate leads to the viability of imposing taxes. As the demand for land can determine the earnings of it (because it is fixed in supply), imposing taxes on undeveloped land has no impacts in terms of increasing or decreasing the supply (Harvey and Jowsey 2004). Although it is true that taxes do not increase the supply in nature, some evidence shows they increase it in practice. Indeed, despite the massive demand for residential land, particularly in developing nations, land is not only too

expensive but also withheld from development (Abrams 1964). Abrams argues that placing taxes only on land rather than buildings, as happened in Jamaica, can reduce monopoly and speculation actions, resulting in further supply of land ready for development, which finally can curb increasing prices. This is land value taxation, which only taxes land value. Without this type of tax, on the other hand, land prices can go up and, concurrently, encourage speculation.

Further evidence of the efficiency of the land value taxation is found in different contexts such as China, Singapore, the Philippines, Brazil, Colombia, Korea and Taiwan but with disparate application methods, for example by time left vacant, location, or the degree of development, as well as identifying the tax rate (Amirtahmasebi et al. 2016). Despite such dissimilarities, one common denominator amongst these contexts is the local government being professionally capable enough to successfully implement the system (for more details about different case studies, see Amirtahmasebi et al. 2016). Singapore has gone beyond this to apply land acquisition if the land has not been developed within two years after the granting of planning permission (ibid). This type of taxation is supported by earlier scholars such as Adam Smith, David Ricardo, and Henry George (e.g. see Dwyer 2014).

Having explained the features of land, it is central to the aim of this study to analyse their potential reflectivity on the spread of white land, especially whether there are non-financial factors encouraging withholding land, whether the immobility and durability of it has promoted a culture of keeping land without development, whether the increased land prices contribute to white land and how. An important point of highlighting the features of land in this section is to help in understanding the actors' behaviours in dealing with land, as will be discussed in the following section.

2.5 Actors in land market

It is vital to explore the actors in the land market because they take important decisions towards land usually based on both the sociocultural factors and the nature of the land features, explained in the earlier section. There is a correlation between the features and the performance of the land market itself, where the actors behave, often towards their

own interest, built on the land features. This correlation indicates that, depending only on the sociocultural factor, which was suggested by Form (1954), in understanding the phenomenon of white land would not be effective. This argument is supported by a different model, which relies on 'rational actors' instead of Form's conceptual model.

In the model of rational actors, rational expectation is the motive behind the behaviour of land development actors. The rational expectation responds naturally to the current events and conditions in the development process (for more details, see Healey 1991; Ball 1998; Ross 2016; Cronje 2018). These events and conditions are the rational actors' response to urban growth, the features of land and external factors affecting it, the economic fluctuations, and land policies and the government rules and regulations in general (e.g. Healey 1991; Barras 2009). Taking the argument in Section 2.2 about the connection between the sociocultural factor and rules and regulations into consideration, it can be assumed here that the model of rational actors largely responds based indirectly on the sociocultural factor. However, this view should be considered carefully because, as was clarified in Section 2.3, the extent of government interventions in land markets vary from one context to another, where a high level of intervention can lead to further practice of sociocultural factors (for example by exercising more discretion, see Section 2.6.2.3).

Another consideration, the behavioural economics support the idea that the actors in the land market deal with it based on economic cycles. Consider investors who are overconfident in the market and in their abilities and likely to make transactions even with imperfect information (Mullainathan and Thaler 2000). One reason is they are optimistic about selling the commodity with profits, and the purchaser might do the same (i.e. buy it for making money due to high overconfidence). However, the main goal here is not to argue whether dealing with land is influenced only by the sociocultural context or by the rational expectation. Rather, the aim is to explore any influencing factors on the actors' behaviours for the purpose of studying their possible impacts on increasing the white land proportion.

The actors in the land market are divided in this research into three main groups: developers, landowners and relevant government institutions. The relevant government

institutions, which are seen as responsible for providing public goods and controlling development (i.e. through the planning system), will be discussed in Section 2.6. Under this section, the role of developers and landowners will be outlined, and more importantly whether their behaviours in dealing with land can result in white land.

2.5.1 Developers

Developers play a fundamental role in urban development (Zöllig Renner 2012). The role of land developers is to construct basic infrastructure like roads, utilities and recreational facilities (Kohlhepp 2012). Irwin and Bockstael (2002) state that the development of a land tract is subject to the developer's decision after buying it, or to the landowner's decision if it is under their ownership. This indicates that the developers' decisions have a major hand in developing land or not. The ultimate goal of land developers is usually to make profits (Goodchild and Munton 1985), they want to buy land at the cheapest possible price and to sell it after developing at the highest possible price. To satisfy this aim, they sometimes behave in a way that leaves land as undeveloped for a longer time.

For example, the process of assembling land can consume time, where the potential developer cannot start developing the project (for more details, see Evans 1999). Even after passing the subdivided land to a housing developer, the housing developer tends to develop slowly with anticipating the future prices (e.g. Kohlhepp 2012; Cheshire et al 2014). This behaviour guarantees the housing developer their planned profits. This is because constructing slowly can maintain the land value and deliver it to the consumers in the value of a new-build dwelling, otherwise the developers may bear the risk (Bentley 2017). In other words, as Bentley demonstrates, any increase in housing supply would reduce the current house values, and hence the land price that the developers have already invested in. Although there is no specific duration of time for building the entire land subdivision, some evidence in Maryland shows that the subdivided parcels tend to be built on within three years (Irwin and Bockstael 2002).

Given the above, one central point related to the subject of this study can be raised. It is a well-documented fact that depending on housing developers, who establish the

vertical developments, is an idea spreading throughout the world (Kohlhepp 2012). However, in some parts of the Gulf context, the culture of building can differ, where building individually from scratch prevails (see Section 6.2.1). This is to argue that one limitation and gap in knowledge lies in the fact that the literature does not generally focus on differentiating between the two building styles (i.e. housing developers and self-construction style) in terms of their possible implications on land development. Little is known about why the self-construction style prevails and, more importantly, whether it contributes to further white land and how, a gap that needs to be addressed.

2.5.2 Landowners

The broad concept of private ownership of land is rooted in rights, which allow the owner(s) to behave in a way that suits their own interests, for instance by developing the land, selling it, or preserving it for a future purpose (Gillham 2002). Landowners, therefore, do play a significant role in urban development. One crucial dissimilarity between landowners and developers is that the former tends to be involved in the development process unprofessionally and lacks experience. They can choose to pass their raw land to a potential developer for subdivision or make a partnership with the developer or exclude them from the task and subdivide the land tract themselves (Kohlhepp 2012).

However, the landowner sometimes decides to withhold their land for a future purpose, resulting in an increase of the white land proportion and, simultaneously as asserted by Bhatta (2010) and Fischel (2015), cause non-uniform growth of cities. This is because the demand for urban-rural fringe areas tends to increase (Mills 1981), bringing about 'leapfrog' development (e.g. Markusen and Scheffman 1978; Balchin et al. 1995). The underlying question then can be: why do some landowners keep their land away from development? The different planning culture and behaviours of landowners, according to Neutze (1987), need to be fully understood since some of them develop their property and others, in seemingly similar circumstances, defer development even if the returns seem to be high. Summarised from various pieces of research, there are three feasible causes that can shape the culture of owners to preserve their lands instead of selling /

leasing or more importantly developing them, namely attachment to land, uncertainty, and speculation.

The first possible reason is the culture of attachment to the site, affiliation with the landowner's ancestral land and a set pattern for its use which they feel will be spoiled if they allow commercialisation of their land. This can be seen in some cases in India and China, owners are not willing to give their land to industrialists for these two reasons (Bardhan 2011). Kaiser and Weiss (1970) research into behaviour of landowners towards development of land and illustrate that some landowner's priority is a non-financial aspect, for example land for housing, love of land, and land as symbol of status or privacy. The attachment to the land, conversely, can sometimes be associated with financial factors, landowners may develop affiliation with their land thinking of it as the only secure asset, and thus they never want to part with it (Fatta 2014).

The second reason rests in uncertainty about the future, which sometimes makes landowners prefer waiting rather than selling or developing, because in this case they have ownership of an option. Such uncertainty embodies the dilemma of identifying the most profitable use of development at present, and in the future. For example, Neutze (1987) in his model clarifies that some land is projected to be more appropriate for higher density in the future, an important factor behind withholding some land. The landowner, hence, tends to avoid not only the sale option, but also the development choice until the image becomes clearer to them (Ohls and Pines 1975; Titman 1985). This is because once development takes place, reversing it is unreasonable as it is too costly (Irwin and Bockstael 2004). When the choice is taken and the potential landowner(s) decides to exclude any developers from the development process, they sometimes sell some of their land to fund the other part with establishing a scheme and infrastructure (Evans 1999), which implies that the part sold is not necessarily to be developed.

Mills (1981), using a model of a monocentric city, has extended the work of Ohls and Pines. His main argument is that landowners might withhold land not only because they are uncertain about the ideal use of their land in the future, but also because they are uncertain about the potential growth, whether the city will grow largely, resulting in

exercising speculations.

The third reason why landowners might be willing to preserve their lands lies in speculation that they could obtain a higher value if they sell their land in the future (Evans 2004; Bayer et al. 2011). What most probably happens, thus, is that a particular percentage of land is bypassed by builders to build on areas more remote from the city centre (Fischel 2015). A survey shows that lands are not undeveloped because of financial barriers encountered by landowners, but rather due to intentional actions of speculators (Sinn 1986). For example, in Jeddah, if a speculator acquires any piece of land, they tend to keep it for the maximum period of time unless they are in desperate need of money. To them land is the most precious fortune they can have. If they need money, they sell a small piece of land (Fatta 2014).

The difference between the second reason (uncertainty) and the third (speculation) seems, based on Evans' (2004) explanation, that the latter includes only the selling option with, surely, the aim of profit, while the former encompasses all kind of options (sale, development, use, etc.); that is why he states, "ownership of option" (p.83). Ownership of option is, therefore, defined as ownership of a site that enables its owner to exercise their option (e.g. use, develop sell) whenever they wish, where the development of such site closes this option (Evans 2004. P.83).

Despite the above possible reasons why landowners may withhold land, the literature reviewed here assumes that, with the exception of attachment to/use of the site, the ultimate motive for withholding land is linked with making money, where landowners respond as rational actors to their surroundings in a way that suits their own interests. Although it is critical to the aim of this study to consider how and why making money through simply withholding land may appear as a culture, the literature has ignored any other potential obstacles why landowners do not develop their land, which can be out of their control. To fill this gap, the emphasis here is on the possible deficiencies stemming from government intervention, which may exacerbate the white land phenomenon (see the following section). In fact, it seems there are two similar reasons why the literature focuses on showing a strong correlation between withholding land and making money, namely the concentration is on land on urban-rural fringe and brownfield sites.

One underlying point, when it comes to undeveloped land, is the focus of the literature generally on the urban-rural fringe sites. This seems clear from both the logic behind the location theory (when rural use turns into urban) (see Section 2.3), as well as Mills' (1981) thesis above, that uncertainty about the potential growth can discourage landowners to develop their land; the development may not be financially viable. Indeed, the situation of uncertainty about the potential growth often occurs in lands around the urban-rural fringe. That is why the effort of many studies goes for measuring the optimal development-timing, mostly quantitatively (e.g. see Shoup 1970; Anderson 1993; Irwin and Bockstael 2004; Kim 2010; An et al. 2011; Ott et al. 2012; Zhang et al. 2012; Yao and Pretorius 2014).

The second core point, in respect to undeveloped land, is the concentration of the literature on the brownfield land. This appears obvious from Neutze's (1987) argument above about identifying the most profitable use and density. Balchin et al. (1995) clarifies that identifying the most profitable use and density is central to the decision of developing brownfield land. In support of this, and compared to greenfield sites, brownfield sites are usually more expensive and require greater economic gain to realise a successful and viable scheme. That is why taking the decision to develop this type of land tends to be considered carefully in a way that guarantees reaching the point where marginal revenue equals marginal cost (e.g. see Burgess and Jenks 2002; Harvey and Jowsey 2004; Neuman 2005; Dixon 2006; Halleux et al. 2012; Rérat 2012; Newton and Glackin 2014; Song et al. 2019). That is why, similar to the urban-rural fringe sites, quantitative methods are used largely in most of the studies related to brownfield sites (e.g. De Sousa 2002; Tang 2011; Wang at el. 2011; Morio et al. 2013; Green 2018; Modica 2019).

However, the scope of this study does not centre around the above two types of undeveloped land (i.e. urban-rural fringe and brownfield land). Rather, in the context of the Gulf, many cities tend to grow in a way that leaves a plethora of undeveloped land within the urban boundaries of the city. (e.g. Hamouche 2004; Kaganova et al. 2005; Rizzo 2014; Abou-Korin and Al-Shihri 2015; Al-Muttawa; 2016; Ababsa 2020; Mansour et al. 2020). This means that the land market here has not originally developed this type of land (i.e. virgin land). This can totally differ from land around the urban-

rural fringe, where the latter has not been bypassed by the market, but also differ from the nature of brownfield land, where the latter has previously been developed according to Dixon (2006). Therefore, what is meant by undeveloped land in this study is any residential virgin land locating within the UGB, which is called here 'white land'.

In brief, white land is defined as "any idle land designated for residential or residential/commercial use within the urban boundaries" (MH 2020). Likewise, it is defined as "large plots of idle urban land" (Wahbah et al. 2016, p. 6). While the latter definition refers to only large urban plots and the former to any residential or residential/commercial land (whether large or small), this study refers to white land as any land within the urban boundaries that has not been previously developed, whether subdivided or not. This can be derived from the RCRC's (2019) clarification that white land includes both developable land (i.e. large tracts) and any subdivided land (i.e. plots) that has not been built on yet. Therefore, the word 'plot' will only be used here to differentiate from a large section of white land.

The above definitions indicate that the market sometimes fails by bypassing this type of land without any developments, a phenomenon that differs from other forms of undeveloped land (for more details about the underlying distinction between urban-rural fringe, brownfield, and white land, see Alsulaiman 2018). In terms of white land, there are very few studies focusing on it.

One comparative study shows that the proliferation of white land in Saudi Arabia is caused by a historical approach of distributing land for the powerful individuals (e.g. tribal leaders), which has resulted in speculation and ultimately contributed to unaffordability of housing. This comparative study argues that this issue does not appear clear in Oman because the economic base of powerful Omani individuals does not depend mainly on land speculation, resulting in more affordable housing for the residents (see Shouman 2017). Similarly, Heim et al. (2018) analyses the impact of the formation of clans on land allocation processes, finding that the existence of white land is influenced by the powerful Omani leaders/individuals. Another study has attempted to fill a gap by developing models for urban growth that suit Kuwait, finding that the process of land allocation in the Gulf (i.e. land grant policy) can create noticeably

spatial segregation between nationals and foreign people (see Alghais 2018).

Although the above studies related to white land can be useful in terms of studying the potential effects of powerful landowners, affordability and spatial segregation in the Gulf context, they have a crucial limitation. They do not essentially aim to explore and explain the potential causes of the emergence and continuing existence of white land (the aim of this study). Finally, as the phenomenon of white land is the focus of this research, it is vital to discuss the market failure. This is not only to explain how uncertainty and land speculation, which have been discussed in this section, are both due to the imperfection and failure of the land market, but also to highlight how governments can address such failure by intervention (e.g. Ewing and Hamidi 2015).

2.6   Intervention in land market

The theoretical framework developed in Section 2.2.1 justified discussing the role of government intervention as a response to market failure, identifying the potential implications on land development. In support of this, the previous section also demonstrated that the literature has ignored any other possible obstacles why landowners do not develop their land, which are out of their control sometimes. This section will discuss both the reasons for market failure, including how government responds to such failure, and more importantly the possible effects of government intervention. Considering these effects of intervention on the existence of white land is highly relevant to the aim of this research. The relevancy here is that this intervention can, for some reason, make developing land as an obstacle for landowners, a research area this study aims to cover.

The response of government to the market failure can be through both the planning system including some rules and regulations (explained throughout the following sections) and the approach of land administration including the governance system (clarified in Section 2.6.2). The approach of land administration seems vital in this study as the success or failure of such planning techniques is not necessarily associated with the feasibility of planning. Rather, as emphasised by Evans (1999), in how planning is practiced and managed, which can sometimes lead to implementing

planning tools incorrectly or differently (this supports the previous argument in Section 2.2 about the importance of considering planning culture).

2.6.1 Market failure vs planning failure

The term 'market failure' is used "to describe a situation in which the invisible hand fails to allocate resources in a socially desirable manner, so as to maximise aggregate economic well-being" (Brueckner 2000, p.163). This failure is endemic in land markets, and the land markets hence cannot achieve economic efficiency (economic efficiency is met when the best distribution of limited resources is secured by society in the way that maximises economic welfare) (Harvey and Jowsey 2004). The thoughts regarding the free market in allocating resources, which demonstrate that the market has the ability through the price system to correct itself when every individual seeks to further their own interest with no intervention (Harvey and Jowsey 2004), can be challenged. Therefore, Evans (2004) believes that intervention is necessary to correct this failure, emphasising the significance of planning culture (see Sections 2.2 and 2.2.1).

Intervention through planning systems to alleviate the market failure is widely advocated by many scholars, for example Wootton, Tugwell and Mannheim (for more details about the argument for intervention, see Mannheim 1941; Castle 1965; Webster 1998). Nevertheless, it should be acknowledged that intervention through planning can also fail, resulting in what is known as 'planning failure', leading some opponents to argue against it (for more details about the argument against intervention, see Pennington 1999; Webster and Lai 2003; Halleux et al. 2012).

The definition of planning failure is considered, according to Matsila (2012, p.18), as challenges in the urban context "that came about as a result of past planning of the city". Likewise, Kenitzer (2016) discusses three different dimensions related to planning failure: 1) rational comprehensive, where the failure lies in the processes of preparing plans and their evaluation at each phase 2) communicative, where the failure stems from the way the process of developing plans is influenced by limiting participation between the stakeholders which may affect implementation of plans, and 3) the pragmatic planning theory, which attributes the failure to incompetence where competence is seen

as an understanding of the processes of planning.

However, it is out of the scope of this study to review the argument for and against the government intervention. Rather, and again, the central reason for exploring the effects of market failure and planning failure is only to analyse their possible implications on the existence of white land. That is why this study will not cover the irrelevant elements of market failure, such as water and air pollution. The elements of market failure that can help in fulfilling the aim of this study can be summarised in externalities and imperfect competition. The following parts outline these elements, explaining the possible responses to address this failure.

2.6.1.1 Externalities

The impacts of externalities on societies spread worldwide, especially in urban areas where economic development continues and urban population increases (for more details about externalities, see Castle 1965; Mishan 1971; Bator 1993). Both the positive and negative externalities are explored in this section, with an emphasis on explaining how they may exacerbate the phenomenon of white land.

Positive externalities

The positive externality happens when a third party takes advantages from a good consumption or production without bearing the total costs resultant from the benefit gained (Cohen and Winn 2007). Although Cohen and Winn (2007) give some illustrations for the benefit gained, what seems highly relevant to the study aims is an example drawn by Klosterman (1985). He points out that the landowner's property value can increase not because they have developed it, but because important improvements or transport networks have been built close to it, which make the landowner benefit without compensation. Klosterman assumed this theoretically to support his thesis against the feasibility of the 'invisible hand'. This suggests that exercising the planning culture based only on the outcome of human actions (i.e. landowners' behaviours) may lead to exploiting the private interest in case of the absence of a planning system and/or rules and regulations.

Few studies have evaluated the above argument, especially in terms of the possibility whether landowners keep their lands away from development only to wait for the surrounding areas to thrive (to gain this positive externality). In other words, this research will consider if this positive externality about which little is known (i.e. waiting for improvements or transport networks to be built near one's land) can give rise to increasing white land proportion, where every landowner intends to withhold theirs.

Negative externalities

Externality can, on the other hand, be negative which is the prevailing view in the literature. Negative externalities exist when the costs resulting from consumption or production of a service or a product are borne by a third party, without obtaining parallel benefits (Cohen and Winn 2007). Government often intervenes here to minimise the damaging impacts of any negative externalities, which in urban areas involve many elements such as the costs of traffic congestion, pollution, noise, lack of privacy and so on (for more details about negative externalities, see Mishan 1971; Anderson 1993).

More importantly, what is consistent with the aim of this study is to explain how urban sprawl of cities involves negative externalities that bring about market failure, as Marin (2007) believes. The underlying rationale behind this explanation is not simply to argue that there is a correlation between urban sprawl and neglecting developing the inner-city (i.e. undeveloped land), as Brueckner (2000) thinks. Rather, this study goes beyond this to explore whether the intervention to address this sprawl, especially through the planning system, can itself give rise to white land (how and why), a gap in knowledge. To fill this gap, the thesis will cover what sprawl is, why it is associated with market failure, and how it can be tackled, as will be explained in the following arguments.

Sprawl is defined as "development that is inefficient in its use of land (i.e. low density); constructed in a leap frog manner in areas without infrastructure, often on prime farmland; auto car dependent and consisting of isolated single use neighbourhoods requiring excessive transportation" (Freilich et al. 2010, p.8). Likewise, Gillham (2002, p.4) clarifies that "planners define it as low-density, single-use development on the

urban fringe that is almost totally dependent on private automobiles for transportation". The National Trust for Historic Preservation, similarly, describes sprawl as "dispread, low-density, development that is generally located at the fringe of an existing settlement and over large areas of previously rural landscape … characterised by segregated land uses and dominated by the motormobile" (Gillham 2002, p.4). It is out of this thesis' scope to list all the definitions, but the common characteristics of virtually all sprawl definitions depict sprawl as a suburban phenomenon having low-density with a favouritism to the motor car as a main means of transport (e.g. Gillham 2002; EEA 2006[4]; Freilich et al. 2010).

Taking the above characteristics of sprawl into consideration, Brueckner (2000) has identified three elements that associate sprawling cities with market failure, namely individual commuters, open space, and costs of public infrastructure. In brief, the individual commuters can impose social costs due to the traffic congestion. Costs borne by the commuters (i.e. money and time) go beyond to include the society, where road networks become more congested for those who live inside the city to use (Brueckner 2000).

Secondly, open space: the excessive use of open spaces is a negative externality. This is because undeveloped land by the urban-rural fringe can sometimes be beneficial to the citizens (positive externality) as they provide open spaces (Anderson 1993). To tackle the excessive use of open spaces, according to Brueckner (2000), can be by intervention through land use control such as the tool of UGB (not only providing negative tax to the landowners involved as Anderson (1993) claims), otherwise the society can lose large proportions of open space.

Thirdly, it is acknowledged that urban sprawl can exhaust the government budget because it is too costly in terms of constructing infrastructure (e.g. Speir and Stephenson 2002; Burchell and Mukherji 2003; Thompson 2013; ROGATKA and Ramos Ribeiro 2015). Brueckner (2000) shows evidence that the infrastructure cost of new development on greenfield sites is a negative externality not only owing to their indirect impacts on encouraging sprawl, but because homeowners often benefit from a new project through the system of property tax. The market here fails since tax burdens on

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[4] The European Environment Agency.

homeowners are usually less than the actual costs of infrastructure that they benefit from, where all the other citizens share such costs. This situation, ultimately, can exacerbate sprawl and damage open space as the homeowners here tend to have a higher financial ability to buy new dwellings (because the correct burden of tax is not imposed on them) (Brueckner 2000).

Sprawl is deemed to be detrimental not only because of the negative externalities embedded, but also because of the damaging effects environmentally, economically and socially (for more details, see Williams 1999; Brueckner 2001; Weng 2001; Speir and Stephenson 2002; Ewing et al. 2003; Garcia and Riera 2003; Raza et al. 2016). However, the ultimate aim for this study is not to describe the impacts of sprawl. Instead, it is to explain the potential types of intervention through planning that can alleviate sprawl but for the aim of investigating if such types of intervention can, on the other hand, exacerbate the phenomenon of white land and how (i.e. to consider whether such intervention is a source that can cause planning failure by impeding the development of white land). Although impact fees are seen as an effective method for treating the residents fairly and reducing sprawling cities (Burge et al. 2013; Coutts et al. 2015; Jiang and Swallow 2017), intervention through land-use planning is widely used in dealing with sprawl, especially the introduction of urban containment tools.

Urban containment tools are one common type of intervention for alleviating urban sprawl, particularly the UGB and greenbelts that can control unfettered growth of suburbia. Although the origins of these tools are the USA and the UK, they have spread across many cities in the world (Nelson and Moore 1993; Cohen 1994; Tang et al. 2007; He et al. 2018). They are regarded as effective in preserving open space, curbing urban sprawl and promoting development in an inner-city (Dawkins and Nelson 2002; Pendall et al. 2002; Rowe 2012). The city, otherwise, can grow excessively (for more details, see Healey 1998; Brueckner 2000; Dutta 2012; Halleux et al. 2012; Westerink et al. 2013; Ewing et al. 2014). The origins of the UGB can be derived from the idea of defining the urban-rural fringe, which rely on market-based considerations, such as the considerations of competing for land discussed earlier in the location theory, including the diminution of householders' bidding until it is substituted by the rural use (see Section 2.3). Thus, the UGB can be designed to define such fringe.

That is why most of the discussion related to the UGB is based on economic considerations. One example can be derived from the above definitions of sprawl; increasing density should be connected with the urban containment tools to curb sprawl and achieve economic agglomeration, which is commonly supported by some planning concepts, such as the 'compact city' and 'smart growth' (e.g. Dantzig and Saaty 1973; Dieleman and Wegener 2004; Daneshpour and Shakibamanesh 2011). More importantly, conversely, the UGB is most blamed for restricting the already limited supply of land, which as a result increase land value (for more discussion, see Diamond 1995; Evans 1999; Lee 1999; Levine 1999; Brueckner 2001; Dawkins and Nelson 2002; Pendall et al. 2002; Pennington 2003; Downs 2005; Bengston and Youn 2006; Jun 2006; Kim 2011; Rowe 2012; Cheshire et al. 2014; Woo and Guldmann 2014).

This increase in land value by restricting the supply by curbing the city expansion, or even by identifying maximum heights of building, can decrease the available developable land (Cheshire 2013). Pennington (2003) supports this by illustrating that prices of residential land in the UK have skyrocketed 600 – 700 % since the introduction of the Town and Country Planning Act in 1947. Cheshire (2013), therefore, criticises planning intervention as it gives some landowners the advantage of gaining asset values while others, who may own land with similar features and could gain more in a free market, gain no advantage.

It is difficult to draw general conclusions about the UGB and greenbelts because, as Pendall et al. (2002) maintain, they are applied in dissimilar nations with different governance regulations and maybe other local goals. One country might intend to imitate the form instead of the main substance for a particular purpose, such as the greenbelt in Hong Kong which is intended to be flexible, and thus it is actually a transition zone instead of a conservation area (Tang et al. 2007). Therefore, the effectiveness of these tools is subject to location and nation (i.e. the contextual planning culture) (Amati and Taylor 2010). This argument is in harmony with what was previously explained about the importance of the way planning is practiced and managed, as well as the significance of considering the local planning culture, otherwise some problems from travelling planning ideas may arise (see Sections 2.2., 2.2.1 and 2.6).

Given the above, as distinct intentions of governments are a vital consideration, it appears strongly consistent with the aim of this study to investigate whether there are any possible associations between urban containment tools (i.e. the UGB) and the existence of white land, and whether the UGB is sometimes designed based on non-market factors that do not conform to the original concepts of such tools, where little research is conducted in this area. In other words, it is to explore if the UGB is imitated as a form with insufficient consideration of the planning culture existing in different contexts, which may affect land development, especially if the UGB is applied with the intention to serve other purposes. A further vital consideration is also to examine whether the asset values gained by intervention through planning have consequences on withholding land, assuming that one core reason for landowners to withhold land is making money, as was discussed in Section 2.5.2.

While some evidence was illustrated of how residential land prices can increase with the planning system, this study will explore if there are any correlations between unaffordable residential land and the existence of white land. In other words, it is to analyse the possibility if some white land remains undeveloped because of the social exclusion, especially when the end-user cannot afford land. To fill this gap, the issue of affordability and social exclusion, and how these can be treated in planning, needs to be identified in the following part.

2.6.1.1.1 *Affordability and social exclusion*

It is an accepted fact that residents differ in terms of some characteristics such as gender, financial level, religion, national origin, class or race, but this difference can be an issue when it leads to social exclusion (for more details about the negative impacts of social exclusion, see McFarlane 2010). This social exclusion, according to Madanipour (2011), suffers from a shortage of clarity but it does include any elements that result in excluding particular groups from a city or, more importantly, some parts in a city (i.e. neighbourhoods). Madanipour (2011) gives an example in the economic arena, where exclusion can occur when access to resources becomes too difficult for some residents, especially the low-income group. One aspect of this exclusion is a consequence of market forces which produce urban space in a way that ensures the segregation of both

social classes and income groups by making such space unaffordable to them (ibid).

Not only the market forces, but also the planning system can, whether intentionally or not, create this segregation by applying some planning form (Madanipour 2011). This is not simply to argue that urban containment tools exacerbate the issue of unaffordability by adding some additional financial costs to the residents. Rather, it is about the creation of a balance by introducing other planning ideas that try to minimise the effect of price increases connected with the urban containment tools, and concurrently facilitate access to more affordable residential plots/units. In fact, the treatment of unaffordability has attracted some scholars and organisations to discuss some resolutions from a view of planning. Almost all the suggested resolutions focus on finding approaches to reduce land price and increasing its productivity, an idea that is strongly associated with the logic behind the urban containment tools.

Habitat (2014) identifies the social mix as a key principle that can contribute to the solution of social equity problems. This is, according to them, because it supports affordability and enhances economic efficiency. One job of city planning regulations, thus, is to ensure the accommodation of dissimilar social classes, who have different financial levels, in the same district. What can contribute to this social mixing is 1) the establishment of a mixed land-use neighbourhood because it can create different job opportunities with dissimilar income groups living in the same area, and 2) the establishment of various kinds of housing that ensure a minimum percentage of affordable housing (Madanipour 2011; Habitat 2014). Some successful models for this minimum percentage are shown by Habitat (2014) as empirical evidence in Europe, reaching a conclusion that no more than 50% of the land subdivision scheme should be assigned for one single tenure type with 20% to 50% recommended to be for affordable housing. The affordable housing here is sold for low- and moderate-income families at below market cost (Madanipour 2011).

Similarly, it is advisable to provide different sizes of plots with distinct regulations for the purpose of expanding the variety of housing options (Habitat 2014). This suggests that establishing a minimum plot size can restrict the access to affordable residential land/units. This argument is strongly supported by Zabel and Dalton (2011), who infer

that the minimum plot size restrictions can enormously increase house prices by 20% - going up over time. While the above approach can increase housing density, there are other underlying ways for increasing it[5]. Perhaps the most popular belief is to intensify areas vertically through establishing multi-storey buildings (Oluseyi 2006). However, there are other forms for increasing density.

Establishing planning regulations that guarantee economical subdivision of land can assist in intensifying the density and reducing the sprawling infrastructure. This can be achieved by minimising both the width of plots and their setback requirements. Choppin (1993) argues that having large width of plots can increase the cost of infrastructure and then the cost of the plot itself. Figure 5 shows that the size of infrastructure that serves the two blocks is the same but with double the number of plots with the smaller frontage. It is true that the area is smaller in this type, but having longer depth, rather than width, can increase it.

Figure 5: Plot frontage
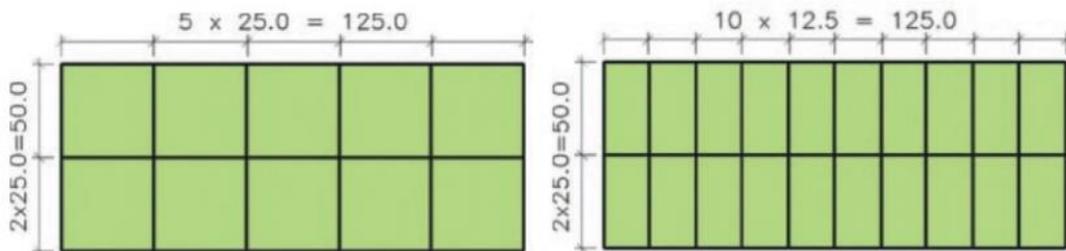
Source: KAI, 2000 cited in Alzamil, 2014, p. 29

Minimising side-yard setbacks can also contribute to curbing sprawl indirectly, as it increases the plot usability, thus homeowners would generally seek smaller plots (e.g. NAHB 1991). There is some evidence, when land prices skyrocketed, that many American homebuyers were prepared to sacrifice larger plot areas in front for spaces inside the home (ibid). The argument here is that having less side-yard setbacks ultimately can serve the idea of subdividing smaller plot frontage, which can be more economical (Boles 1987).

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[5] From a planning viewpoint, density is often measured by individuals per hectare and residential units per hectare.

Given the above, the crucial consideration here is to investigate whether urban containment tools (i.e. the UGB) have been applied with an isolation of the above planning regulations that try to ease the issue of unaffordability through intensifying housing density. If so, then to explore if this situation hinders access to white land assuming that many residents cannot afford purchasing land.

2.6.1.2 Imperfect competition

The second element of market failure lies in the imperfect competition that can easily occur in the urban land market, as each part in the urban area is distinct, resulting in imperfect information (i.e. uncertainty) and monopoly behaviour, as discussed below.

Imperfect information (uncertainty)

It was discussed in Section 2.5.2 that uncertainty regarding the future is regarded as a central source of delaying development, encouraging the existence of undeveloped land as an 'option value'. It is a well-documented fact that, in practice, there is no economy that is able to provide adequate information (Cohen and Winn 2007). This imperfect information results in market failure (Akerlof 1970). Even the neo-classical economists recognise that a competitive market cannot allocate resources of society efficiently because of the imperfect information available to sellers and buyers (Klosterman 1985; Balchin et al. 1995; Harvey and Jowsey 2004). Government intervention, thus, is seen as greatly justified to develop the system of urban information to reduce the uncertainty, prepare estimations for long-term economic factors and population, establish up-to-date analysis of land use patterns, and estimate how much land is needed in the future and so on (Klosterman 1985; Kim 2011).

While the above elements can reduce uncertainty in the land market, using proper land-use planning and regulations can contribute positively to these elements (Dawkins 2000; Alexander 2001a), despite the shortage of empirical studies (Kim 2011). More importantly, having an efficient system of legal land registration can strengthen the system of urban information. To illustrate, allocating urban land must rely on a legal registration system to clarify rights, otherwise using and exchanging land are negatively affected (Hanstad 1997). The significance of legalising and documenting the rights to

land is the creation of a secure and, as a result, extended market which involves different stakeholders such as construction companies, insurance companies and banks (De Soto and Kennedy 2000). For example, as land is a durable asset, it is often used as a guarantee to acquire loans (Feder and Nishio 1998). Therefore, it is often too difficult to mortgage without a secure title.

Land-use planning and the system of legal land registration can both be fulfilled by government intervention to increase the certainty (for more details about how government intervention can address imperfect information, see also Lee 1981; Dawkins 2000; Staley 2001; Cunningham 2006; Alexander 2008; Kim 2011; Jones 2014). Interestingly, as asserted by Titman (1985), when the certainty is high, the certainty about the future prices also becomes high. According to Titman (1985), it is highly unlikely for the development to be postponed as it is less valuable. White land, based on this argument, is supposed to be less prevalent with the application of both land registration systems and 'proper' land-use planning. This means that without using proper land-use planning that respects the contextual planning culture, the process of applying planning might fail, which could ultimately further the already existing uncertainty.

Therefore, this study will examine if planning can be a reason behind uncertainty; landowners are uncertain about taking a decision, preferring to wait to gain some planning advantages (e.g. planning permission for a particular use) (e.g. see Cheshire et al. 2014; Bentley 2017). The study will also investigate whether the lack of legal land registration system can play a major role in the existence of white land, a gap that little is known about.

Monopoly behaviour

Imperfect information leads to actors who are uncertain about development or selling, while the monopoly actors differ in terms of their explicit intention to withhold land for the objective of increasing its price. This can be motivated by the characteristic phenomenon in land market, which is the existence of few sellers (Evans 1999). One of the major impacts on supply is that a lot of land is owned only by few people who

release it for development very slowly to ensure increasing their profits (Markusen and Scheffman 1978). The monopolist just keeps their land away from development, sometimes in agreement with other monopolists, and waits for an increase in its price while doing nothing for society (Bentley 2017). What makes monopoly power more common in land, compared to generic goods, is the general fixity in its supply and the immobility of location, as was discussed earlier. These two characteristics can be exploited by monopolists in a way that can increase the white land proportion.

For example, in delivering public infrastructure, only specific and not alternative sites are acceptable for widening a given road. Such a factor makes landowners control the whole development process and name the price for their land, sometimes at the expense of waiting longer and by keeping land undeveloped (Enns 2002). The monopolist also plays other tactics and strategies by selling some portions of land and keeping the remaining in expectation of increasing profit several times above the original price. For instance, when a potential monopolist owns 10000 acres of land, they may sell 5000 acres at price X and keep the other 5000 acres undeveloped. After development, the rate of remaining undeveloped land becomes almost equal to the developed land, which is a multiple of the initial price, without any work done by its owner (Coase 1972).

To address the above monopoly behaviour, it is argued that the government should intervene for the public interest, for example through compulsory purchase (this however is subject to the nature of planning culture, especially the nature of power that shapes the planning system in nations, see Section 2.2) (Evans 1999). Setting approaches that help the land market to be opened up to everyone will produce market outcomes which allocate resources at their lowest possible cost (Dowall 1993). Taxes on only undeveloped land, as discussed in Section 2.4, are also considered effective solutions (Abrams 1964; Wahbah et al. 2016). It seems highly relevant to the aim of this research to consider to what extent the existence of white land correlate with the way the planning system treats monopoly behaviour, and more importantly to explore whether government intervention through rules and regulations motivate monopoly unintentionally.

2.6.2 The governance system and some issues related to land administration

Section 2.2, discussed the strong correlation between sociocultural issues and the formal rules and regulations, also supported by the literature related to bureaucracy. One key element of the bureaucracy is the operative system of the political decisions that is ultimately, according to Yolles (2019), conditioned with sociocultural components. To Yolles, the sociocultural element here is important as the patterns of understanding and knowledge can affect the operative behaviour in the bureaucracy (for more details about how the culture and the operative structure represent two intercorrelated dimensions in the bureaucracy, see Yolles 2019). Thus, the operation process of the bureaucratic system varies from context to context, where the variation here is informed by the behaviour of planning actors (e.g. policymakers, decisionmakers and employees), who can manage, operate, direct and influence such process (e.g. see Yaney 1982).

The bureaucratic system is not deducted as an external reality to deal with a rule system. Rather, it is considered as a self-governing system affected by its own sociocultural system, resulting finally in the interaction with its political system (i.e. its own planning culture). Thus, it is vital in this study to identify both 1) the governance system that form and apply rules and regulations and 2) the potential impacts of the actors who can influence the approach of such governance. Specifically, it is relevant to the aim of this study to examine if some obstacles against developing white land are rooted in the way of governance (i.e. centralised or decentralised), trust issues, and interpretation and discretion (subjectivity) as outlined below.

2.6.2.1 Centralisation vs decentralisation

Some pieces of research focus on studying the impacts of the centralised and decentralised systems on urban development, where this study will later try to analyse the effects of the shape of the governance system on the existence of white land. Many nations adopt decentralisation, which has some positive characteristics such as decisions are made more quickly, detailed plans are unnecessary, people who take decisions

communicate with performers better, and so on (e.g. see Halushchak and Halushchak 2015). Meanwhile, some countries adopt centralisation as a governance system owing to its suitability for them - Singapore is one of the most successful.

Singapore depends on a highly centralised government, which has a strong influence on urban development. This influence, according to Heng (2016), has resulted in an integrated and coordinated strategy of long-term planning, which has a positive effect in eliminating the conflict of interest in the decision-making process related to planning, an important characteristic of the centralised system. The central planning power also enabled the government to apply the Land Acquisition Act early (1967), compensating their owners. This has contributed to a high ownership of land that belongs to the country, which then facilitates the government plans in the land-use planning and public projects, especially in terms of infrastructure and public housing (ibid). Nonetheless, one should note that the success of such centralisation might be enhanced as a consequence of Singapore's small size, with an area of about 720 km2 and population of less than 6 million (Department of Statistics Singapore 2020).

China adopts the same governance system (i.e. centralisation) but with different results, probably because of the different topographic features in China with a far larger amount of land and higher population number. The centralised approach in China seems only to be useful in terms of serving its socialist ideologies. These chiefly focus on the nation's socialist production, industrialisation and economic growth, where urban planning ought to serve this direction as a top priority with little attention on planning and project development (Xie and Costa 1993). Hence, it can be argued that maybe another profitable characteristic of the centralised approach lies in enhancing the national economy (e.g. see Sagbas et al. 2005; NAGY 2007).

Conversely, some negative characteristics of applying the centralised approach in China can cause planning failure, as clarified by Xie and Costa (1993). More significantly, it prevents the local governments from achieving their 'special needs' in terms of planning and development as such needs are subject to the national interest. Most cities suffer from poor infrastructure, especially the shortage of housing and transport facilities. Unlike Singapore, the existence of conflict of interest among the government

agencies is seen as a damaging characteristic. This is owing to the fact that urban planning is not managed by one institution, and therefore lack of collaboration and coordination among such institutions seems unavoidable, which has given rise to poor management for urban planning and development (ibid).

From another perspective, one underlying issue here is also related to the matter of transaction costs, which involves imperfect information that requires intervention, such as the owner's assessment of the costs of externalities (e.g. Stiglitz 2010). However, regarding the shape of the governance system, government intervention can also exacerbate the issue of transaction costs sometimes, especially with dependence on a more centralised system in dealing with urban development. This is to argue that the theory of transaction costs is not only linked with planning as Alexander (1992) initially thought. Rather, the process extends to include the process of land development, as supported by Buitelaar (2004). To illustrate, the processes of development control can add extra transaction costs, for example potential delays resulting from organisation, and the negotiation process of building permits and plan approvals (Alexander 2001b). One of the most common strategies to minimise the total net of transaction costs is through redistributing some tasks and responsibilities from the central government and its institutions enabling decentralisation and devolution to the local level (Alexander 2001b).

One can conclude from the argument in this section that there is a possible connection between the centralised system from one side and having poor infrastructure, conflict of interest, lack of collaboration and coordination among institutions, poor management for urban planning and development, and transaction costs from another. As was argued in Section 2.2, the process of decision-making in planning urban development and regulating the market in most of the Gulf region tends to depend on a centralised system, which is derived traditionally, especially in Saudi Arabia. The purpose of emphasising this here is to consider if a failure to develop white land is caused by a system that is more centralised, a gap in knowledge that has not been covered yet nor explained by the planning concepts that have emerged in different planning cultures. Thus, it seems increasingly relevant to the aim of this study to examine whether centralisation is a main cause of planning failure.

2.6.2.2 Trust issues

Trust here means trust of the public (i.e. landowners here) in the government institutions that may not behave in a responsible manner (Offe 1999). Maintaining a high level of trust among the actors in land is important in societies because it can diminish transaction costs (Schmidt & Posner 1982) and facilitate more efficient and faster coordination amongst individuals and government institutions (Fukuyama 1995). Without building trust, development processes and the control of the land market can be negatively influenced (for more details about the importance of trust in the built environment, see Kumar and Paddison 2000; Molm et al. 2000). It is argued in this study that the decline of this type of trust can be a form of planning failure by deferring land development.

Tait and Hansen (2013) explain that planning is one key element that is subject to 'crisis of trust' due to the competing interests that do not have one certain set of rules or one right answer. Therefore, as Earle and Cvetkovich (1995) believe, sociocultural values are used as a personal criterion for the residents to judge whether the government institutions operate in a way that matches their own values, implying that the consideration of trust is not an external reality, which can be in harmony with both the argument in Section 2.2 and the epistemology used in this study (see Section 3.3). This situation is challenging because, according to Jabareen and Carmon (2010), the sociocultural values differ with the passage of time not only between social contexts, but also amongst people in the same context. Swain and Tait (2007), by focusing on the British context, discuss two main reasons behind the declining trust in planning. These two reasons seem to summarise many previous studies about trust issues. Both reasons can be associated with the issue of conflict of interest, namely the emergence of pluralism and liberalism.

It is probable that cultural pluralism can lead the planning system to fail in responding to an increasingly heterogeneous society with diverse desires, needs and interests. This failure can itself create a lack of trust among the public around whether the relevant institutions will meet their interests, or not. Advanced liberalism is also seen as an attempt to regulate the market. This attempt certainly can affect trust in planning. This is because, thought by Swain and Tait (2007), trust in the government institutions to use

the planning system for the sake of public interest is not only questioned, but also how specialists are trusted to employ their expertise in a right way to serve the public. To deal with the issues of declining trust in general, 'transparency' is a key player.

Transparency and trust are strongly correlated, where enhancing the former can build the latter, resulting in improving the processes of urban planning and development (World Economic Forum 2019). People become more confident about meeting the public interest by any decisions taken by the government institutions (Mukhopadhyay 2017), which can strengthen their acceptance of planning projects and development (Polívka and Reicher 2019). This assumes that, if landowners are not confident about meeting the public interest, and instead feel the decisions are against their own interest, they may not accept such decisions. Consequently, they would respond in a manner that mismatches with the government plans, which can negatively affect the situation of white land. That is why, based on several scholars, the communication with the public, through the bottom-up approach of citizen participation in the decision-making process, can positively enhance this transparency and reflect on land development (e.g. see Stiglitz 1999; Tenney et al. 2006; Florini 2007; Hollyer et al. 2011).

This participation can be achieved by 'disclosure of information' to the public (Mukhopadhyay 2017). Mukhopadhyay (2017) categorises transparency as inward versus outward, where the former is achieved by empowering outsiders (citizens) to be aware of the decisions taken by the government institutions with having a voice in such process, and the latter is achieved when such institutions have access to information in respect to the activities of those citizens. This is consistent with what Rowe and Frewer (2005) identify, that the citizen participation is achieved by communication, where the public receive information from the government, and by consultation, where information is conveyed from the public to the government. Rowe and Frewer (2005), add a third category called participation, where the government and the public exchange information for the goal of having a degree of dialogue, and reflecting the planning culture more suitably. Accountability can also enhance transparency.

The absence of a system of accountability in the government institutions can, according to Woro and Supriyanto (2013), decrease public trust in the government. Interestingly,

with a system of accountability, corruptibility diminishes. In other words, incorruptibility is a further critical dimension of transparency, where the performance of some employees' official duties might be influenced by outside individuals (Kim and Lee 2017). Despite the existence of corruption, Mukhopadhyay (2017) mentions that its impact on planning practice is little discussed in the literature. However, one should note that one way for combating corruption is the transparency through the methods discussed earlier.

Accordingly, it seems highly relevant to this study to investigate whether the decrease in trust in the government institutions can lead landowners, for some reason, to withhold their lands away from development (if so, what are the reasons for trust diminishing?). Likewise, it is an examination of any associations between the lack of transparency and the existence of white land, a gap which this study aims to address.

While it was explained that one issue related to declining trust lies in the specialists' employment of their expertise for the purpose of serving the public, it is relevant to discuss the role of the specialists' interpretation and discretion in the decision-making process, as will be explained in the next part.

2.6.2.3   Interpretation and discretion (subjectivity)

Discretion in the planning system is an inevitable element of the decision-making process, especially with rules and practices within a complex system. It is defined as the "liberty or power of deciding, or of acting according to one's own judgment" (Forsyth 1999, p. 6). Interestingly, the 'own judgment' of government institutions' actors is linked to the sociocultural element, as was demonstrated in Section 2.2. Claydon (1998) finds out that the actors' culture produces discretion, where discretion is a product of their own interpretation of rules and regulations (Kwok et al. 2018). As a result, as Forsyth (1999) maintains, the actors do not use the discretion to the same extent nor the same way. Using discretion can bring about some negative outcomes including unfairness, exploitation of a given situation, and when discretion is affected by ambiguous rules and regulations.

First, the possibility of unfairness and the lack of predictability can easily occur with using discretion (Pynoos 1986). Forsyth (1999) clarifies that, while actors do not use the discretion in the same way, they tend to respond to events dissimilarly, which can sometimes be less efficient, humane, and fair. This appears clearer in contexts that mostly rely on ultimate discretion, where decisions cannot be reviewed or overturned by another official (Goodin and Cohen 1988). To put it differently, with the existence of formal strong discretion, according to Forsyth (1999), arbitrariness becomes more apparent, where the actors do not need to justify their actions or explain their decisions.

With a high level of administrative discretion, exploiting rules and regulations and manipulating can occur even within the lawful power (Forsyth 1999). This happens when discretion allows an exception, as described by Smith (2000, P.742), to "swallow the rule", leading to failure. In this regard, the accountability, which was explained in the previous part, should strongly exist with the discretionary domain for the intention of combating any potential corruption. The third negative outcome lies in the ambiguous rules and regulations that affect discretion. Sometimes the system of rules has a gap, where conflicting and ambiguous rules exist, or sometimes there is an absence of rules for dealing with a particular situation (Forsyth 1999; Kwok et al. 2018). However, decisions in this case are expected to be taken subjectively based on one's interpretations.

As discretion in the planning system is unavoidable, it should be turned into a positive factor, where the interpretations of the actors should concentrate on promoting the aims and principles of a plan or policy through any suitable methods (Kwok et al. 2018). According to Shahab et al. (2018), adopting evaluation criteria in planning, based on identifying possible transaction costs, can limit the discretion in judging plans and policies (e.g. a guideline or a framework that concentrates on combating the failure of planning). This can also be supported by enhancing the actors' experience, where a lack is deemed to be a critical concern in practicing discretion (Forsyth 1999).

The above argument implies that the negative side of discretion can be alleviated by turning it into positive. Not only this, but discretion also has some advantages, such as enabling officials to concentrate their power on considering particular situations in the

light of having little information. Interestingly, exercising discretion in the Gulf, with its own religious concepts that do not separate religion from state, is likely to differ. This can be derived from the thesis in Section 2.2, that religion is the handmaiden instead of the producer of politics (Platteau 2008). This supports the idea that states *Sharia* is valid for every time and place (Hussein 1999), meaning that the flexibility of Islam should be reflected in a way that maintains the public interest[6] (see Section 2.2). To do so, discretion is justified when used for this purpose, especially by the Muslim leader (i.e. ruler).

Given the above, discretion has been covered in the literature mostly for the objective of reviewing its impacts on the administrative system and the decision-making process in particular. This study will specifically focus on considering any potential implications of this discretion, including the way of interpreting rules and regulations by the relevant actors in the government, on hindering the process of developing white land, about which little is known. It is an investigation whether discretion can sometimes be a cause of planning failure, and how.

2.7   Concluding remarks

In this chapter, a theoretical framework has been developed to deal with the complex issues involved in dealing with urban land development, specifically for the purpose of exploring and explaining the reasons behind the phenomenon of white land. The framework highlights the need to take sociocultural, economic and political factors into consideration, which will also be taken forward into the remainder of the thesis. Emphasising the sociocultural, economic and political factors in the theoretical framework can give an opportunity to reflect on the non-market factors affecting urban land development, which is vital in this study (see the first objective in Section 1.3).

The theoretical framework has also covered and justified the use of three elements, which are essential in discussing the processes of urban land development, namely 1) the demand side through discussing the urban location theory, 2) the supply side

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[6] For example, one high-ranking official interviewed said that imposing taxes on white land in Saudi Arabia was rejected in the past for a religious reason but accepted today when the decision-maker realised it can serve the public interest (for more details about White Land Fees, see Sections 4.4 and 5.2.3).

through examining why the actors sometimes withhold land (normally related to developers and landowners), highlighting the unique features of land that can affect their behaviour, such as the durability, immobility and the fixity in supply (e.g. Doebele 1987; Hui 2012), and finally 3) the possible implications resulting in both market failure and planning failure (normally related to government intervention).

Based on the discussion in this chapter, some points are the most important, the gaps in knowledge which were detailed earlier can be summarised as follows:

-       This study is distinct from other studies by considering the potential impacts of religion on the economic and political factors. This distinction is supported by the fact that the study is conducted in a context that does not separate between religion and state (for more details, see Chapter 4).

-       The form of undeveloped land in the Gulf region context often comes as white land, which is dissimilar from that in the literature, which focus on land in urban-rural fringe and brownfield sites. The important point here is that, similar to the land in urban-rural fringe and brownfield sites, white land can have its own reasoning for being undeveloped which this study explores and explains (see Section 2.5.2).

-       It was explained in Section 2.3 how location theory concentrates on the elements affecting the process of competition for site selection (i.e. the demand side) with concentrating on market-based considerations. This study, however, will fill a gap in knowledge by adding an examination of any other elements during this process of site selection that can result in keeping white land as undeveloped (i.e. non-market factors).

-       The correlation between land prices and external factors was clarified in Section 2.3, where the macroeconomic fluctuations can affect land prices. This study will seek to consider the connectivity between the macroeconomic fluctuations and the existence of white land, where the Gulf region context can be a fertile ground to explore such impact due to the high dependence on oil revenues.

-       It was discussed in Section 2.5.1 how the literature has emphasised the role of housing developers in the development process over the world. However, as the literature does not generally differentiate between the construction process by housing developers and by individuals (i.e. self-construction style), this study will cover the impact of the latter style on land development, with an emphasis on investigating the effect of such style on the proliferation of white land, as a gap in knowledge.

-       It was concluded, based on the literature reviewed in Section 2.5.2, that aiming at making money can be the most important motive for withholding land from development. Meanwhile, the literature has ignored discussing the reasons that are out of the landowners' control, which can be obstacles against land development (these reasons are related to government intervention through both the land-use planning and the land administration system, as summarised in the next points).

-       Two elements of market failure were clarified in Section 2.6.1, namely externalities and imperfect competition. The discussion focuses on demonstrating how these elements can play a role in the existence of white land, arguing that 1) urban sprawl as a negative externality, 2) uncertainty 3) monopoly, all are situations that require tackling by intervention through the planning system. Concurrently, and again, the discussion showed that the planning system itself can fail in responding to the public interest, as outlined in the following point.

-       As was discussed in Section 2.6.1.1, the planning failure leads us to an investigation of any relevant elements that can contribute to white land. More importantly, it was reviewed how urban containment tools can add an extra value of urban land, and thus they should be used with applying other considerations in terms of intensifying the housing density. Otherwise, with misusing planning techniques, the problems of unaffordability and social exclusion can easily exist (Section 2.6.1.1.1). The study, in this regard, will investigate one gap in knowledge, whether the urban containment tools (i.e. the UGB) have been misapplied, or applied for serving different purposes in a way that contributes to more white land. It similarly will explore if a part of white land was left as undeveloped simply because some cannot afford the cost.

-       Besides the land-use planning, the land administration system was also explained in Section 2.6.2 in terms of how it can cause planning failure, with focusing on the centralisation as a governance system. It was argued that there is a connection between having a centralised system and having transaction costs, poor infrastructure, conflict of interest, lack of collaboration and coordination among institutions, and poor management for urban planning and development. Therefore, this research will investigate a gap in knowledge, whether centralisation is an important cause of planning failure, leading to white land.

-       Likewise, the importance of building trust for the land development processes, through transparency between relevant actors, was clarified. The study will investigate, as a gap in knowledge, if the decline of trust in the planning actors in the government is a part of planning failure that leads the landowners to respond in a manner that mismatches with the decisions of the relevant government institutions, resulting in withholding white land from development.

-       The use of discretion was also outlined, arguing that it is unavoidable in the decision-making process, though it involves some negative effects, including the possibility of having unfair decisions and exploiting rules and regulations, especially when discretion is surrounded by ambiguous rules and regulations. However, this study will fill a gap in knowledge by exploring any implications that stem from the way of interpreting the rules and regulations, in the discretionary domain, on the proliferation of white land.

Finally, it is worth mentioning here that the literature review identifies the sociocultural factor as a dominant element. This means, as discussed in Section 2.2, that this element has 'inputs' that can affect it, including religion, rules and regulations, and the financial level, particularly in the Gulf context as will further be examined in detail in Chapter 4, 5, 6 and 7. Therefore, in order to achieve the aim of this study, there is a great need for understanding this context through its own sociocultural influences including the economic and political aspects. As was discussed in section 2.2, the human action is a key dimension that informs these factors, resulting in constituting the city (Haworth 1957). This is to argue that, as the human action has a great impact in constituting the

city, understanding their behaviours in dealing with white land, and land development in general, requires an interpretive approach of qualitative methodologies (i.e. in-depth interviews and documental analysis). While these approaches seem more appropriate to this study, the following chapter will explain and justify these approaches in more detail.

CHAPTER 3 :   Methodology

3.1   Introduction

In the literature review chapter, vital issues related to this study were discussed. More significantly, theoretical limitations and gaps in knowledge (briefly listed in Section 2.7), showed a lack of similar research, the majority of studies related to undeveloped land have dealt with urban-rural fringe and brownfield sites, with an emphasis on market-based considerations. A theoretical framework exploring and explaining the phenomenon of white land was developed by discussing and combining some relevant theories, concepts, and various bodies of literature that "act as a proxy for theory" (Bryman 2016, p. 20) (for more details, see Section 2.2.1). This theoretical framework shows gaps in knowledge related to the aspects of demand, supply and the way of controlling and managing urban land, it emphasises the sociocultural factor, where it plays a major role in these aspects and ultimately in constituting the city.

To enrich the literature with why and how the phenomenon of white land arose, the methodological strategy should follow and select suitable tools for interpreting and understanding the behaviours of the relevant actors, mentioned in the previous chapter (i.e developers, landowners and the government). Their behaviours and actions greatly influence the process of land development, as was explained in Section 2.2. Methodologically, therefore, this section will start by explaining that the inductive approach suits the concept of the theoretical framework used in this research.

After that, the methodological paradigm, approach, strategy and methods appropriate for meeting this study's aim will be justified and clarified in more detail. As illustrated in Figure 6, the study adopts a realist ontology paired with an interpretive epistemology (Section 3.3), where reality, epistemologically, needs to be interpreted (e.g. Jacobs and Manzi 2000; Merriam 2009; Bryman 2016). Following this, a critical discussion will justify the use of qualitative data as a methodological approach (Section 3.4). Next, the application of single case study, as a research strategy and a vital part in qualitative data, will be demonstrated in Section 3.5, with an emphasis on the single case study

design in the form of both explanatory and descriptive case study.

The methods used will be illustrated in Section 3.6, 1) in-depth interviews (i.e. 40 semi-structured interviews), including justifications for selecting the informants and the methods used to access them, and 2) documentation (Figure 6). In Section 3.7, the approach of data analysis will explain how the data were accessed, analysed and used. The chapter will then highlight some ethical considerations and research limitations.

Figure 6: Research plan
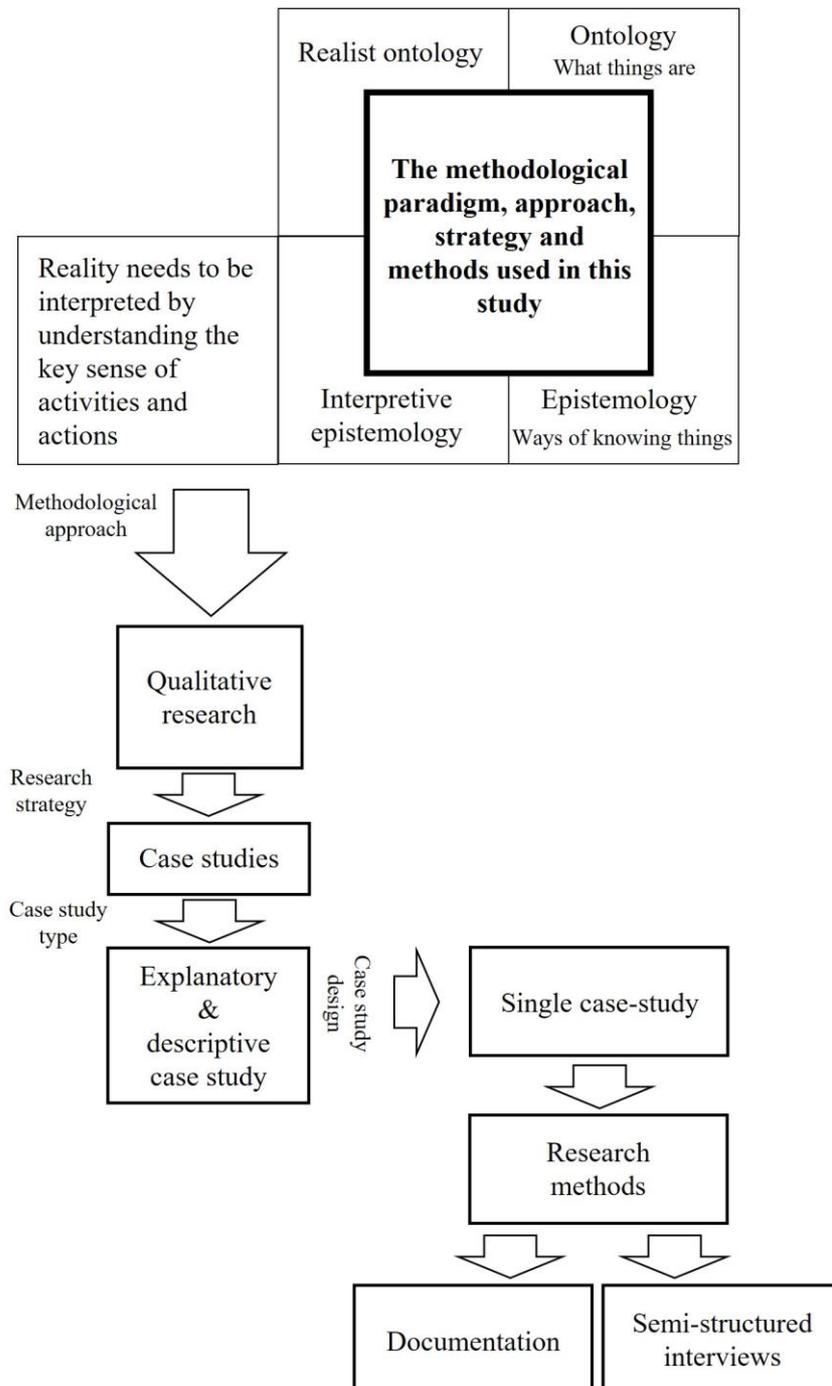
3.2 The role of theory in research methodology

Theory usually "guides and influences the collection and analysis of data" (Bryman 2016, p. 21). It also justifies the methodology used and gives direction to how data are collected, analysed and interpreted (Kelly 2009). In terms of research methodology, theory can play a role in different ways, more importantly by applying the deductive and the inductive approaches. One can, from the beginning, apply solely one theory to the whole of the research with the objective to confirm or reject a hypothesis (usually deductive strategy) (Yin 2012; Bryman 2016). This deductive approach, mostly but not limited to, uses quantitative research methods because it often aims to test hypotheses (e.g. Prado et al. 2011; Rahi 2016). However, dealing with urban land development, especially white land, can involve complex issues, as was clarified in the precedent chapter. That is why a theoretical framework had to be developed, which involves theories, concepts, and various bodies of literature (see Section 2.2.1).

Based on Lennon's (2013) argument, it is problematic to begin with only one theory to explain or describe a complex context that is related to social science. This is, according to Yin (2012), because it can limit one's explorations. Thus, by using a rich theoretical framework, the exploration and explanation of white land is more effective, as this study requires *understanding* and *interpretation* of the issues involved, as discussed in different parts in Chapters 2 and 3. The need for *understanding* or *interpretation*, according to Yin (2012), is enhanced by connecting and comparing the study's findings with a rich theoretical framework, rather than one single theory. This is an inductive strategy, where the intention is to develop a theoretical framework built on empirical data, and then used in deductive ways in other studies (May 2011; Bryman 2016).

The inductive approach of reasoning to interpret the data is compatible with the aim of this study. Significantly, this approach is usually connected with interpretive epistemology and qualitative data as will be explained the in the following sections (e.g. Merriam 2009; Saunders et al. 2012; Bryman 2016).

3.3   Research paradigm

A paradigm is embedded in the argument of both ontology and epistemology. The ontological base seeks to know and deal with what reality and things are (nature of reality) (Merriam 2009). It also goes beyond; to the consideration of the types of things that exist, and their attributes (Chandrasekaran et al. 1999; Guarino et al. 2009). Ontologically, the reality and the types of things in this study can refer to 'white land'. The aim of this study (see Section 1.3) is not to question the reality of white land, and thus an interpretive ontology would not suit the nature of this study (e.g. the interpretive ontology starts from the assumption that there is no world/reality). Rather, the aim here is to consider white land as a reality (a concrete object that exists and can be seen).

Given the above, a realist ontology is adopted in this study. The realist ontology assumes that the existing reality is independent and external (there are universals) (e.g. Sayer 2006); "the real exists in the sensible world and can be known through sense of perception or observation" (Aristotle n.d, cited in Pajares 2012, p. 133). Therefore, there is 'a' world but experiences of that world vary widely amongst people (including planning actors) and that therefore there is a need for interpreting informants' worldviews to find out about how the many interpretations of that 'one' world play out and shape their actions and ultimately practices. While white land, ontologically, is given as a reality (realism), the suitable epistemological paradigm for what those white lands mean for different individuals, which is the interpretive epistemology, will further be justified in the following section.

3.3.1   Selection of epistemology

The epistemological base is critical as it seeks a way of building and measuring knowledge and understanding the world (Thomas and Lo Piccolo 2015). Therefore, this section justifies the suitability of the interpretive epistemology in studying and understanding the phenomenon of white land. In general, urban planning is more associated in social science with the interpretive paradigm owing to its complexity that needs deeper explanation and understanding (though there are various positivist studies in planning). One form of the complexity here deals with 'social reality' that has

meaning for individuals. This implies that the activities of human beings are not only meaningful, but also that the acts of those individuals are influenced by such meaning (Bryman 2016). This is to contend that their behaviours and decisions require a paradigm that offers interpretation (Maxwell 2006).

This means there are multiple explanations of one single event (Jacobs and Manzi 2000; Merriam 2009). This does not only mean there can be multiple explanations for the existence of white land, but also supports the argument in Section 2.6.1.1 about the difficulty of drawing general conclusions about the planning tools applied, such as the UGB (as a single event) when applied in dissimilar contexts. The reality here, therefore, is not intended to be measured; the emphasis instead is very much on understanding the individual behaviours that can affect the built environment (e.g. see Booth 1993; Winch 2002; Collini 2012; Webster 2015; Bryman 2016) and "the world of human experience" (Cohen and Manion 1994, p.36). In this regard, the emphasis here is 'much on understanding' the potential causes of the emergence and continuing existence of white land and investigating whether the planning tools have been applied in a way that, to a certain degree, contributes to white land, and how.

Another vital form of complexity in considering most processes of urban planning lies in the involvement of potential actors and factors as indispensable elements (e.g. Fainstein 2001; Nichols 2002; Webster 2015). Interestingly, based on this argument, there are complex issues involved in the theoretical framework used (see Section 2.2.1) that explain the related different theories and bodies of literature, including two crucial components in investigating the existence of white land: 'potential actors' and 'potential factors'. These two components are strongly linked with the interpretive paradigm, as interpretivism calls for the involvement with relevant actors and factors that affect the context, for the aim of seeking more profound understanding and insights into the issue (Guba and Lincoln 1994; Bryman 2016). For this reason, two fundamental elements must be defined and justified, 1) the type of actors involved in this study, and 2) the factors that influence white land.

Chapter 2 showed that sociocultural, economic and political elements are key influencing factors. Besides justifying the use of these factors to help in investigating

the phenomenon of white land later in Section 3.5.1, it will be explained that the key actors in this study (i.e. the fieldwork participants) include landowners, real estate agents rather than developers, and the policymakers as representative for the government institutions (for more details why real estate agents are included instead of developers, see Section 3.5.1).

Finally, it is worth mentioning that those who have attempted to add the positivist paradigm to understand a given sociocultural context can have misleading findings (for some explanations and examples, see Alvesson 2013). Positivism is strongly correlated with objectivism. This paradigm tends to ignore the value-context (Thomas and Lo Piccolo 2015), which mostly depends on deductive rationale (Saunders et al. 2012), assumes there is one single reality that can be generalised for almost all equivalent cases (e.g. Azadi et al. 2017; Khumalo et al. 2017; Leppink 2017; Varpio 2017), has external facts that influence the involved actors (Bryman 2016), employs numeric approaches (Creswell 2003), and views the globe as a group of natural objects that can be precisely noticed and measured (Bryman 2016). Therefore, understanding why there is white land in the Gulf context would not be achieved by adopting this paradigm.

3.4 Methodological approach

The interpretative paradigm is, Bryman (2016) states, associated with qualitative data. To conduct research related to interpretivism rationally, Saunders et al. (2012) assert that such a paradigm must use flexible techniques related to qualitative data. Dissimilar to quantitative research that usually employs numerical procedures in order to achieve statistical generalisations, qualitative studies concentrate more on the nature of the problem of the study and understanding it (supported by some quantitative information) (Strauss and Corbin 1994).

The qualitative technique is beneficial when investigating feelings, emotions, views and behaviours (McMillan and Weyers 2007; Rahman 2016). Using words that bring about richer description is critical to explain what land means for owners in order for them not to bring it to the market. In qualitative research, assuming that social reality is created by individuals (Baskarada 2014), the main purpose is interpreting and contextualising

meanings from what individuals think and practice (Denzin and Lincoln 2011). Understanding the sociocultural nature of the actors involved, even before explaining their actions, is important in qualitative research (Allan and Skinner 1991). This implies that the sociocultural factors that frame how actors (e.g. landowners) deal with each other (e.g. they interact by selling and buying land) and with other objects (i.e. white land) is key in understanding why white land exists in increasing proportions.

All these interactions are motivated by the sociocultural nature of such actors, and therefore it is the job of qualitative research to "understand the meaning people have constructed" to explain their way of life (Merriam 2009, p.13). Different theories and bodies of literature have been discussed (see Chapter 2) to explain why undeveloped land can sometimes exist. In general, many studies focus on undeveloped land on urban-rural fringe and brownfield sites (see Section 2.5.2). In these cases, the existence of undeveloped land can be attributed to certain reasons, and hence quantitative methods are used to, for example, 1) measure the optimal development-timing in the urban-rural fringe sites (e.g. see Shoup 1970; Anderson 1993; Irwin and Bockstael 2004; Kim 2010; An et al. 2011; Ott et al. 2012; Zhang et al. 2012; Yao and Pretorius 2014) and 2) identify the most profitable use and density, by reaching the point where marginal revenue equals marginal cost, in terms of developing brownfield land (e.g. De Sousa 2002; Tang 2011; Wang at el. 2011; Morio et al. 2013; Green 2018; Modica 2019).

As such discussions have not reached satisfactory conclusions in investigating and understanding why the development process (or the market) has originally bypassed a large proportion of white land without development, Merriam (2009) asserts that qualitative research is required to compensate for the failure of present studies/theories to sufficiently explain the relevant phenomenon.

Furthermore, in complex issues (like examining the motives behind white land) policymakers seek profound data that enable them to understand the causes of the problem, which would not be provided by simple variables (Marshall and Rossman 2014). This thesis aims to understand some dimensions of why landowners withhold white lands without selling or developing, why they originally purchased them, how they obtained them, what they need to sell or develop them and so on (this explanation

is imitated and employed here from different examples drawn by Allan and Skinner 1991). Thus, what is needed is 'inquiry from the inside', empirical study with the "absence of a priori analytical categories, and an intent to understand a particular situation" (Evered and Louis 1981, p.385). For this study, the 'particular situation' is the proliferation of white land that needs to be understood with lack of 'a priori analytical categories' that are available. The key features of qualitative research (compared to quantitative) are summarised in Table 1.

Table 1: Attributes of qualitative versus quantitative research

Qualitative research	Quantitative research
Interpretivism	Positivism
Words	Numbers
Unstructured	Structured
Usually subjective	Usually objective
Rich, deep data	Hard, reliable data
Meaning	Behaviour
Contextual understanding	Generalisation
Theory emergent	Theory testing
Inductive	Deductive
Small non-random, purposeful and theoretical sample	Large, random and representative sample
Interviews, documents and observation	Surveys, questionnaires, tests, scales etc

Source: Adapted from Merriam 2009, p.18; Bryman 2016, p.401.

3.4.1 Critique of qualitative research

Although qualitative research is advantageous in providing a detailed description of a phenomenon, it has several limitations (Rahman 2016) including the element of subjectivity, the difficulty of analysis and interpretation, the hardship of framing the research question, and the time-consuming nature. Qualitative research is "a long hard way" (Berg and Lune 2012, cited in Rahman 2016, p.105). Despite these limitations, the issue of generalisability can be the most common concern in qualitative research (e.g. Merriam 2009; Yin 2018). An essential attribute (rather than a weakness) of qualitative research is that it does not aim at generalisation but emphasises the studies that are context specific to understand a specific phenomenon.

Opponents claim that it would be impossible to generalise the findings of qualitative research as 1) it is characterised by a small sample and 2) one or a few cases cannot represent all cases (Bryman 2016). Hence, Bryman (2016) strongly believes that those who adopt qualitative methods tend to contribute (generalise) to theory instead of to populations. That is why they consider a given issue in depth (e.g. small samples, subjective interpretations), instead of in breadth (e.g. featured by objective and statistical measurements, and large samples) that aims at generalisation (e.g. Van Vianen 2000; Martin 2002; Wester and Borders 2014; Lee et al. 2016).

This view that generalisation is not the intention in qualitative research is not accepted by all scholars. To illustrate, this type of research can generate what Williams (2000) names *moderatum* generalisations, where some aspects, for example interviews with a small group of landowners, "can be seen to be instances of a broader recognisable set of features" (p. 215). Such generalisations, according to Williams (2000), can be established by the qualitative researcher. Therefore, when producing results (that are related to landowners who live in a given context), one might be able to do some points of comparisons to other groups of (landowners) (Bryman 2016). Possible comparisons here are place, individuals, time, sociocultural contexts and so on, notably if the topic is under a similar theoretical framework (e.g. Leung 2015).

Given the above, this study mainly aims at generalisation to theory rather than population or other contexts. However, it is relevant here to state that in any other contexts with white land, a potential researcher might deduce some points of comparison with the general attributes of the case study (see Section 1.2 and 3.5.1), compatible with the *moderatum* generalisation suggested by Williams (2000).

While this section attempts to justify qualitative research for this study, the next will explain and justify the use of case study strategy as not only one of the most common related to qualitative research (Merriam 2009), but also a suitable strategy that fits this research.

3.5   Case studies as a research strategy

Case study, instead of large-scale survey as a strategy, dominates planning research (Du Toit 2015). The fundamental reason for case study research here is to more deeply understand a given phenomenon (i.e. white land), by using a single case that exists in a real-world context (i.e. Riyadh) (e.g. Bromley 1986, cited in Yin 2012, p. 4). The definition of case study supports investigating white land in Riyadh, as a suitable context (for more details, see Section 3.5.1). This intention is supported by Yin's (2012, p.4) definition of the case study, where it is:

> *"An empirical inquiry about a contemporary phenomenon (e.g., a "case"), set within its real-world context-especially when the boundaries between phenomenon and context are not clearly evident."*

Meanwhile, Schramm (1971), cited in Yin (2018, p.14), emphasises that the case study is what "tries to illustrate a decision or set of decisions: why they were taken, how they were implemented". The importance is the role of 'decisions' taken as a central emphasis of case studies. This assumes that white land in Riyadh is left undeveloped mostly due to some decisions taken by the actors in land (normally landowners). However, it must be acknowledged, as was clarified in Section 2.5.2, that landowners sometimes might not develop their lands due to some reasons out of their control, and beyond their own 'decisions'. That is why some political (i.e. the role of government intervention through rules and regulation) and economic (e.g. the role of macroeconomy in land development) factors were highlighted in the theoretical framework (Section 2.2.1) and discussed in the literature (included within the case study, see Section 3.5.1).

Case study can be a suitable approach for this thesis, for two reasons clarified by (Yin 2012). Firstly, this approach is used when a particular phenomenon needs to be contextually understood, especially when it is "distinctive if not extreme, unique, or revelatory event" (Yin 2012, p. 7). This quotation can be applied to the phenomenon of white land in the Gulf cities in general (e.g. Hamouche 2004; Kaganova et al. 2005; Rizzo 2014; Abou-Korin and Al-Shihri 2015; Al-Muttawa; 2016; Ababsa 2020; Mansour et al. 2020), and Riyadh in particular because it can be extreme. Generally, Gulf cities have similar features, for example urbanisation began recently in the 1950s – 1970s with fast-growing cities, similar cultures where Islam is the adopted religion,

similar political systems which are monarchical, and similar economic features where oil mostly represents the macroeconomy.

However, Riyadh has been selected as a case study for the investigation process of white land in this study for a couple of reasons (see Section 1.2), one of which, according to Al-Mogren (2016), lies in the fact that Riyadh is the perfect indicator, as a very extreme example, to describe the side effects of the phenomena of Gulf urbanism. A report conducted by RCRC (2010) shows that the percentage of white land in Riyadh is too high; about 77 % from the UEL, approximately 58 % from the Urban Limit for 2030, and roughly 49 % from the Urban Limit for 2015.

The second reason the case study can be a suitable approach, based on Yin's (2012) clarification, is that it provides efficient examination of a phenomenon. Case study types are strongly associated with explanatory questions, which seek why and/or how a given phenomenon happened, and with descriptive questions, which seek to describe what has happened and/or is happening. While exploratory case studies seek to generate research questions and hypotheses (Zainal 2007), the nature of this study is highly suitable for combining both explanatory and descriptive case studies. Schell (1992) alleges there is no clear boundary between these categories of case studies, and they can be used together to achieve better results. Yin (1984), cited in Schell (1992, p.4), supports the idea that combining a descriptive and an explanatory case study can sometimes create favourable results, mentioning William's (1943) work as an excellent example.

Based on the above, in order to understand the underlying reasons behind the existence of large proportions of white land (i.e. explanatory), there is a need to describe the current land policies and the planning tools applied (i.e. descriptive) to consider their potential role in and/or connection with such phenomenon. This is because descriptive research, as stated by Du Toit (2015), aims to enrich the understanding of the nature of planning and/or the real life which planning handles, describing the phenomenon and its context as they appear (Yin 2012). The use of descriptive and explanatory case study is applied in this research in a single case study design, as justified in the following part.

3.5.1 Case study design

It is important to select case study designs cautiously because they help considerably in defining the case. Single case study is used in this research. The single case study is often used when a researcher deals with a large body, within which different actors and/or factors are essential for reaching more profound data (complex body) (Yin 2018). According to Booth (2015, p. 91), the methods used to carry out a planning study tend to be complex as it often requires an understanding of the related sociocultural factors, which consist of "a myriad of different but interconnected facets". This citation is important here as the process of urban development is often subject to a particular planning system, within which there are 'different but interconnected facets'.

The above argument is compatible with this study due to the complexity of issues discussed in Chapter 2; this study does not deal with one single object (e.g. theory) as is the case with deductive studies (see Sections 2.2.1 and 3.2). Rather, it includes different actors (e.g. landowners, developers and the relevant government institutions) who behave towards land in a specific context that is subject to some crucial factors (i.e. sociocultural, economic and political). Therefore, these differences in the factors are *interconnected* since they ultimately bring about the final product of planning (e.g. of white land).

Given the above, the existence of a high percentage of white land in Riyadh is the case study here, within which there are several *interconnected* (but important) factors, as shown in Figure 7. First of all, Figure 7 illustrates that the investigation process covers the duration from the 1950s when urbanisation started in the Gulf region based on various discussions (e.g. see Kaganova et al. 2005; Al-Mogren 2016; Ababsa 2020), to November 2018, the start date of the fieldwork (see Section 3.7).

Additionally, and more significantly, the actors and factors are essential in finding out why there is a high proportion of white land in Riyadh. The actors include three groups: landowners, policymakers (in the relevant government institutions), and real estate agents (Figure 7). Two of these groups, landowners and policymakers, are derived from the literature review as important actors in land development, where the policymakers represent the issues related to the government intervention and planning failure (see

Sections 2.5.2, 2.6.1 and 2.6.2). The real estate agents are added as main informants at the expense of developers. The reason behind not involving developers, though mentioned in the literature, is that 1) the role of major housing developers is originally not popular in Saudi due to self-construction style[7] (see Section 6.2.1), and 2) infrastructure development was partly related to the government as the only institution responsible, particularly during the UL1 (see Section 4.3).

After the UL1, when landowners were responsible for the infrastructure, some real estate agents began to expand to include a department for infrastructure development. This leads us to the fact that by interviewing policymakers, the white land related to UL1 has been covered as the government was the developer until 1995. Likewise, by interviewing some landowners and large real estate agents, the white land that is out of the UL1 has also been covered as they sometimes work as developers.

Figure 7: The subunits involved in this study
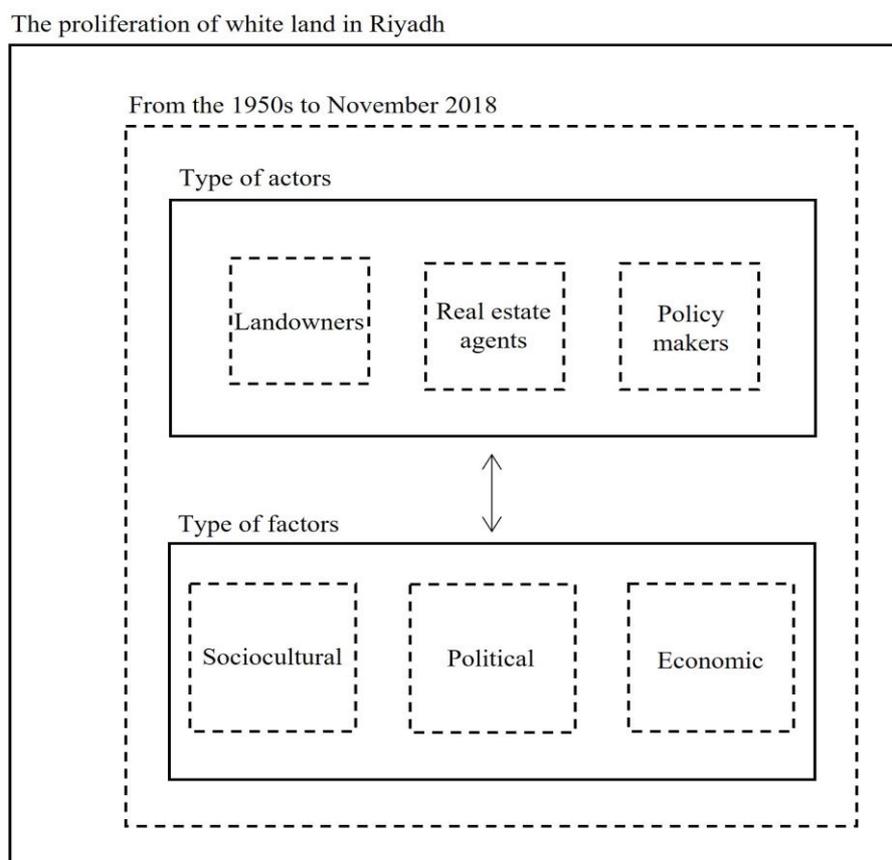
Moreover, Marshall and Rossman (2014) state that the researcher in case studies needs to employ some factors that help in examining their aims. Gipps (1999) strongly argues that understanding any contexts, three key factors should be involved, namely the sociocultural, political and economic. This is well-matched with the factors that are vital in this study, as was derived from the theoretical framework (see Section 2.2.1). Therefore, as depicted in Figure 7, the process of conducting the fieldwork centred around these three factors, which will also form the three chapters of the empirical findings (where the sociocultural is an overarching theme over the three empirical findings' chapters).

In detail, the sociocultural factor represents a key subunit (i.e. overarching theme) that helps in understanding the spread of white land because it can influence the behaviours and acts of how land is treated by the actors. As an example, landowners are often motivated by the idea of what land means for them, so the reason for withholding it is sometimes related to the culture of attachment to the site (see Section 2.5.2). More importantly, Booth (2015) claims that built environment is strongly influenced by the decision-making process, which is associated with the context rules and regulations of the government administration structures, which are ultimately derived from the sociocultural factor; it underpins the idea discussed in Section 2.2 of the correlation between the sociocultural factor and institutions (i.e. the political factor).

The above emphasis on the strong correlation between the sociocultural and the political factors (the empirical findings will refer to the political factor as 'the government intervention in land market') can be seen in the Gulf region, where the leader's decisions are derived from sociocultural norms, and thus applied as laws (De Montequin 1980, cited in Salama 2015). By considering the political factor (e.g. the government intervention through rules and regulations related to urban planning and development), some underlying causes of the white land are expected to be reached. For instance, Imperfect information can be tackled by introducing some land-use planning tools such as the UGB, as explained in Section 2.6.1.2, which result in no delay in the development process (Titman 1985). This assumes that the white land proportion is supposed to be much less with the UGB.

However, as illustrated in the previous section, there is a large percentage (49%) of white land existing within UL 2015, despite the application of UGB as a tool to enhance benefiting from inner sites. One can see from Figure 8 that urban sprawl noticeably started in the 1980s up until 1996, which is concurrent with the introduction of the UGB in Riyadh (for more details, see Section 4.3). This implies, dissimilar to the common belief, that the UGB has not addressed the uncertainty. Is the problem related to the implementation of the UGB, or to further regulations that need to be introduced, or to the way of the governance system, or to the interpretations of the government actors of the rules and regulations (discretion), or to the sociocultural factor of the residents who may view the public interest mismatches with some rules and regulations leading to some conflict of interest and crisis of trust, or to some of these factors together, or to other considerations that are related to planning failure?

The above vital points would not be reached without considering the political factor through analysing official documents and evaluating some relevant information from policymakers. Indeed, by interviewing the policymakers, the researcher was able to consider whether controls and decisions on land development at the local and national levels of government (e.g. the applied planning tools and/or land policies) have failure that leads to the phenomenon of white land, with identifying such failure whether related to the planning or the land administration system.

Finally, Figure 7 depicts that the economic factor is also important and considered in this study for two reasons derived from the literature. First, it includes the element of financial level, which has a fundamental role both in the sociocultural factor (see Section 2.2) and in the demand side for land (i.e. the competition for it) (see Section 2.3). This can offer some analyses whether some of the white land is undeveloped due to reasons related to the demand side (e.g. unaffordability of land), instead of solely focusing on the market/planning failure or the supply side (e.g. landowners who monopolise). Second, the economic factor also offers the capability to consider the impacts of the macroeconomic fluctuations on land development, especially in the Gulf region where it mostly depends on oil revenues but oil is subject to some external effects (see Section 2.3).

Figure 8: Phases of urban growth in Riyadh (1910 – 1996)
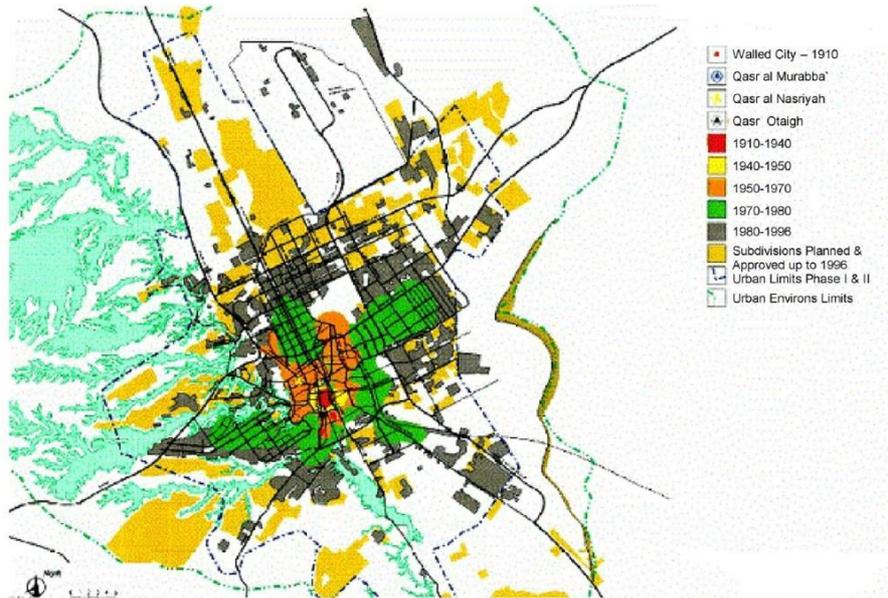
Source: HCDR 2013, cited in Al-Hathloul 2017, p. 98.

3.6   Research methods

"A research method is simply a technique for collecting data" (Bryman 2018, p.40). Two main techniques are used in the process of data collection: interviews and documentation. These are, in most cases, suitable for the interpretive paradigm, qualitative research and particularly for case studies, all of which aim to enhance explanations and interpretations (e.g. see Merriam 2009; Saunders et al. 2012; Du Toit 2015; Bryman 2016; Yin 2018). Therefore, the reality here is measured subjectively by 1) in-depth interviews, to better understand the relevant phenomenon (Du Toit 2015) and 2) documentation as urban land development is a cumulative process over time, which means that returning to old events and decisions can be essential. Yin (2018) states that documentation not only can provide the precise references, names and details, but also cover a long span of time.

As case study research is criticised as having a lack of statistical validity and reliability, using more than a single method in collecting data can increase the internal validity (Burns 2000). This is called triangulation (i.e. documentation and interview in this study) (see Golafshani 2003; Carter et al. 2014). The following documentation and interview methods are used.

3.6.1 Approach to documentation

Documentation is an important method in data collection of case study research. Merriam (2009), Saunders et al. (2012) and Bryman (2016) have mentioned several types of documents, such as public records (i.e. official documents), personal records (e.g. diaries, letters etc.), mass-media outputs (e.g. films, TV programmes, newspapers, magazines etc.) and virtual documents (e.g. websites, online communities, blogs, social media etc). Yin (2018) argues that although using documentation in case study research is often useful, it sometimes lacks accuracy and might be biased, particularly when relying on personal records and the media in general. To overcome this disadvantage, the researcher has mostly depended on official websites, unpublished official documents[8], published articles, and news where necessary, as the reliability and credibility of the official documents and articles is higher, especially as pieces of such documents can be accessed, whether online or through the institution itself (i.e. unpublished documents).

All the related institutions' websites were searched in detail to find any data related to the focus of this study (before the fieldwork). Most of these institutions are at the centralised level (national), namely 1) Ministry of Economy & Planning MEP 2) Ministry of Municipal & Rural Affairs MMRA 3) Ministry of Housing MH, 4) Ministry of Justice MJ, and 5) the Real Estate Development Fund REDF. Additionally, these institutions include one regional body (i.e. Alriyadh Municipality AM), which includes some local municipalities, and finally one local institution (i.e. Royal Commission for Riyadh City RCRC) (Figure 9).

Figure 9: Official institutions connected with urban land

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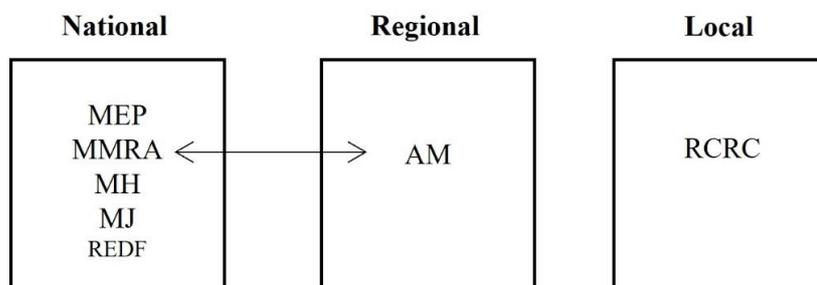
[8] Some of these documents were accessed during interviewing the policymakers. Some of the policymakers indicated some useful government papers, reports and letters about the mechanism of land administration and urban development. Thus, those policymakers enabled the researcher to collect unpublished data from where they work.

The MEP develops the general plans and includes the General Authority for Statistics as well as some programmes, for example the National Transformation Programme. While the MMRA is the national institution responsible for urban planning in Saudi Arabia, the AM is the regional one that is administratively related to the former. The MH is responsible both for housing issues and more importantly for collecting fees on undeveloped urban land (this is a new initiative under the national vision 2030, for more details see Section 4.4).

Concurrently, the REDF relates to the MH in terms of providing the beneficiaries with mortgages with free-interest (see Section 4.2.2). The MJ, meanwhile, is in charge of the registration of property ownership and the management of land transactions and is supposed to have details of each piece of land that has been sold. It is worth mentioning that some of the institutions are not limited to only their tasks. As only an example, the RCRC is a local consultative body, but at the same time it implements some strategic and comprehensive development programmes (RCRC 2021a).

Additionally, the above institutions were contacted to find any unpublished documents key in this research (before and during the fieldwork). An official letter from Cardiff University was sent to the official institutions, explaining that the researcher is a PhD student, and this facilitated access to some unpublished documents (they were informed that these will be used in a published thesis). These sorts of data and documents, whether published or not, provided contextual information and were used in three different ways, supported by the earlier argument in Section 3.5.1 about the validity of using both descriptive and explanatory case studies together.

The first way is to return to old events and essential decisions as descriptive of the context of urban planning and development in Saudi in general, and Riyadh in particular (see Chapter 4). The second way is to supplement and support the findings and their discussions. Thirdly, and beforehand, they were used to design some relevant interview questions. Yin (2018) argues that the documents not only can verify the correct titles or names of organisations and people, but also generate some key interview questions. The researcher, therefore, was able to conclude some vital questions and added them to the list of interview questions (Appendix A). After interviewing the participants and

starting the process of data analysis, the researcher again revisited the gathered documents, as a second stage, to see if any of the data collected through the interviews can be supported and strengthened.

Table 2 illustrates eight unpublished documents that can be useful and related and were used in this research in the three ways mentioned above.

Table 2: Categories of unpublished documents

NO.	Topic	Domain	Author's name	Notes
1	Riyadh: the master plan	Urban planning	Doxiadis	Provided by MMRA
2	Regulations of land division and construction for residential units	Urban planning (regulations)	MMRA	Provided by AM
3	The current situation of housing in Saudi Arabia	Urban development	MH	
4	Updated regulations for Urban Growth Boundary until 2030	Urban planning (tools)	MMRA	The researcher converted the date from the Islamic calendar
5	The system of Land Granting Programme	Land tenure (i.e. legal rights)	MJ	
6	An analytical study for white land in Riyadh	Urban development	RCRC	Was also used in designing some of the interview questions
7	The programme of White Land Fees	Taxation system	MH	
8	Average of land prices	Real estate	JLL	One of the companies that the MH depends on. Also used in designing some of the interview questions

3.6.2 Interviews

Three common classifications are used in interviews; structured, semi-structured and unstructured (Saunders et al. 2012; Bryman 2016). In this research, semi-structured interviews were used. This is because the nature of qualitative research requires less structured interviews, whereas the structured ones are not preferable here as it could limit the discoveries and/or any potential factors (Merriam 2009). Unstructured interviews, however, may suit exploratory case studies more, where the phenomenon is not clear enough to the researcher to ask proper questions, therefore the interview works

as a guide to create relevant questions. On balance, the semi-structured interview is in the middle; it encourages the researcher to design some specific questions by which some information is targeted, and simultaneously it can be flexible to explore other issues that might appear during the interview (Merriam 2009). Suggested questions, which are derived from the literature review, can be vital to examine why there are white lands, but concurrently the researcher was flexible to add, exclude or amend some questions where suitable.

The semi-structured interview covered a list of key questions that are derived from both the literature review and the related documents. One should note that there are five dissimilar lists of questions: one for real estate agents, one for landowners, and three for policymakers depending on their interests (Appendix A). In order to increase the validity of the interview questions, they were sent to three experts in planning issues, particularly in Riyadh, prior to conducting the interviews. After designing the final drafts, an interview was conducted with another academic expert as a pilot study. The researcher reached them via his personal connection relying on Merriam's (2009) view that the personal contacts of the investigator is a formal strategy that can be used. One should note that these personal contacts were only used as a pilot study, reaching the actual study participants is explained in the following part.

3.6.2.1   Approach to interviews

As justified earlier, the interviews are limited to policymakers (including officials), real estate agents and landowners. The total number of semi-structured interviews is 40, where the process of selecting informants was reached as follows.

3.6.2.1.1 Approach to interviews: policymakers

Interviews were conducted with officials who work in institutions connected with land transactions and urban planning and development, whether at the national, regional or local level. The initial idea, before the fieldwork, was to contact five relevant institutions, namely the MMRA, the MH, the MJ, the AM, and the RCRC. During the data collection it was found that there are three additional institutions that should be involved, the local municipalities of Riyadh, the National Housing Services Co. (NHSC) and the REDF (see Section 3.6.2.2).

These institutions were contacted to arrange an interview, depending on how many relevant departments they have with a well-qualified member (see Section 3.6.2.2). These interviewees were identified, contacted and informed about the identity of the researcher, the nature of the research and its aims. After gaining the final approval for an interview, they were given the consent form to sign. It was difficult arranging interviews with some institutions, and therefore the researcher had to visit these institutions to persuade them of the importance of this research.

3.6.2.1.2 Approach to interviews: real estate agents

Real estate agents are the second target in the interview process. It would be impossible to target all real estate agents in Riyadh as there are many. Thus, two different strategies are proposed: the first is to identify a certain area, for example a neighbourhood, and limit the interviews with real estate agents to it based on some justifications. The second is to rely on those real estate agents mentioned in the official website of the MH as qualified partners to the ministry, 38 companies, specialising in real estate and building (see MH 2017). These companies are certified with no problems with their legal status. The advantage of these large companies is also that they tend to have great experience in properties in many different districts of Riyadh, which may deliver more fruitful information.

The first approach is not used because the main case study of this research is the white land in 'Riyadh' as a whole and the related urban land policy. Investigating only one area in Riyadh would limit the extracted factors of why there is a large proportion of white land, which then might not achieve the aims of this study properly. White land in one area may relate to issues such as a conflict on land, while another area might be influenced by a different element, say different social classes that encourage a certain group not to sell the land to anyone from a different social background, and so on. The second approach, thus, is used here.

20 companies that are outside Riyadh were excluded from the 38. The 18 remaining real estate agents were contacted in the same way as the relevant institutions, mentioned in Section 3.6.2.1.1. However, only nine agreed to participate, highlighted in grey (Table

3). Those who did not participate either did not respond or the fieldwork timing did not suit them[9].

Table 3: Names of real estate agents

Name	Name	Name
Al-Deyar Alarabiya	Retal	Anan
Alzamel Alliance Real Estate	Mawten	Maya
Salman Bin Saaedan for Real Estate	Alhakmiah	Artar
Dar Al-Bayan Real Estate Dev. Co.	Dar Al Arkan	Dawawen
Bwabt al-dar for Real Estate Development	Tawasul Alemdad	Al Tahaluf
Dar Al Ibdaa For Development & Real Estate Investment	Sondos Real Estate	Al-Mozaini

3.6.2.1.3 Approach to interviews: landowners

Landowners are the main group as they ultimately take the decisions on whether to develop, sell or keep land undeveloped. Access to this group was very challenging. This is because the researcher aims to interview those who keep their land away from the market. The researcher found it hard to identify the owner of a piece of land, as there is no efficient system available to the public for connecting each plot with its owner. Within collecting the data, it was found there are three different kinds of landowners: 1) those who hold a parcel(s) but do not intend to develop, 2) those who hold a parcel(s) with a view to selling it or carrying out development of it, and 3) those who hold a small plot(s). Despite the difficulty, the researcher did his best to access these three groups using three justified techniques.

The first method was to contact both the MJ, responsible for legalising land transactions between sellers and buyers and the MH, responsible for collecting land fees from landowners; they are expected to have records of the individuals who own these lands. The MJ explained that their system is not designed for this purpose and cannot help. The MH, conversely, has a list of all the identities of the owners of large parcels, but unfortunately they refused to provide it to the researcher due to confidentiality. After efforts, they were helpful and agreed to contact some landowners and take prior permission for interviewing, six of who agreed to take part. This approach helped the researcher to reach the first group, the most important.

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[9] The data collection took place at the end of 2018 and beginning of 2019. Companies during this time were often busy with calculating the budget before 2019.

The second strategy was to reach some well-known public figures in landownership throughout Riyadh. This group can be known through everyday life, such as newspapers, what normal people hear, or through a sign written in the middle of the land showing to whom it belongs. As only an illustration, Figure 10A shows that this land, with a total area of 343,390 m^2, belongs to the inheritors of Saleh Alrajhi. The researcher, thus, allocated days for searching and identifying pieces of white land in Riyadh's map, as well as visiting to look for signs.

Eventually, the researcher was able to secure some participants, well-known in landownership, through both the newspapers and signs on their lands (Figure 10B). This approach has helped to reach group 2 (i.e. those who hold a parcel(s) with a view to selling or carrying out development). The researcher assumed they 'intend to sell or develop' because they normally announce their names and properties to the public if any is interested; if they would like to withhold land from the market, they would not put any signs on it.

Figure 10: A): A sign showing to whom the land belongs

Source: Amlaknewspaper (2017).

B): Some signs showing to whom the land belongs

Finally, the third way was to reach group 3 (i.e. those who hold a small plot(s)), which are often the end-users. The researcher did not find any information about them in the MJ or the MH, and they are not well-known such as group 2. The only way to access them was applying a snowball technique, where the targeted participants are suggested by other real estate agents. The snowballing technique was vital to secure this type of landowner, and is advisable when access to the sample populations is not feasible, or too difficult to reach, thus the connection among people can be helpful here (e.g. see Bryman 2016).

This technique, conversely, has some risks. Importantly, for example, it could be biased, where the initial participants mention those who share the same views (e.g. Magnani et al. 2005; Sadler et al. 2010; Etikan et al. 2016). The researcher attempted to minimise this by varying the recommended participants, between different real estate agents, who do not know each other. Although it was difficult, the researcher finally secured four interviewees from this category from four disparate locations (north, south, east and west of Riyadh), who were recommended by different real estate agents, to maximise the opportunity to obtain a wider variety of views.

3.6.2.2 Selection of informants

There are several sampling approaches, for example non-probability sampling, probability (random) sampling, systematic random sampling, stratified random sampling, snowballing sampling and so on (e.g. Trochim and Donnelly 2001; Onwuegbuzie and Leech 2007). As it is possible to use more than one sampling

approach (e.g. see Bryman 2016), non-probability sampling, where a selection of elements are the target, stratified sampling, and snowball sampling were used in this research.

Non-probability sampling is one of the most common approaches in qualitative research, where the researcher often seeks relevant participants to their research questions (Bryman 2016). This sampling was used with the policymakers and the real estate agents because, as clarified in the previous section, they are systematically specified and not based on a random selection. The stratified sampling was used with landowners to ensure that the three different groups are covered. This stratification can maintain the sample to be as representative as possible (Onwuegbuzie and Leech 2007). Snowball sampling was solely used with those who hold a small plot(s), as clarified in the previous section. In general, the sample size here is usually less than that of probability sampling.

Identifying the exact sample size is a very debatable point. Even if the researcher tries to, and should, specify it from the outset, they might during interviews discover more participants or a new essential group (Bryman 2016). This occurred with the researcher as will be clarified later in this part. Nonetheless, an attempt has to be made for specifying the logical sample size for qualitative research as it gives the researcher an indicator of approximately how many interviews should be carried out. The suggested ideal sample size for interviews is thought to be between 60 and 150 (Gerson and Horowitz 2002, cited in Bryman 2016, p.416). This seems to be suitable for probability sampling. This can be noted from the argument of other scholars who propose much smaller numbers.

Warren (2002) concludes that 20 to 30 interviews seem to fulfil the goal of qualitative research. Many other studies focus on the *saturation* concept, where the sample size is adequate when no new themes or information is added to the data (Fusch and Ness 2015). Depending on this concept, Guest et al. (2006) observe that the data saturation level occurs within the first 12 interviews, though the first six have suggested the basic themes. Similarly, Hennink et al. (2017) find that nine interviews are sufficient to reach code saturation (i.e. the potential affected elements), while 16 - 24 interviews are

sufficient to grasp meaning saturation (i.e. to understand the deep meaning). Likewise, Creswell et al. (2007) recommends qualitative interviews that include between 5 and 25 participants. Interestingly, a mean of 31 interviews was the result of analysing 560 qualitative studies that use interviews with non-random sampling (Mason 2010).

Given the above, the sample sizes of the three groups (policymakers, real estate agents and landowners) were divided as follows: the policymakers were selected based on the related departments under each related institution. The researcher checked the administrative structures of these institutions which gave this in their websites, specifically the MMRA, and the AM (AM 2018a; MMRA 2018). Institutions with no information about their administrative structures on their websites were contacted by phone, particularly the MJ, the MH, and the RCRC.

The researcher found that there are four related departments from the MMRA, two of which are Department of Land Issues and Department of Land Grants - both branches under the Deputy Ministry for Land. The other two are Department of Urban Studies and Department of Local Planning which are both related to the Deputy Ministry for City Planning. The MJ includes two related bodies: one is responsible for legalising and recording land transactions between sellers and buyers (i.e. the Notary Public in Riyadh), and the other is in charge of any claims related to properties such as conflict on land or any problems linked with the titles of lands (i.e. the General Court –Titles of Ownership department). The MH has two departments representing land issues; Land Management Department and Technical Affairs Department, responsible for developing those lands owned by the MH with infrastructure.

One relevant department of the AM is involved, Department of Land and Property Management. Likewise, the RCRC has various sections; one is relevant, the Section of Urban Planning, which refers to the Department of Strategic Urban Planning. Figure 11 gives information about all the departments involved. The initial plan was to complete 10 interviews relating to 10 different departments. During the data collection, however, the researcher had to make some amendments. Firstly, rather than interviewing four individuals from both the Deputy Ministry for Land (MMRA) and the MJ, each of these two bodies offered the researcher the opportunity to conduct one interview, but both

were with high-ranking employees, who have sufficient experience related to departments required by the researcher (see interviewees 2 and 5 in Figure 11). In addition, the researcher, during the data collection, found it was vital to add six extra interviews associated with the policymakers (see interview 1, 6, 9, 12, 13 and 14 in Figure 11).

Interviewee 1, who was recommended by some interviewees, was crucial. The interviewee is already retired, but he had more than 20 years of experience in a high-ranking position in the MMRA, he was a key in introducing the UGB. While interview 6, where the Etmam initiative has relation to the study's focus (see Section 4.4), was significant enough to be added, interview 9 was also fundamental, where the NHSC is responsible for fees on white land (both related to the MH). As for interview 12, there are 20 local municipalities in Riyadh under the AM, one of which is called Al-Shimal Municipality. The Al-Shimal Municipality was specifically selected as, after excluding the agricultural areas and the airport area, it by far has the highest percentage of white land. With respect to the REDF, many of the participants mentioned (and blamed) it as the responsible institution for funding the beneficiaries to build their houses, therefore two interviews were conducted (Figure 11).

14 policymakers were interviewed, an interviewee from each relevant section was important to at least cover the key official departments involved with land.

Figure 11: The organisational structure of the relevant departments
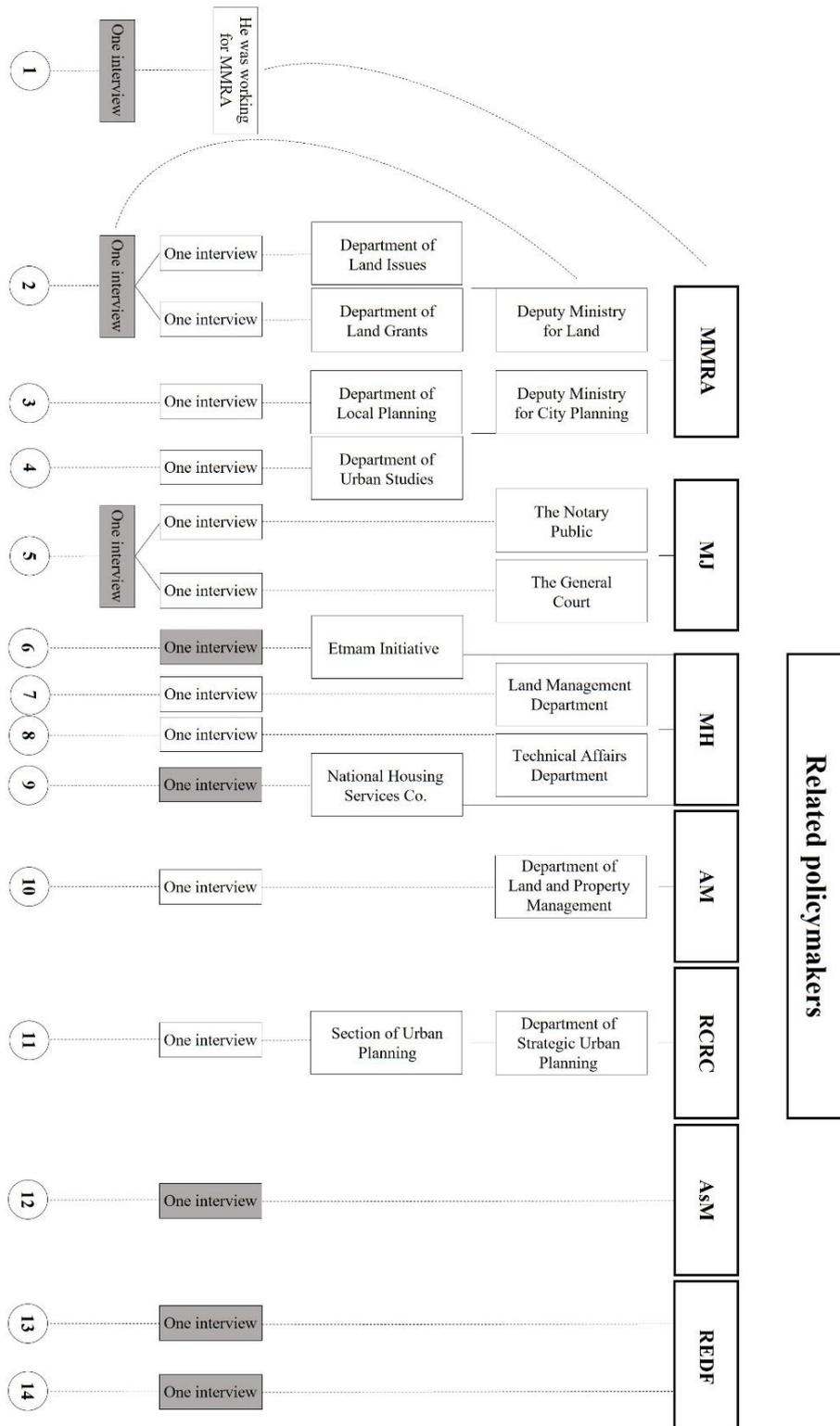
Note: The highlighted interviews in grey means either their relevance was revealed during the fieldwork, and thus they were added, or they were modified based on what was offered to the researcher from the relevant institutions.

The researcher was able to conduct nine interviews of those who agreed to participate out of the 18 real estate agents, as explained in Section 3.6.2.1.2. One should note that the researcher ensured that the saturation level was fulfilled here with these nine interviews. Finally, and more importantly, the sample size of landowners. Although its size can be much greater than that of policymakers or real estate agents, it was the most challenging sample to reach (see Section 3.6.2.1.3). Data saturation level was used for these participants. It is vital especially with landowners to grasp all the potential reasons behind this phenomenon of white land. This can generate more reasons or factors that have not been considered in the literature review; the job of this thesis is to gather and understand them until the level of saturation is reached.

In total, the researcher needed to complete 16 interviews with landowners until he felt the data saturation was met (Table 4). One should note that the interview with landowners included the three groups explained in Section 3.6.2.1.3. The researcher interviewed an academic. This resulted in 40 interviews in total, as shown in Table 4.

Table 4: Number of interviews within each category

Type of participants	Number of interviews
Policymakers	14 (12 of the participants are in high-ranking positions)
Real estate agents	9
Landowners	16
Academic	1 (pilot study)
Total	40

3.7   Approach of data analysis applied

The data collection took place from the 8th of November 2018 to the 31st of January 2019. This section will explain how the data were analysed. After conducting the interviews, for anonymity reasons, codes and fake names are used in the text instead of the participants' real names. To make it more logical and easier for the reader, the participants were divided into three groups, real estate agents, landowners and policymakers.

The real estate agents were given fake names starting with (R) (Table 5). The landowners were divided into three groups; 1) those who hold a parcel(s) but do not

intend to develop, 2) those who hold a parcel(s) with a view to selling it or carrying out development, and 3) those who hold a small plot(s). Therefore, letters were taken from the word (landowner), (L) for the first group, (O) for the second one, and (E) for the third. The abbreviation of each institution is used for policymakers, with letter (P) that means (participant) in the beginning. For example, PMMRA1 means the first participant from the MMRA. All the fake names and codes are listed in Table 5. The academic is referred to as 'Ahmed'.

Table 5: Different names and codes of the participants

Real estate agents	Landowners	policymakers
Rakan	Loay	PMMRA1
Rayyan	Lafy	PMMRA2
Raed	Lotfi	PMMRA3
Raif	Lammah	PMMRA4
Raji	Laith	
Rabeh	Labeeb	PMH1
Rashed		PMH2
Rami	Omar	PMH3
Radhi	Othman	
	Owen	PMJ
	Oday	
	Osamah	PNHSC
	Obaid	
		PAM
	Elias	
	Eesaa	PAsM
	Ehab	
	Ebrahim	PREDF1
		PREDF2
		PRCRC

The 40 audio-recorded interviews were transcribed word for word. Due to anonymity reasons, the transcription process was done only by the researcher, and very time consuming. The researcher searched for a tool that can accelerate transcribing and found some software such as (AudioToText), but they were not helpful, for instance some of them only transcribe up to two minutes and some are poor quality. As a result, the researcher had to transcribe manually. It took approximately two months of hard work, resulting in around 200,000 words on about 400 pages. All the interviews were transcribed in Arabic. Figure 12 depicts all the phases of the analysis process.

Yin (2018) states that data analysis relies on the interpretation of the researcher rather

than having a fixed rule for analysis. Therefore, the thematic analysis approach was adopted, which can be the most prominent approach in qualitative data analysis (e.g. Corbin and Strauss 1900; Langley 1999; Bryman 2016). The first step after transcribing the interviews was coding the data to generate many codes. These codes were, as shown in Figure 12, either characterised into categories (i.e. sub-themes) or again compared to the data in order to create additional codes (i.e. constant comparison). The same is done with the established sub-themes until reaching a core theme(s) that reflects the purpose of the research.

Figure 12: The data analysis process
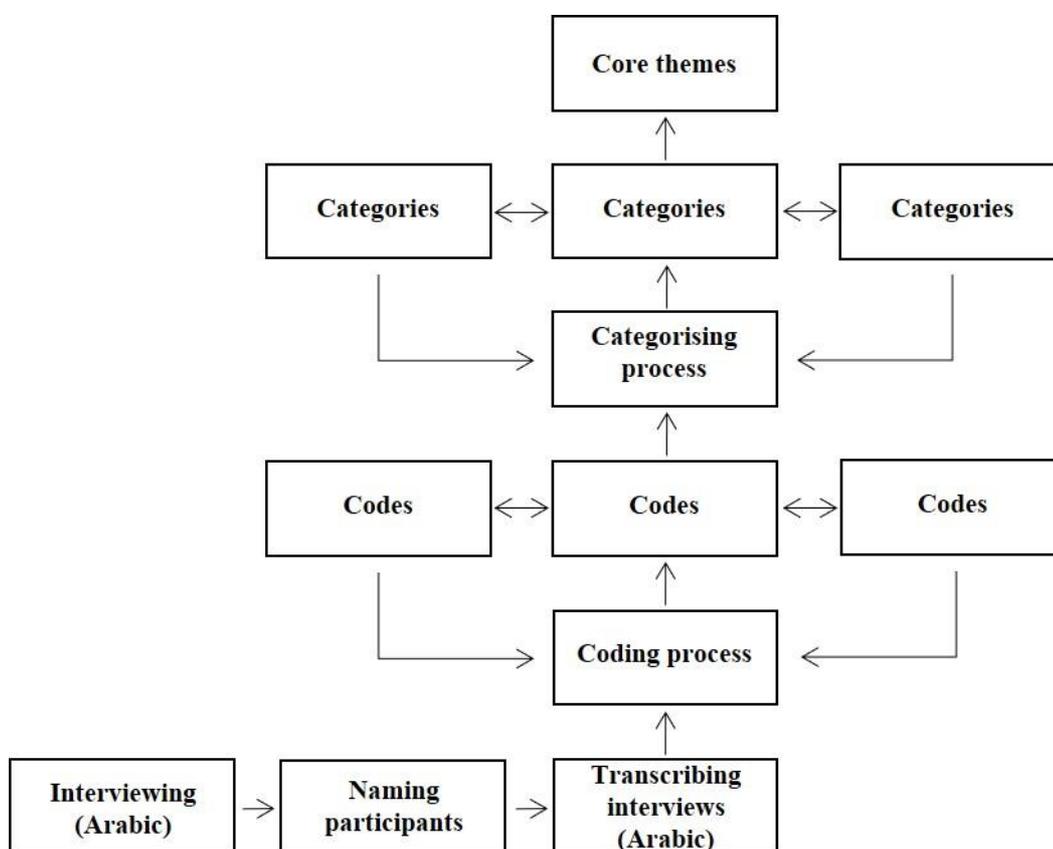
As the thematic analysis originally depends on codes, the researcher would like to briefly clarify how the coding process took place in this study. Saldaña's (2015) book, which discusses 33 coding processes, was carefully considered and aspects relied on during the coding. The science of coding is not precise, and the code can differ from

one to another. Thus, the researcher, as recommended, bore in mind the research question and the aim of the study during the coding and data analysis. Additionally, some codes are classified under two sub-themes, at the same time, if they are related to both (Saldaña's 2015).

There are two broad strategies for coding; 'splitter' is line-by-line coding, and 'lumper' for examining or discovering the core of a phenomenon and when having an overall idea of what to examine in the data. It is better for enormous amount of data with a limited framework for analysis. Therefore, the lumper strategy is mostly applied unless there are some meaningful details that clarify the border consideration. This is called a 'middle-order' strategy that is between the lumper and the splitter strategies (Saldaña's 2015).

Furthermore, as the focus here is on quality not quantity, the codes mentioned only once or twice are taken into consideration as they might hold significant meaning for creating an underlying vision. As organisation is seen as analysis itself; the researcher from the beginning was organised and focused by classifying the codes into sub-themes and the sub-themes into themes after coding only seven interviews. This, as explained by Saldaña, can help in comparing new data with the present codes, new codes with the current sub-themes and new sub-themes with the existing themes, and hence unnecessary codes are avoided and rich information is categorised in an organised way.

Saldaña also gives two tips that have been applied during coding and data analysis. Firstly, coding on a hard copy is strongly recommended because the mental concentration could be too much on the software instead of the data. The second tip is to keep consulting a reliable expert, advisor, colleague and/or peer as they might see the matter from different perspectives. The researcher sought advice from an expert in urban planning, particularly in Riyadh, and two colleagues who conducted their PhD research purely qualitatively and are now academic lecturers.

With respect to coding methods selection, Eclectic Coding, where more than one method is concurrently used to enhance the findings, is employed here. This gives the researcher the opportunity to select three (out of the 33) coding methods, as Saldaña recommends using more than one method to enrich the findings, justified in a way that

matches the methodological needs. Accordingly, In Vivo Coding, Concept Coding and Causation Coding are applied during the data analysis.

In Vivo Coding refers to the codes that the researcher takes from what the interviewees directly state (i.e. their own language). This method is recommended as a generic approach suitable for case study as it is a meaning-driven approach. It enhances understanding of a phenomenon (i.e. the spread of white land) in a certain sociocultural context because it can reflect and explain the motive behind individuals' actions directly via interviewees' voices. For instance, one interviewee states "there is no updating in the AM's plans for 50 years" - an In Vivo Code is used here is 'no updating'.

Concept Coding is "a word or short phrase that symbolically represents a suggested meaning broader than a single item or action" (Saldaña 2015, p.119). This method is in harmony with the 'lumping' strategy since it focuses on the larger picture, it is ideal for research concentrated on theory, especially for sociocultural and political studies. It is also a favourable method when there are various participants as in this study. For example, an interviewee clarified how landowners in Saudi Arabia behave towards their lands based on the timing suitable for them, regardless of the city's direction. The interviewee gave a long story ending by saying that it is not good for him to develop his land at this time - a Concept Code used here is 'own interest'.

The third method used in this study is Causation Coding, the most crucial and useful approach here as it is one of the best methods that serves explanation processes. It is not about variables, but individuals whose needs, actions, values, choices and intentions can lead to causation of an outcome. "It is about the cause, the outcome, and link between the cause and the outcome" (p.187). It is an action stemming from a reason and then results in an outcome. This method has been used in coding the data from the direct interview questions about why there is a high proportion of white land in Riyadh. The participants' answers vary but also, as mentioned above, have different links between the cause and the outcome (assuming the white land is the shared outcome) that need to be investigated.

This means that the data analysis in the Causation Coding is dissimilar to the other methods as it has three different columns; antecedent conditions, mediating variables

and outcomes. As the outcome (the consequence) here is unified as 'white land' (because this method is applied only to specific questions), the focus is on two columns; antecedent conditions (i.e. initiating or pre-existing factors) and the mediating variables (i.e. contexts, causes and actions). For example, X leads to A + B, and A + B leads to Y, where Y is the outcome (i.e. white land).

To illustrate from the data, one interviewee explained in detail how the long process from the MMRA and the MJ makes the decisionmaker not the landowner, but their inheritors, who can have different opinions that lead to conflicting views, requiring a legal intervention to solve the problem. The final outcome is that none of them can take action towards the land. A Causation Code, therefore, is used here as follows:

Long process of bureaucracy > inheritors are the decisionmakers not the original landowner > problems of inheritors > further legal process > cannot make a decision whether to develop or sell the land > white land.

The researcher depended on manual coding in order to be close to the data, as software programmes in analysing qualitative research have some limitations. As an example, using CAQDAS does not enable the researcher to address the vagueness of social interaction or to grasp the rooted meaning. Although the CAQDAS approaches are time consuming (you have to enter each code and identify it), they do not produce greater findings (e.g. Coffey and Atkinson 1996; Atherton and Elsmore 2007). Moreover, these software programmes are not designed to serve Arabic, the language of the transcripts. The researcher tried using NVivo and found it not helpful as its writing system is from left to right, while writing in Arabic is from right to left.

3.8   Ethical considerations

Ethical issues in social research should be considered while carrying out the research (Bryman 2016). This can be more vital in qualitative research since in-depth interviews involve human experiences (Darlington and Scott 2003, cited in Rahman 2016, p.108). The nature of such involvement in conducting interviews often requires seeking information, which sometimes might be sensitive, particularly if the interview is

recorded. Additionally, the researcher, as happened in this study, may have to use unpublished documents that relate to the government. Therefore, it is important to take some essential steps both to maintain the participants' rights and to ensure that the unpublished documents are used correctly in a way that preserves the researcher's and the potential institutions' rights.

A formal ethics approval from Cardiff University was acquired before conducting the fieldwork. It includes a description of the type of participants involved, the broad questions addressed to them, and any potential ethical considerations that could arise during collecting the data. In addition, such ethics approval also considered the use of informed consent.

3.8.1 Informed consent form

Wilson (1992) demonstrates how informed consent is highly prioritised when involving participants in academic studies. The agreement of the participants to take part in the research is the key component of the informed consent (Scheyvens 2014). The participants were provided with information about the nature of the research as understanding of this can influence their decisions to participate or not (e.g. see Bryman 2016). It is vital to maintain anonymity for all interviewees, and this is mentioned in the informed consent. The right to withdraw from the interview was also explained to them (Hunt and McHale 2007).

An Arabic informed consent statement was sent to each potential interviewee clarifying the identity of the researcher, the nature of the research, that the interview will be audio-recorded, how long the interview is expected to take, and that the interview will be anonymised and confidential. Just before starting any interviews, the informed consent was already printed for the interviewee's signature. Two interviewees refused to record their interviews, according to their wishes the researcher took some notes instead.

With regard to the unpublished documents, the researcher contacted the important institutions that are interested in planning and land policies at the national level (i.e. the MMRA, the MH, the MJ, the MEP and the REDF) or at the regional and local level (i.e.

the AM and the RCRC respectively). Communication with them was for the purpose of finding out if they have any useful documents about land policies in Riyadh (see Section 3.6.1). The researcher explained to them the nature of the research and that the information will be confidential and only used for research purposes.

3.9   Research limitations and difficulties

This research, during collecting of the data, encountered some limitations. First, time; the study entails interviews that required more time than anticipated to arrange, conduct, transcribe and then analyse. The interview questions were translated into Arabic, as the interviews were carried out in Saudi Arabia, and then the final step of analysis was undertaken in English. During the data collection, the researcher faced some difficulties that required extra time. The researcher contacted 18 potential participants who refused to take part for different reasons such as they are busy or not interested. In addition, 11 interviews were postponed for various reasons, two of which were delayed three times. The researcher also, in many interviews, had to wait, sometimes as long as 1:30 hours, because the interviewees were busy with other people or tasks.

Additionally, money; the fieldwork, which took place in Riyadh, was funded only by the researcher leading to another limitation. For instance, some interviewees, especially landowners, did not have a suitable place to meet, therefore the researcher had to conduct some interviews in quiet and respectable places such as a hotel lobby, or hiring a meeting room, which was costly.

Above all, the sensitivity of the research as well as the difficulty of reaching the required sample of the landowners were more worrying. The sensitivity here, based on what the researcher felt, lies in 1) the reluctance of some participants, especially policymakers and real estate agents, to speak explicitly about the situation of those lands that are related to powerful individuals, and 2) the fact that a few landowners might have felt they were questioned in a way that seeks to know more details about their own properties that could have made them not very comfortable to speak.

Regarding the former, seven interviewees asked to stop recording for a couple of

minutes to deliver some information, and some added some information after finishing the interview[10], which makes the researcher wonder whether those who did not ask to stop recording talked frankly or not. As for the latter, the researcher felt that a few landowners might have not talked honestly. The reason lies in trust issues, as confirmed by one of the real estate agents, that landowners do not trust anyone and they feel all people, including the government, are against them, particularly after the introduction of land fees. In order to lessen this anxiety, the researcher promised the participants including landowners, both verbally and in the informed consent, that their participation is anonymous and the information given only used for the study.

With respect to reaching the required sample of the landowners, it was hard to reach the owner when a piece of land is away from the market. Unfortunately, there is no specific system showing landownership and landowner details available to the public. Consequently, the researcher had to contact the concerned institutions to find if they can provide him with some more details, as well as reaching some well-known public figures in landownership from, for example, newspapers and so on. The second option to overcome this was a snowballing technique, in one group of landowners (see Section 3.6.2.1.3).

3.10 Summary

The relative research methodologies were explained in this chapter. It was demonstrated that the realist ontology paired with the interpretive epistemology is warranted as suitable paradigms that can fit this study to understand and investigate why there is a large proportion of white land. This investigation requires a deep involvement with the sociocultural context, which not only motivates how landowners treat their lands, but also influences the process of decision-making in terms of land administration at the government level. The methodological conceptualisation of adopting the interpretive epistemology has led to a qualitative approach, despite some limitations. The greatest limitation can directly be linked with the issue of generalisation, but it was clarified that the aim is to generalise (contribute) to theory rather than population (Section 3.4.1).

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[10] It can be normal information but for some reason the participants preferred not to be recorded, though they knew and agreed that the researcher used it in the study.

Regarding the research design, a single case study that aims to be both descriptive and explanatory was adopted. The adoption of this, as a key branch in qualitative studies, was well justified, with an unusual or an extreme case that is complicated, this type of case study can be the most appropriate approach (Yin 2018). Therefore, the phenomenon of white land in Riyadh is the case, within which there are several factors involved (i.e. sociocultural, economic, and political), while the actors involved are landowners, real estate agents, and policymakers.

40 semi-structured qualitative interviews were conducted with the above actors (including one academic), which were the most difficult part for the researcher to arrange, carry out, transcribe and analyse (see Sections 3.7 and 3.9). The data analysis followed the thematic analysis approach, adopting three methods of coding recommended by Saldaña (2015), In Vivo Coding, Concept Coding and Causation Coding. The documentation process was also adopted. Besides some official websites, published articles, and news, eight unpublished official documents were collected from the related institutions to create some interview questions, support the findings, and describe the situation of urban planning and development in Saudi Arabia in general and Riyadh in particular, which is described in the following chapter.

CHAPTER 4 : The context of urban planning and development in Riyadh: with an emphasis on the sociocultural, political, and economic factors

4.1 Introduction

Earlier chapters emphasise that, to achieve the aim of this study and understand the phenomenon of white land in the Gulf context, it is important to understand such context, especially in terms of the sociocultural, political (including the relevant rules and regulations), and the economic (including the financial level) factors. Earlier chapters also justified selecting Riyadh, as a fertile ground, to examine and understand this phenomenon. This chapter will provide the necessary information in three main sections, to help in understand the concerned phenomenon.

Derived from the theoretical framework in Section 2.2.1, the first section will clarify information about sociocultural, political, and economic factors, which can affect the Saudi context in general at the national level. The sociocultural factor will include considerations of the social relations and religion at the individual level, highlighting their potential impact on land development. It will also explain how the government invested in some historical and religious evidence that had a major role in land development, the Land Granting Programme (LGP). The section will consider how economic growth occurred in Saudi Arabia and increased the urbanisation rate, especially through the Real Estate Development Fund (REDF), which was introduced mainly due to the revenues of the oil boom.

The second section will highlight how Riyadh has expanded and developed historically. This overview will include the main planning tools applied, most importantly the UGB and the strategy used in its application. The third section will outline the government initiatives and programmes established after 2015 (under Vision 2030). The focus centres around the initiatives and programmes that attempt to combat the phenomenon of white land, including White Land Fees and Etmam.

4.2 Saudi Arabian context: an overview of the factors affecting the built environment

Saudi Arabia is in the west of Asia, in a key location that connects Asian and African civilisations (Figure 13). It covers over 2.2 million square kilometres (about 80% of the Arabian Peninsula), with a population of approximately 33.4 million (Saudi National Portal 2020). It is divided into 13 regions, where Riyadh is the capital (Ministry of Foreign Affairs 2010). The main institution in the government is the Council of Ministers, responsible for the organisation of government policies externally and internally. This council consists of the King, who is the Prime Minister, the Crown Prince, who is the Deputy Prime Minister, and the ministers of the state (Saudi National Portal 1993) (for more details about the government institutions that have a connection with land, see Section 3.6.1). Based on the argument in different parts of the previous chapters and allying with the theoretical framework (Section 2.2.1), the next three sub-sections will explain the sociocultural, political and economic factors that can play a role in Saudi context.

Figure 13: The location of Saudi Arabia
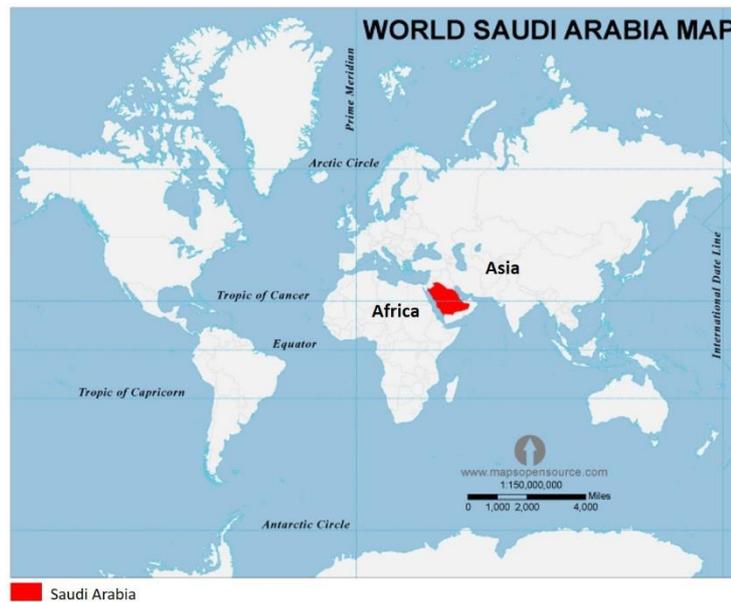
Source: Taken and adapted from MOS, 2020.

4.2.1 The sociocultural factor: an emphasis on social relations and religion

The sociocultural factor in the Saudi context is the key theme that can influence land development directly, or indirectly through its strong connection with the other factors[11] (i.e. political and economic). Besides explaining the importance and impact of the political and economic factors, this section will firstly shed light on the most influential sociocultural aspects, based on the literature about Saudi culture. They are 1) the impact of social relations and 2) religion.

Social relations

When it comes to the sociocultural factor in the Saudi context, the element of social relations prevails and receives a great emphasis in the literature. There are three essential elements: family ties, tribal allegiance and friendship commitment. Prioritising these three elements was strongly rooted in the culture of the Arabian Peninsula even before Islam, which enhanced it. The rationale behind concentrating on these three aspects is that they can have a hand in the selection process of land and its development, especially the family ties. Additionally, these three elements can be affected by *Wasta,* as a common factor. *Wasta* is "a process whereby one may achieve goals through links with key persons" (Smith et al. 2012, p. 3).

The family is regarded as the central social unit that is key in forming the society (Alsaeeri 1993). That is why the means that lead to the disintegration of the family ties, such as divorce, are not preferable culturally; it remains lawful, but most hated by Allah (God) (e.g. Mashhour 2005; Risman et al. 2018). The structure of the Saudi family respects a specific hierarchy, where every family member knows their responsibilities and rights (Lutfiyya and Churchill 2012).

In Islam, it is obligatory for children to be kind and dutiful to their parents. This dutifulness is stressed in Qur'an and/or Sunna (for more details see Asgari et al. 2012; Arifin and Chiroma 2014; Rassool and Sange 2014). Meanwhile, children have rights. A parent cannot write a will to pass their inheritance to some of their children and

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[11] The factors discussed under Section 4.2 (including sociocultural, political, economic, or matters related to social relations and religion) do correspond and correlate to each other (the discussion in Section 2.2 supports this argument). The sub-sections are used as a kind of organisation to explain the main argument, the material can switch between the sub-sections where appropriate (e.g. some material related money (*Zahat*) is discussed under the religion part not economic factors, some material related to Islam is mentioned under the social relations part, and so on).

prevent some from inheriting; all must benefit (for more details, see Bowen 2003; Muhammad 2012; Akkila 2015). This means that all their inheritors must have a share in any land and turn into decisionmakers. This leads to investigate the possibility of conflict that may prevent land from being developed or sold.

The above relation includes the family as the small unit (i.e. father, mother and children), and extends to include kinship[12] (for more details about the importance of engaging with the kinship, see Al-Bukhari 1894). This type of strong family tie was more obvious in the past, where relatives needed and supported each other due to the difficulty of life by living together (extended families) (Lutfiyya and Churchill 2012). A report published by RCRC (2015) shows the percentage of the population living in this type of family was 33% in 1996 in Riyadh, though it decreased to 20% in 2004. This implies that there is more demand for homes for smaller households today. The implication of this demand on land development, by analysing how the family ties influence the land location selection by competing on particular land plots, will be explained later in Section 7.3.1.

According to Dickson (2015), tribal allegiance receives important attention in Arabic traditions; it is seen as a symbol of reputation and dignity. Despite its diminishing impact with the existence of a powerful political system that protect rights, the adherence to the tribal traditions can direct how Saudi individuals behave. The behaviour here is not necessarily relating to the land location selection, but maybe to how to facilitate land procedures in the government institutions. This is called *Wasta* or 'who you know in the relevant institution'. To an outsider *Wasta* may appear to be unacceptable behaviour. However, the Saudi society tends to accept it, especially if the beneficiary feels they do not break the law. Discretion by potential officials or employees, which was highlighted in Section 2.6.2.3, might be exploited here, especially if there are some vague rules and regulations.

Indeed, Al-Khalifa et al. (2015, p. 205) describes *Wasta* as the mentality that motivates individual behaviours through their own connections, arguing that:

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[12] It includes those who are related to one through their father and mother, such as brothers, grandparents, uncles, aunts, cousins, nephews, nieces.

> *"in Saudi Arabia a person never leaves the family mentality behind and moves on; this mentality stays within him or her throughout all stages of their life. What this mentality does is create the "connections" they need wherever they work either in a government job or in the private sector. These "connections" have a nickname in the Saudi culture; the Saudis call it "vitamin C" [In Arabic they say vitamin WOW]."*

Wasta can be an influential factor not only among the tribe members, but among the family members, and friends, as one of the friendship commitments. Friendship value in Arabic culture, and Saudi in particular, seems to go beyond the limits that other societies are familiar with, especially in the West (Al-Faleh 1987). He illustrates that it can be normal that one asks their friend, who is an employee in an institution, to ease their requests. Conversely, and similarly to the tribal traditions, the applicant may see it as a shame if their friend does not help them (Al-Khalifa et al. 2015). Despite the possible variation in the interpretation of or the adherence to such sociocultural values among the Saudis, the thesis later in Chapter 7 will examine whether *Wasta* can be influential in the work environment.

Religion (Islam as a way of life)

Religion has influences in many cultures. The Saudi population follows the Islamic religion but have an additional (conservative) pattern (e.g. Salama 2015). This conservatism stems from historical and sociocultural reasons. The region is the cradle of Islam; it has the original place of the Prophet and his Mosque in Medina, the great place of worship in Mecca, where Muslims around the world perform the ritual prayer, as well as the annual pilgrimage. The Saudi population was not exposed to colonial influences and other cultures from major states and empires, as were neighbouring countries, especially the inhabitants of the center of Saudi Arabia, which has survived from that because of the lack of ambitions in it due to the social and geographical conditions owing to hunger, drought, and poverty.

It was clarified in Section 1.2 that one key attribute of the case study is that Islam has influences in the region on both the political system and the society in general. It can be

assumed that all Saudi population are Muslims (e.g. see At-Twaijri et al. 1996; Pharaon 2004), as it is the only religion accepted in Saudi Arabia (BECM 1992). Although there can be variation in the adherence to the Islamic teachings, the Saudi population receives shared and unified Islamic teachings (e.g. Al-Farsy 1990), which can affect how they behave and act in all aspects of their lives (Haneef 1997), including in relation to land. There are two relevant issues 1) the notion of landownership system in Islam (discussed in the following section) and 2) *Zakat* on land (Islamic tax) regarding the influence of Islam on dealing with land.

Zakat is a fundamental part of the Islamic economy. It is a fixed amount (2.5%) of one's wealth (not income) that a Muslim must take out from certain funds (e.g. money, gold and silver) once every Hijri year, and pay to certain beneficiaries, such as the poor (Islamic Fiqh Academy 2001). Due to the economic boom (see Section 4.2.3) and the prohibition on the acquisition of land by farming (see the following section), real estate prices started to rise dramatically. Residential land values, for example, rose dramatically between 2009 and 2016 by more than 100% (e.g. MJ 2016). This considerable increase in prices has made the property market a safe way to save and invest money, viewing land as an asset. An important issue emerged; is land now eligible for *Zakat* in the same way as money, gold and silver? If so, then the potential landowner must pay it every year, and if not, then they can withhold land without paying any extra charges.

Generally, Islamic scholars are unanimous that whoever owns the real estate for essential personal use (e.g. home or farm) or owns it through inheritance, gift or granting, will not be considered eligible for *Zakat*. On the other hand, whoever owns the real estate for the purpose of trading and treats it as commercial commodities, is considered eligible for *Zakat*, according to all Sunni Schools of Jurisprudence in the Islamic religion (Islamic Fiqh Academy 2001). However, the point of discussion, on which some Islamic scholars disagree, is the person who buys real estate that exceeds their needs but not for trading or commercial commodity, but just to save their money and protect it from depreciation, even if they decide to sell later.

While three out of four of the Sunni schools regard the above case as eligible for *Zakat*

every year as long as the landowner withholds it, there is a common fatwa based on one of the Sunni schools, the Maliki School, that has a different opinion. This fatwa confirms that the landowner is required to pay *Zakat* on their land only once when sold regardless of the number of years owned (Islamic Fiqh Academy 2001). The most widely spread Sunni school in Saudi Arabia is the Hanbali School (which asserts that *Zakat on land* is yearly), and therefore the government, through the General Authority of Zakat & Tax, collects *Zakat* from companies every year (see General Authority of Zakat & Tax 2020). Companies that own land will be subject to Z*akat* annually.

However, for individuals there is no legal provision for the government to collect *Zakat*, which leaves it as a personal moral obligation. This is to argue that the fatwa of the Maliki School above is issued by some Saudi clerics[13] and can be followed by any landowners. This argument about *Zakat* is to consider whether it is common for landowners to choose to speculate on land, benefiting from the fatwa of the Maliki School to not pay *Zakat.*

4.2.2   The political factor: an emphasis on the important rules and regulations affecting urban land development

The significance of the political factor (rules and regulations) was explained in Sections 2.2 and 3.5.1, emphasising its strong correlation with the sociocultural factor. The unified political entity in Saudi Arabia, from 1902 and headed by King Abdulaziz Bin Saud, is an absolute monarchical system (Saudi National Portal 1992) (the monarchical system is one characteristic of the Gulf region, see Section 1.2). One of the advantages of the monarchy is political stability, reflected in the stability of laws and norms, harmony between groups and regions of society, the absence of parties, and the unification of loyalty and belonging (previously a group of different tribes and regions competed for leadership and control over the places of water and green pastures). The monarchical system can also enhance the application of bureaucratic centralisation, a common feature of the region, as clarified by Akbar and Shaw (1988). As was explained in Section 2.2, two factors assisted the unified political entity in the Gulf in

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[13] Nothing in Saudi Arabia to prevent people from following any of the Sunni schools of jurisprudence.

general, and in Saudi Arabia, the economic boom (see the following section) and the adoption of *Sharia.*

Drafting the government's rules and regulations tend to be subject to or derived from *Sharia*[14] (Saudi National Portal 1992), emphasising the fact that the constitution of Saudi Arabia is the Qur'an (the Holy book of Islam) and the Sunna[15] (BECM 1992). The notion of landownership system in the nation, which has played a major role in urban land development and is essential in the investigation of white land, is purely stemmed from *Sharia*. The government benefited from historical and religious evidence called 'the revival of the dead', which means the construction of a dead or ruined land that does not belong to anyone; as if by their action, they spread life to the dead land. This concept is from the Hadith of the Prophet that "who revives a dead [non-owned and vacant] land, then it becomes theirs" (Al-Sajistani 1999, p. 450). The state, through the MJ, has taken the initiative to provide documents proving ownership of these lands to citizens under the name of *Hujjat Istihkam* (bonds of proof of stewardship).

Before 1967, the 'revival of the dead' was a lawful way in Saudi Arabia of acquiring vacant land once it is seized and exploited. In the past there were fewer people; everybody would acquire more natural resources than their need (Dwyer 2014). This implies that one can acquire ample land for almost nothing, with informal planning by individual effort. When the population suddenly increased in Riyadh to reach almost 300,000 in 1967 (RCRC, 2015a), there was a belief that land needed to be rationed and allocated through a government intervention using an organised system. Thus, and because only the leader of the state may set limits on the acquisition of land, the allocation of land was substituted from *Hujjat Istihkam* to the LGP in 1967, which is also derived from the state's investment of historical evidence in *Sharia* (MJ n.d).

The LGP is a product of a mixture of religion and *rentier* economy, which was introduced at the time of the successor of the Prophet Muhammad II, Umar Ibn Al-Khattab (died in 644), who provided free lands to citizens for the purpose of building them (*Iqta*) (Akbar and Shaw 1988). The state has used this *rentier* model officially through the LGP by distributing lands to citizens for free (the so-called 'grants').

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[14] It is a well-known fact that it is not necessarily that all rules and regulations about urban planning and development relate to *Sharia*, but the point here is that they do not conflict with it.
[15] Sayings and acts of the Prophet.

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The LGP includes two types: royal grants and municipal grants. In respect of the former royal households throughout the world normally have some allowances, whether through taxes or resources of the nation (e.g. see Alshehabi 2017). This type of grants includes the royal households. The orders of granting have to come from the Royal Court, and specify the area and place (e.g. city or district) of the land granted. The MMRA and the MJ then implement such orders by legalising the ownership to the grantees (MJ n.d).

Regarding the municipal grants[16], all Saudi nationals have the right to apply for a granted plot for free under some routine conditions: that the beneficiary must be at least 18 years old and has not previously obtained a residential land grant in the country. The area of the granted plot is also standardised to be 625 m^2 (MMRA 2004)[17]. By 1986, as an illustration, the government was able to allocate almost half of the capital (Riyadh was 92 km^2 at that time) as plots granted to the public, with the intention of enabling them to dwell (Mubarak 1999).

The beneficiary can also apply for financial support from the Real Estate Development Fund (REDF), a further key national programme in urban land development. The REDF was established after the LGP, in 1975 (BECM 1975). It aims to increase the level of affordability by funding the Saudi nationals with free-interest loans to build their houses, paid back over 25 years. The loan was 80,000 USD and then increased to 133,333 USD in 2011 (MH 2015). Some of the conditions of being eligible for such a loan are dissimilar to the land grants. The beneficiary of the REDF must be a family head and own a piece of land in order to apply for the loan (ibid). More importantly, there is evidence that the applicant waits at least 15 years to receive their loan due to the long waiting list (CEDA 2016). This assumes that one must own a piece of land for 15 years to be on the waiting list to obtain a loan.

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[16] The MMRA was responsible for distributing all land grants before transferring the municipal grants to the MH in 2013. The reason for transferring this type of grant to the MH lies in giving it full control in dealing with housing issues (Almeqbili et al. 2013).
[17] The area of plots in the market (not allocated for granting) must be at least 400 m^2 (RCRC 1996; Al-Mayouf and Al-Khayyal 2010).

This was the case until 2015 when an initiative called 'mortgage support' was developed in a collaboration between the MH and the REDF. The beneficiaries were transferred to the banks, and the REDF pay the bank interest on their behalf according to a particular calculation (for more details see Sakani 2020). In the beginning, the idea was not accepted by some applicants and the issue reached the Board of Grievances (BG) claiming that this decision conflicts with the official decree M/23 that Saudi nationals have the right to obtain a free-interest loan from the REDF (see BECM 1975). In 2019, a royal decree (NO. 554) was issued to give the REDF the authority to transfer all the applicants to the banks (Almanatiq 2019).

The key point here is that the top-down centralised decision-making process enabled and then disabled the applicants benefiting from the REDF. As the new initiative (i.e. mortgage support) is very recent with little information available, the researcher tried to seek answers from some officials regarding why the MH and the REDF made this shift to the banks (see Section 5.3.1).

In connection with the proliferation of white land, there are two key points from this section. First, the possibility of whether the land distribution process by the LGP has contributed to the spread of white land, and the consideration of its impact on land development. It is to consider if the LGP has been introduced in a way that serves the public interest, or in contrast, has led to a kind of planning failure, and how. Second, the possible implications of the free-interest loan need to be examined in terms of its impact on the spread of white land, especially as it entails the possibility of withholding land for many years waiting for the loan.

4.2.3   The economic factor: an emphasis on oil and the standard of living

One of the most salient features of urban development in Saudi Arabia is that is it driven by the economic environment. Though there have been new initiatives to diversify the economic resources such as the investment in industry and the involvement in global investment through the Public Investment Fund, the national economy is mainly dependent on oil, as the dominant component of the national macroeconomy (Vision 2030, 2016), dissimilar to some other countries that produce oil

but their macroeconomies do not mainly rely on oil returns (see Section 2.3). Saudi Arabia possesses almost one fifth of the world's proven petroleum, the highest exporter of it in the world (OPEC 2019).

The revenue from oil in Saudi Arabia, which started during the 1970s, was a turning point in the national economy, resulting in the emergence of money and wealth in the region. This abundance of oil in the country contributed to the government to choose to be a *rentier* state (the LGP and the REDF are significant examples of this, which have changed the Saudi culture towards private ownership). As a result, the developing urban areas grew rapidly (Gamboa 2008) - the proportion of urbanisation in Saudi Arabia increased from 21% in 1950 to approximately 84% in 2018 (Statista 2020).

The above urban expansion was to meet not only the increasing population growth, but also the outcomes of the increased financial level and quality of living conditions of the Saudi citizens. The increasing financial level has changed the social culture towards housing, as was argued in Section 2.2. This, in the Saudi context, can be seen through the desire of obtaining a much larger residential plot. The traditional house in the beginning of the last century had an area fluctuating between 100 and 200 m^2 in the capital, with optional yard setbacks, and normally includes more than one family (extended families) (Appendix B) (Al-Hathloul 1981; Al-Taiash 2007). By 1980, the plot areas increased to reach 600 m^2, with a nuclear family pattern (Al-Gabbani 1991). This means that the size of the residential plots increased to at least three times the size.

It is worth considering, later in the data analysis, whether this social culture of obtaining larger plots can be sustainable and workable without having some negative effects on white land, or not. It is also worth investigating whether the increased financial level of the citizens has contributed to considering the land market as a suitable channel to invest money, especially with the culture of the *rentier* state. To put it differently, it is relevant to the aim of this thesis to study if the adoption of the *rentier* economy model, specifically the potential consequences of the LGP and the REDF policies, can lead to failure of the planning tools applied, with investigating the correlations between them. Finally, the thesis will also study how the *rentier* economy model, through the above national programmes (LGP & REDF), can work in contexts whose spending is subject

to economic fluctuations (external factors), and more importantly to investigate this effect on the existence of white land.

4.3 Riyadh: an overview of the city planning and development

Riyadh is a desert city in the centre of Saudi Arabia. Due to the massive urban growth and development of Riyadh, the researcher categorised the process of its development into four main stages, specifically the old Riyadh, Al-Malaz neighbourhood, the master plan of Riyadh and the UGB stage.

The Old Riyadh

By 1930 Riyadh was a walled city with an area of only 1 km^2 and a population of just 27,000 (Appendix C) (RCRC 1997a). Riyadh was then readopted, by King Abdul-Aziz, to be the capital city of Saudi Arabia in 1932 after it was the capital of the Second Saudi State in 1824 (RCRC and King Saud University 1999). King Abdul-Aziz decided to opt for the north direction of the walled city at that time to build his palace and the complex for the city administration, called Al-Murabba. The north has flatter land for ease of building and prevailing winds in Riyadh blow from this direction (Al-Oteibi et al. 1993). After such construction towards the north direction, King Abdul-Aziz set a precedent for the future planning system in Riyadh (Al-Hathloul 2017).

Al-Malaz neighbourhood (the New Riyadh)

In 1953, King Saud (after succeeding to the throne) commanded the creation of a new residential neighbourhood, Al-Malaz, five kilometres north of the Al-Murabba (Figure 14) (Al-Hathloul 2017). One key reason for establishing the Al-Malaz was to accommodate the anticipated employees (Mubarak 2004) after the king's decision of transferring the government institutions from Mecca to Riyadh (Garba 2004). The motor car became popular with a complete absence of inner-city public transport. Due to this, as illustrated in Figure 14, the main districts in Riyadh are disconnected, with large undeveloped parcels between developed areas. By constructing the areas disjointedly, the government gave an evident sign of its intention for enhancing urban and population growth in Riyadh to be more powerful in the region. The population

during the 1950s does not reach 100,000 inhabitants (RCRC 1997b), then experienced rapid growth to reach about seven million today, as Figure 15 depicts.

Figure 14: Major areas in Riyadh during the 1960s

1)	Old city
2)	Al-Murabba
3)	Nasriyah
4)	Al-Malaz
5)	Airport
6)	Railway station
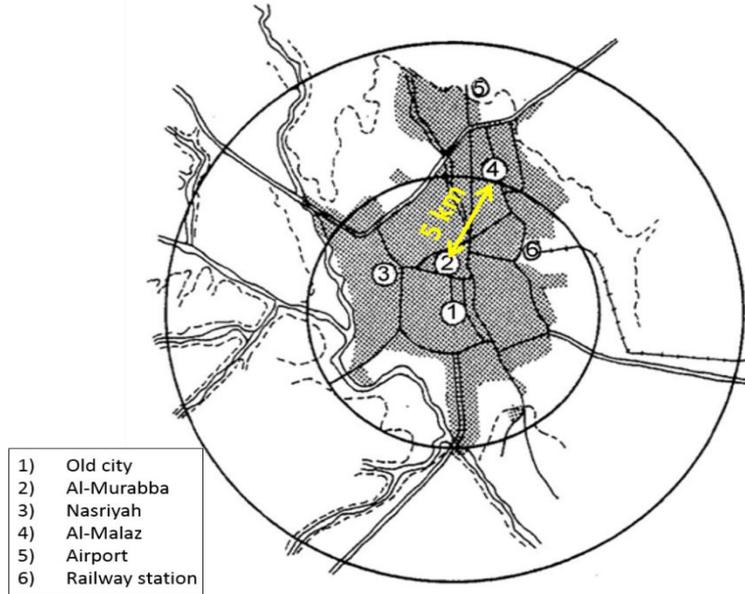
Source: Taken and adapted from Al-Hathloul, 2017, p.100.

Figure 15: Population growth in Riyadh
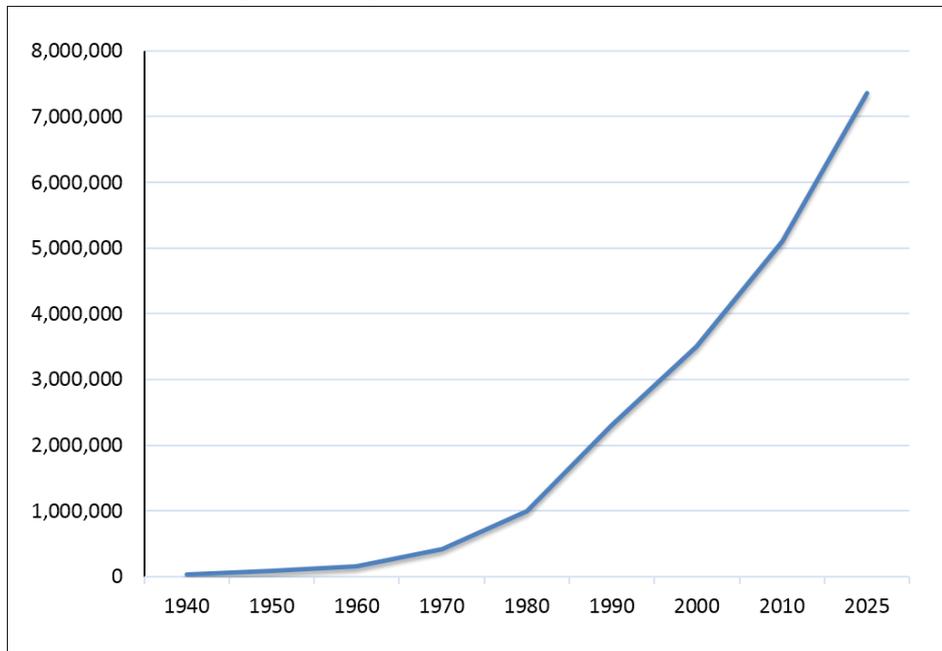
Source: Al-Hathloul, 1993, p.38; Mubarak, 1999, p.9; RCRC, 2015a, p.23; GAS, 2010b, p.15, cited in Alsulaiman 2016, p. 20.

Al-Malaz was a turning point between the traditional and modern in planning pattern and housing style (i.e. villas and apartments rather than traditional houses). It was also the first attempt to introduce formal urban planning at the neighbourhood level (not the city level i.e. the master plan). It is important to outline some basic features of Al-Malaz copied in the rest of the city. As can be concluded from Figure 16, Al-Malaz's master plan has several characteristics (Al-Hemaidi 2001; Al-Hathloul 2017):

- The layout includes large blocks that usually consist of eight or six plots each.
- Most of the blocks have an area of 100×50 m with a plot size of 25×25 (625 m^2) in most cases.
- While the depth is fixed at 25 m, the plots' widths can be 50, 37.5 or 25 m.
- Some setback requirements were introduced, instead of having a voluntary yard setback, it has become compulsory for all houses to have setbacks from four sides with, as listed by MMRA (2005, p.20), no less than 40% of the area of the plot (RCRC 1996).
- Identifying the maximum heights of residential use with two storeys[18] (MMRA 2005).

One can infer from the above that the process of subdividing land introduced several regulations that mismatch with both the objective of the UGB (that aims at intensifying the density and reducing the sprawling infrastructure) and the provision of more affordable plots (for more details, see Section 2.6.1.1.1). As an example, minimising the width of plots (e.g. 25×25 m) does not exist, where having large width of plots can increase the final cost (e.g. Choppin 1993). The considerable rise of the plot area from traditionally 100 m^2, as mentioned previously, to 625 m^2 not only identifies the minimum plot size, but also can contribute to decreasing the density, leading to further sprawl. To illustrate, there was a dramatic decrease by 80 % in the population density, from 306.25 people/ha in the traditional house (Al-Hathloul 1981) to only 60.38 people/ha) after the 1950s (Al-Hathloul et al. 1975).

It is striking that after establishing the Al-Malaz area, the government, as stated by Al-Mayouf and Al-Khayyal (2010), institutionalised this model; the plot size through

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[18] It has later been allowed to increase it up to 2.5 storeys.

directives, circulars and decrees, and the villa through setback requirements (Al-Hathloul 1981). The LGP, which was discussed in Section 4.2.2, was introduced just after the government institutionalised this model. This implies that the standard of plot areas (625 m^2) in Al-Malaz model is adopted and applied as a national standard for plot areas assigned for granting, which has become a prevailing culture for the most appropriate area for living (for more details about the Al-Malaz, see Garba 2004; Mubarak 2004; Al-Hathloul 2017).

Figure 16: Blocks and its subdivisions in Al-Malaz (the typical pattern in Riyadh)
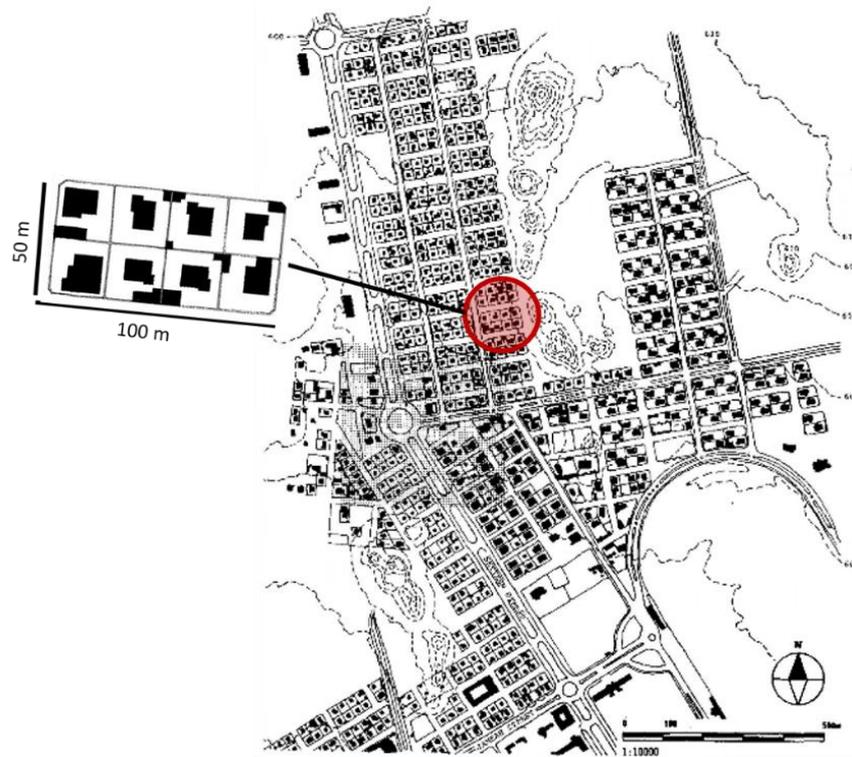
Source: Taken and adapted from Al-Hathloul, 2017, p. 103.

The master plan of Riyadh

With the signing of an agreement with Doxiadis Associates to provide the first master plan (RCRC 1997b), planning regulations came under professional control (Mubarak 2004). The master plan was authorised and approved in 1973 by the Council of Ministers (Appendix D) (RCRC 1997b). One significant target was to establish a structural plan to control the development process until 2000 in a strategy that can accommodate the projected population (ibid).

Doxiadis designed Riyadh with the motor car as the main means of transport (Doxiadis Institution 1971). The master plan, therefore, depends on a spine along King Fahad Road[19], forming superblocks with 2×2 km each as neighbourhoods, with an emphasis on the north direction for the city expansion (RCRC 1997b; RCRC 2003). A total area of 304 km^2 was assigned to accommodate 760,000 and 1.4 million up to 1985 and 2000 respectively (RCRC 1997a). Introducing this master plan was simultaneous with both the LGP and the REDF policies, where Saudi citizens applied for a plot, as a government grant, and a free-interest loan for building. Consequently, a unique style of residential development emerged, where the citizen is responsible for building their granted plot from scratch, and thus the owner often acts as a consultant and contractor to build their house (Alskait 2003).

Unpredictably, maybe because of the encouraging development policy i.e. the LGP and the REDF, there was extremely rapid population growth, which was not taken into consideration by the Doxiadis plan. The city began to expand quickly everywhere, even in easterly and westerly directions, mismatching what was planned by Doxiadis (RCRC 1997b). Riyadh reached approximately 450 km^2 and the population went up significantly to almost 1.4 million in 1987 (Al-Mogren 2016), although the proposed area, as mentioned earlier, should not have exceeded 304 km^2 with no more than 1.4 million citizens in 2000.

Although the population reached 1.4 million in 1987 rather than 2000, the proportion of planned areas surged to 450 km^2 in 1987 instead of 304 km^2 in 2000. This means that, taking the Doxiadis plan into account, the percentage of the allocated areas for housing skyrocketed much higher than the population at the same time, during which, the MMRA issued more than 12,000 private building permits per year, resulting in some critics claiming that Riyadh experienced the largest building site in the history of humanity (Hathloul 2017).

What may have contributed to such acute growth is that the Doxiadis master plan allowed princes, developers, businessmen and landowners to subdivide tracts, to price them and then sell them in the property market, which played a role in turning the land market in Riyadh into a commodity (Menoret 2011). The outcome is that the urban

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[19] It is the main road on a north-south axis, which is the major commercial stripe.

development rate far exceeded Riyadh's boundaries, which are specified by the plan of Doxiadis. This massive sprawl is a negative externality as a feature of market failure, as was explained in Section 2.6.1.1. This was exacerbated by other market failure features such as monopoly, which was not a troubling issue before the 1950s (before seeing land as a commodity). As a consequence, there was an urgent government intervention, establishing another master plan for absorbing such significant changes, this task was commissioned in 1982 to a company known as SCET International/SEDES (RCRC 1997b).

Generally, the proposal of SCET Int followed the main principles of the Doxiadis master plan, adding vital changes to accommodate the massive urban growth. For example, it suggested another major axis (east to west) to accommodate all the projects that had been sprawling during the Doxiadis plan (Appendix E) (RCRC 2003). The master plan became more flexible with an allocated area of 850 km2 for urban development until 1990, 250 km2 of which was subdivided but undeveloped (RCRC 1997c). The purpose of the government intervention with two master plans is to accommodate the sprawling development of such unexpected growth, without focusing on methods that make urban growth subject to the strategic plans.

Interestingly, although the growth rate of population, at 16%, peaked within the 1980s (RCRC 2015), the growth of urban development during the same period was impressively faster than population growth (Section 1.2 explained that being a very fast-growing city is an additional attribute of the case study). Al-Oteibi et al. (1993) state that whilst the population increased by 100% from 1976 to 1987, the area designated for development skyrocketed by 1000% at the same time, describing it as the fastest growing city in the world between 1970 and 1990 (in the data analysis, the researcher will explain this very significant divergence). Perhaps for this reason, one land subdivision scheme can take a massive 30 years to be filled with houses, nevertheless one can find some white land within it (Alskait 2003). As a result of such sprawl, the Council of Ministers intervened by suspending the subdivision processes of any new land in 1986 until this issue was further considered by introducing the tool of UGB (Hathloul 2017).

Urban Growth Boundary

In accordance with the above, UGB was introduced in 1989 to slow physical expansion, controlling unbridled land subdivisions (RCRC 1997a), and encouraging such development in infill sites (Al-Hathloul and Mughal 2004). Another fundamental aim is to enhance economic efficiency by spending on infrastructure more rationally and wisely, avoiding waste or sprawling infrastructure (MMRA 2015). The UGB programme was made up of three stages. Urban Limit 1 (UL1) with an area of 632 km^2 for development up to 1995, Urban Limit 2 (UL2) with an area of 1,149 km^2 for urban development up to 2005 (with a total of 1,781 km^2 for the two urban limits) and an external protection zone (UEL) allocated for future need with an area of 3110 km^2 (RCRC 1997a).

According to Hathloul (2017), the government is responsible for infrastructure and services supply (e.g. schools, mosques, parks etc.) in the first phase, during the other phases this is the developers' responsibility (neither the literature nor the government reports explain why this shift in responsibility from government to developers has been made, and the researcher will investigate it later in the analysis). The services, provided by developers, must constitute at least 33 % of the land tract (RCRC 1997a).

An issue arose when some developers took advantage by providing infrastructure in the second phase, whilst the time of the first one had not officially ended, benefitting from the planning permission given (Hathloul 2017). This was a challenge and, as mentioned by Al-Mogren (2016), mismatched with the common aim of the UGB. To illustrate, there was a hefty 500 km2 of subdivided land in the UL2 undeveloped, 170 km^2 of which (17 land subdivision schemes) were officially approved after introducing the UGB policy in 1989 (RCRC 1977a; RCRC 1997d). Maybe worse, when the UL2 officially began (1995), there was 37 % of white land from the total areas of UL1 (RCRC 1977a). In fact, despite the skyrocketing in population to 3.5 million in 2000 (as was depicted previously in Figure 15), there is an argument that the white land which had been subdivided by the year of 1997 can accommodate Riyadh's residents for many years in the future without any extra subdivisions (e.g. RCRC 1997c; Mubarak 2004).

Consuming too much land can simply be one reason behind white land. Therefore, one

vital consideration here lies in why the planning permissions were granted to some developers. Mubarak (2004) attributes this to laxity from the government during the UGB implementation. A high percentage of land was exempted from the UGB requirements and that might be because "the land was initially given by the King to powerful members of the society" (Mubarak, p. 584, 2004). This issue needs further examination in terms of whether the UGB has been associated with planning failure through creating further white land, and how. This needs careful consideration of why the government allowed some landowners to build in the UL1 before its official start (Figure 8 in Section 3.5.1 illustrates the development form and how it started sprawling and containing further white land visibly from the 1980s up until 1996, which is simultaneous with the introduction of the UGB in Riyadh).

Another point is that the UGB is being updated regularly. One recent initiative for the RCRC is the creation of a comprehensive strategic plan to guide Riyadh's development in the future. It has reviewed and extended the UGB to include UL 2015 and UL 2030, as shown by the strategic plan in Figure 17. One should note from Figure 17 that the UL 2015, with an area of 1,910 km^2 (RCRC 2010), includes the areas assigned for both UL1 and UL2 (1,781 km^2). It should also be noted that the proportion of white land (49%), highlighted in Section 1.2 and 3.5, is from the UL 2015 (RCRC 2010).

Figure 17: Strategic plan of Riyadh
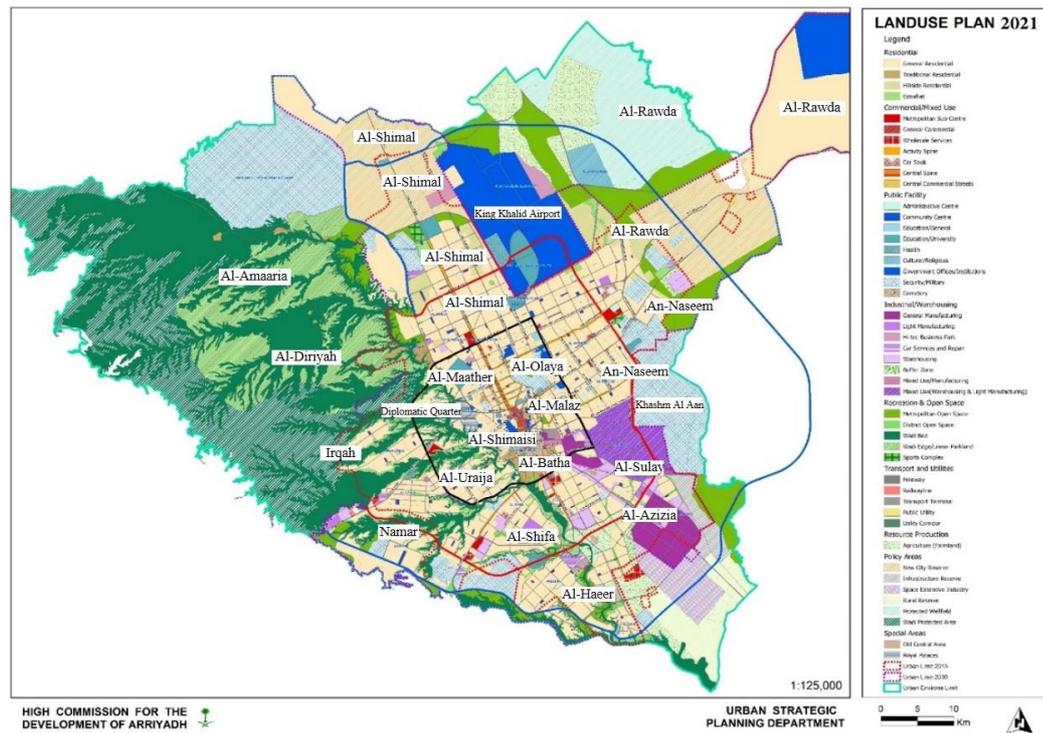
Source: RCRC, 2015, p.41.
Note: The districts names are added by the researcher.

During the shift to further ULs to meet the residents' demand, real estate speculations also continued (Bonnenfant 2014), leading Mubarak (2004) to maintain that this speculative behaviour happens around the urban-rural fringe, where land is usually cheaper. In support of this claim and relying on several sources, the researcher analysed and calculated the percentage of white land in the main districts of Riyadh. Table 6 illustrates that Al-Shimal district, with 76.5%, contains the highest proportion of white land if we exclude the districts which include parts of the UEL.

Al-Shimal is situated in the direction of future development as planned by Doxiadis (i.e. by the urban-rural fringe). However, while Mubarak (2004) argues that land is usually cheaper there, some data shows it can have a cost much higher than land in the inner-city. According to JLL (2018), land in the Al-Shimal, which is located by the north urban-rural fringe, can cost an average of $653 per square metre, whilst land around the city centre is cheaper, for example Al-Shimaisi $427, Al-Sulai $347 and only $333 in Al-Shifa (see Table 6 for land prices and Figure 17 for districts locations). Why land by

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the urban fringe is sometimes more expensive than in the city centre will be examined in the empirical findings.

Table 6 shows that the lowest percentage of white land is within the areas of UL 2015, namely Al-Shimaisi, Al-Malaz, Al-Maather, Al-Batha and Al-Olaya, with a proportion varying from 6.2 to 18.3%. Despite the lack of land supply in these areas, compared with the other districts, one can see that prices tend to be cheaper than Al-Shimal, which has greater supply of land. The underlying reasons will be considered and clarified, especially if it has any relation with the existence of white land. Such a dramatic rise in land prices along with the existence of ample lands have led the government to further intervene in the land market with actions, such as imposing taxes on white land, as discussed in the following part.

Table 6: The total areas and average prices of white land in Riyadh from 2017 to 2018

Name	Total area km^2	Area of white land km^2	Percentage of white land	Land value average/m^2 (USD)	Note
Al-Amaaria	1005	962.8	95.8	106	Within both UL 2030 and UEL
Al-Rawda	1343	1182	88	533	Within UL 2015 & 2030 and UEL
Irqah	408.6	353.6	86.5	480	Within both UL 2030 and UEL
Al-Diriyah	565.4	482.4	85.3	NA	Within both UL 2030 and UEL
Al-Shimal	448	342.5	76.5	653	Within both UL 2015 & 2030
Namar	234.9	159.1	67.7	293	Within both UL 2015 & 2030
An-Naseem	225	140.5	62.4	333	Within both UL 2015 & 2030
Al-Azizia	181.7	109.5	60.3	320	Within UL 2015 & 2030 and UEL
Al-Sulai	272	148.9	54.7	347	Within both UL 2015 & 2030
Khashm Al Aan	128.6	60.8	47.3	NA	Within UL 2015 & 2030 and UEL
Al-Uraija	79	26.9	34	320	Within both UL 2015 & 2030
Al-Shifa	160.1	51.3	32	333	Within both UL 2015 & 2030
Al-Haeer	975	302.4	31	93	Within both UL 2030 and UEL
Al-Shimaisi	43.8	8	18.3	427	Within UL 2015
Al-Malaz	69	9.4	13.6	NA	Within UL 2015
Al-Maather	44	5.5	12.5	NA	Within UL 2015
Al-Batha	39	4.87	12.5	427	Within UL 2015
Al-Olaya	123	7.6	6.2	720	Within UL 2015

Source: Analysed and calculated by the researcher according to; Al-Hayeer Municipality 2018; AM 2018b; Al-Maather Municipality 2018; Al-Malaz Municipality 2018; Al-Naseem Municipality 2018; Al-Shimaisi Municipality 2018; AL-Sulai Municipality 2018; JLL 2018; RCRC 2019, p.3,6 and 13.

4.4 Vision 2030 and urban land development

Saudi Arabia in 2016 launched one of its major missions to develop the public service sectors, called Vision 2030 (Vision 2030, 2016). The focus here is on the national initiatives that might influence the urban land development, particularly White Land Fees and Etmam. These initiatives mainly launched very recently (2016), so it is challenging to evaluate their outcomes during the data analysis in 2018. They are outlined in the following parts.

White Land Fees

The Law of Governance No. 20 states that no taxes or fees are imposed unless there is a need (Saudi National Portal 1992). The government in 2016 realised that introducing taxes on white land (White Land Fees) seemed to be needed, as a quick tool, to tackle the market failure of the monopoly behaviour (see Section 2.6.1.2). The government felt this behaviour played a major role in the phenomenon of white land. It is important, as noted below, to mention that any owner of land who has less than 10,000 m^2 of land in total is not eligible to pay such fees at present. This means that individuals who own a housing plot can withhold their land without extra charges until they need to, or financially can, build on it.

According to the MH (2020a), the fees aim to be a motivating tool to increase the supply of developed lands, combat monopoly and make land prices more affordable and suitable when compared with the average household income. The suitability of land prices here only takes the end-user into consideration as the programme of White Land Fees states that only owners of large tracts must pay, assuming that this would push them to sell as quickly as possible, leading to an increase in supply and cheaper prices available to the end-user. Any eligible landowner who does not develop their land within a year of purchase must pay the MH 2.5% of the land cost, estimated by the MH (ibid). There are conditions for the land to be subject to the fees (MH 2020a):

- The land has to be within the urban boundaries specified by the MH (Figure 18).
- It must be assigned for residential or residential commercial use.

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- It must be at least $10,000^{20}$ m^2.

- No barriers for the owner to develop it, provided that the landowner is not responsible or involved in the creation of such barriers against developing it.

Given the above, the MH imposes fees on 125 million square metres in Riyadh (MH 2019). It should be noted that this number excludes all lands less than $10,000^2$ inside the UGB. It also excludes those who own more $10,000^2$ but have not registered in the programme of White Land Fees. This assumes that if such fees were applied for all white lands, the area of white land would be much higher, extra supportive evidence for the importance of this study.

Figure 18: The classification of white land areas and the target limits for applying fees
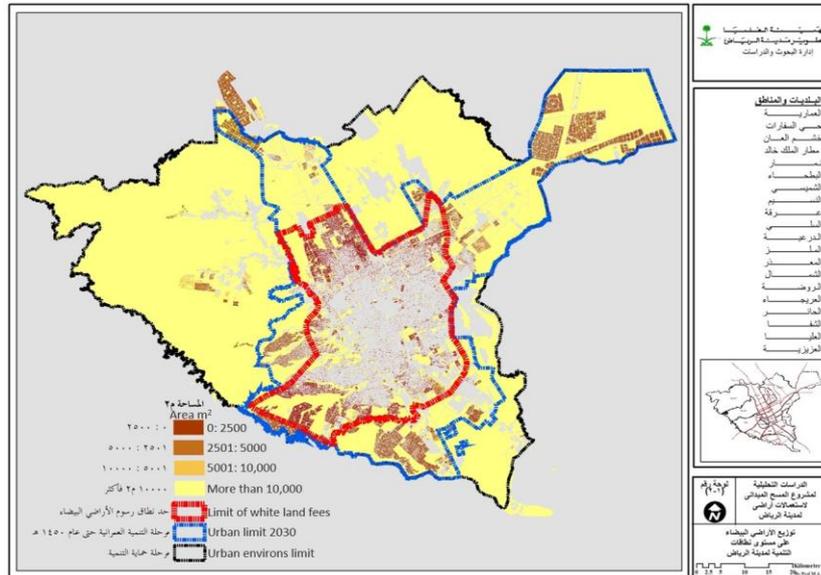
Source: RCRC 2019, p. 15.

Etmam

Similar to the White Land Fees, Etmam (Developers Services Centre), managed by the MH, aims to increase land supply through partnership and collaboration agreements with the relevant bodies such as the MMRA, the MH and the MJ. It acts as a nexus through which the real estate developer can follow up their transactions during the various phases of project development. More specifically, it acts on behalf of the

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[20] This is the first phase. There are another three phases that the MH can use and apply in the future when needed. For example, the first phase deals with every piece of land separately but the fourth phase states that if one owns a total area of land that exceeds 10,000 m^2 in one city, then they must pay the fees (for more details, see MH 2020a).

developer in following up the progress of the accreditation of land subdivision schemes that cover at least 50,000 m^2. The following up process is done with the related institutions with the objective of accelerating the completion process of the project (MH 2020b). This initiative suggests possible issues related to collaboration and coordination among the relevant actors, which is included in the investigation process in this research (i.e. whether such issues can delay the process of land development).

4.5 Summary

Split into three parts, this chapter shed light on some factors that have affected urban development in Saudi Arabia and Riyadh in particular. The first part (Section 4.2) illustrates that the sociocultural, political and the economic factors can be the most influential on the process of urban development in Saudi Arabia, due to some common national aspects. To illustrate, the society share some similar attitudes in terms of the nature of social relations. It was clarified that the appreciation of the social relations among Saudi individuals can lead us to investigate 1) their possible influences on the selection process of land and 2) the possibility of employing *Wasta* in the government institutions concerned with land development sometimes. Islamic teachings are also an aspect that the society shares, within which the impact of *Zakat* on white land can be a subject to investigate and consider.

Besides the influence of Islam on the individual level, it was clarified that the government also benefited from some historical evidence in *Sharia* in drawing some key policies (programmes) that have influenced the processes of land development, most significantly the LGP. Thus, the empirical findings in Chapter 6 will investigate if there are any potential implications of allocating land through the LGP on the availability of large areas of white land. Another important national programme is the REDF, as a key tool for financially supporting the beneficiaries to build their houses from scratch.

It was explained how the oil boom very much helped the government to introduce the above financial system. However, an area that is worth analysing is the study if one reason for the increasing proportion of white land in Riyadh is that urban development

relies on the government's budget, especially studying the possible impacts of depending on a macroeconomy that is subject to external factors (e.g. oil). The examination will cover the possible impact of the REDF, which is subject to economic fluctuations, on the proliferation of white land, and how.

The history of urban planning and development in Riyadh was outlined in the second part (Section4.3). Riyadh witnessed an enormous growth from a very small city in 1930 with a population of 27,000 to a megacity of approximately seven million today. Both transferring the government institutions from Mecca to Riyadh in 1953 and introducing the UGB in 1989 are two influential decisions at the local level. This is because the former established an official start that Riyadh is a political city, while the latter officially identified the urban-rural fringe.

The above identification, consequently, is key in this study to consider whether it indicated that land can be used as a commodity as it is limited, and then residents started to buy land to withhold it, especially with ample money in their hands during the economic booms. This consideration is supported by the evidence shown in Section 4.3 that the lands' prices around the UGB were sometimes more expensive than the inner areas. More significantly, the UGB was used with some flexibility. Chapter 6 will analyse the reasons behind such flexibility and if it has any potential influences on the white land spread.

Recently (the third part), Vision 2030 realised the negative implication of the existence of a large percentage of white land (Section 4.4). Etmam was introduced, which seeks to facilitate any obstacles encountered by landowners of large tracts. This implies that landowners sometimes encounter obstacles, and therefore the researcher explored these obstacles and the reasons behind them. More importantly, some fees have been imposed on white land of areas that are at least 10,000 m^2 in order to tackle it. The aim of such fees is to increase the supply by pushing the powerful landowners to sell or develop, and as a result of increasing the land supply, land prices can become more affordable to the end-user. As this initiative is current, the researcher discussed it with the interviewees, especially the landowners, to see whether these fees push them to sell or develop, as will be discussed in the following chapter.

CHAPTER 5 : The impact of economic and funding issues on white land

5.1 Introduction

The goal of this chapter, and the following two, is to present the empirical findings, explaining and exploring the reasons behind the existence of white land. Based on the theoretical framework in Section 2.2 and the vital factors justified in the case study design in Section 3.5.1, the empirical findings are divided into three main categories (chapters) that cover economic, political (i.e. the impact of government intervention on white land) and some relevant interpretive positions (including some social aspects). It is also important to state, based on the argument explained in different parts of the thesis, that the issues related to the sociocultural factor often extend throughout these three chapters.

Chapter 5 is divided into two key sections. The first section will shed light on the possible economic features of the land market, in the Saudi context, that contribute to further white land. These features include the aspects that have contributed to establish a sociocultural view of withholding land as a reliable investment. This section will also study the relation between the macroeconomic fluctuations, as an external factor, and white land, especially when the urban context relies heavily on the government budget in the development process. This section, additionally, will investigate the potential impacts of imposing land value taxation on combating white land and the related debates. Overall, one can reach a conclusion from the first section that the above economic features can play a role in the proliferation of white land to varying degrees, creating some funding issues.

The second section will highlight these funding issues. The argument here is not to concentrate on the issue of affordability and how to financially overcome it, but on whether the funding strategies that have been taken to develop white land are effective, or not. The effectiveness here is measured by analysing their ultimate impacts whether they have succeeded in developing land, or they entail some points of weakness in

motivating the powerful landowners for developing land subdivisions, and the end-users for building their houses.

5.2 Key features of land market in Riyadh: from an economic perspective

Real estate is the second largest market sector after oil, with the total value of transactions (peaking at around USD 134 billion in 2014), having a high impact on the national macroeconomic policy (Al-Sahan 2019). The features of land market were discussed in Section 2.4, including different characteristics of land in general. The study findings show that land in Saudi Arabia can relate to the economic factor in three different ways which, based on the data analysis, can affect the existence of white land. These ways (features) include 1) the land market as a reliable investment, 2) economic fluctuations, where the national income mainly relies on oil (not taxes), whose rate of returns generally affects the development processes, and 3) the land value taxation, as considered in the following parts.

5.2.1 The land market as a reliable investment

The data analysis reveals a strong impact of the reliability of individuals on investment in land on the proliferation of white land, the only component that was mentioned by all the 40 interviewees. Reliability here means that investment in land is normally safe; almost never generates a loss, and is historically familiar with people having positive experiences, as analysed in the following part. Some participants also used 'reliability' as a synonym of 'durability' clarifying how investing in land can be the safest compared to other types of investments (e.g. see Hui 2012), which justifies using it as a financial asset. This great reliability, which regards land as a non-spoilage commodity, creates a local culture that is expressed by some policymakers and real estate agents that land does not 'eat nor drink'[21], as cited below.

> *"Investing in property is safe of course, because it does not eat nor drink and no taxes are levied on it until recently […]. Instead of putting my liquidity in a*

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[21] A cultural idiom which means that land does not consume or cost the landowner after buying.

bank, I can put it in some pieces of land, five or six for example, and with the passage of time, their prices will increase. This is investment."

(Radhi) [Emphasis in interview]

From an economic angle, the study findings cover several features of the land market in Riyadh that can be reflected in the landowners' behaviour in treating land. These attributes are grouped under three main parts, namely scarcity of other investment alternatives, land and making money / saving, and land and *Zakat*.

5.2.1.1   Scarcity of other investment alternatives

Some participants, especially landowners, wonder where they would invest or save their money if they sold the land. They would end up investing the money in another piece of land, enhancing the idea that there is no substitute for land. For instance, one landowner, who is not interested in the development process, tried to persuade the researcher that selling land might not be the right decision for landowners, as he indicated:

"Mohammed if you have 1 million Riyals [$1 is equivalent to 3.75 Saudi Riyals] invested in land, and it made profits of 100,000 Riyals, you would say: this is good if I sell it. However, you would immediately start thinking about where to invest the total of 1,100,000 Riyals! The market is generally scarce, and most landowners do not sell if they fail to know the answer to the question: where shall I invest my money after selling?"

(Lotfi)

In the same way, when the researcher tried to challenge Loay about withholding land, he said:

"Find me different types or areas of investment that I can put my money in after selling my land."

(Loay) [Emphasis in interview]

The above quotations suggest there is a scarcity of other investment areas. Thus, the researcher sought further explanation why some other possible channels of investment,

such as business, the stock market and so on, are not as preferable as land. Indeed, by the Saudi law, government employees are not given permission to do business with any of the 'movable' assets such as jewellery, as there might be a conflict of interest between this business and the responsibilities and commitments of their main employment (Ministry of Civil Service 2012). However, government employees are allowed to buy and sell permanent and immobile assets such as real property as an official in the MH clarified:

> *"As a government employee you are not allowed, for example, to open up a shop but you can be involved in property. As a government employee in Saudi, you have only two investment areas; property and the stock market."*

> (PMH3)

The researcher investigated why the stock market is not as preferable as the land market, especially as it is open for all Saudi residents, including government employees. The findings show that the most notable reason is the high risk. In support of their argument is the stock market slump in 2006, which affected investors harmfully. The slump led to a great loss of money, especially by those who mortgaged their dwellings (for more details about the collapse of the stock market, see Capital Market Authority, 2017). As a result, the culture of investing in the stock market declined; people have become very cautious about the stock market and the reliability of it was not only damaged, but also, as demonstrated by a policymaker, the money which was invested in the stock market transferred to the property market due to the greater reliability of the latter:

> *"There is no asset other than land because we tried until the collapse in the stock market in 2006. The liquidity at that time migrated from the stock market to real estate."*

> (PMH1)

5.2.1.2   Land and making/saving money

The shortage of other outlets for capital has encouraged people either to make money through land by speculation, or saving money in land as a secure asset for the future. A famous high-ranking position employee (PMMRA4) narrated how investing/saving in land was the oldest method that has become culturally popular in the society. This popularity was motivated by powerful landowners and real estate agents when they accepted the payment in instalments during the 1960s and 70s, which encouraged the employees (i.e. the public) to deduct a certain amount from their income on the basis that they own 'an extra' piece of land in advance (i.e. other than their actual home). The aim of doing this was both to save money as they have surplus and sell in future at a higher price.

A real estate agent (Rashed) supported the above idea by clarifying that the yields of oil, which reflected on the society's financial levels, had a key role in making the society find out the available ways for saving or investment, which was often in land. Besides the fast urban growth in Riyadh, the oil boom (through facilitating owning land by accepting payment in instalments) contributed to the idea of capitalising and commodifying the land market since the 1950s – 1970s, particularly after 1967 when the ownership system in the whole nation changed as a result of introducing the LGP (the effects of the LGP will be analysed in Section 6.2). This change, therefore, has led the society to consider land as a valuable commodity, after being obtained for free through *Hujjat Istihkam* (for more details about *Hujjat Istihkam*, see Section 4.2.2).

> *"It becomes in our culture that land is a commodity. If it was embedded in our culture that investment is not only in land […] it would minimise the existence of white land. If our culture encouraged the idea that land is not a commodity in itself but it is a requirement for building a [residential] unit, it would reduce white land."*
>
> (Rabeh) [Emphasis added]

The above approach of accepting payment in instalments, along with the concept of the *rentier* state through the LGP and the REDF (see Sections 4.2.2 and 4.2.3), all have a hand in the culture that Rabeh explained. Consequently, it seems apparent that this

culture has given rise to the fact that land supply continued to respond to cover the liquidity available within people's hands, regardless of the actual demand for land. This idea is strongly believed by the academic participant, as Ahmed emphasised:

> *"People do not need all these lands. Our development exceeds our need, and this confirms what I always say; that it is speculation in order to make money".*

> (Ahmed)

In support of the above argument that the supply of land responds to the liquidity available instead of the demand side lies in what Al-Oteibi (1993) explains. Whilst the population increased by 100% from 1976 to 1987, the area designated for development skyrocketed by 1000% at the same time, where the growth of urban development was impressively faster than population growth, describing Riyadh as the fastest growing city in the world at that time (see Section 4.3). Land normally passes through several phases until it reaches the end-user, as narrated by two participants (i.e. Rakan and Lafy).

In short, land first transfers from a powerful landowner to a less powerful one. Then, it is subdivided into superblocks, maybe at least 10,000 m^2, to be sold to another group of landowners. Afterwards, the large piece of land is subdivided into small plots, say 600 m^2 and sold to smaller landowners (usually the public). The last two stages (i.e. the 10,000 m^2 and the 600 m^2 ones) are sometimes subject to the action of speculation. The public would not speculate on large pieces of land, but they can with small plots. Thus, the plots are purchased either by an end-user or by a minor speculator of the public.

However, the major impact on the existence of white land, at least economically, is primarily caused by the powerful and rich landowners who invest or save their money in land; one would not say that they would enable their children to live in an area of 1,000,000 m^2 of land, but mostly it is kept as a storage of wealth. Many policymakers and real estate agents claimed that this group of wealthy individuals do not actually need cash and regard land as a storage of wealth, as maintained below.

> *"The problem [of white land] is from the wealthy who already have cash. If you say to them that we will help you and give you a free-interest loan to develop,*

they say: Allah bless you, thank you I have money, but I do not want to develop or sell. <u>You cannot ignore this group of landowners</u>, <u>who have land that is worth 600 Million Riyals</u> and, maybe, have another 600 Million Riyals as cash".

(PMH2) [<u>Emphasis added</u>]

This culture of investing/saving money in land has contributed not only to a slow reaction of supply and caused 'leapfrog' in the urban development (see Markusen and Scheffman 1978; Balchin et al. 1995), but also to considerable increases in the value of the urban-rural fringe areas (Table 6 in Section 4.3 shows evidence of how land prices by the urban-rural fringe are more expensive than in the inner sites). It appears very clear, according to Ahmed, that one fundamental reason behind such increased prices in the outer areas lies in the consideration that land is an ideal good for making money, and consequently speculation occurs.

Similarly, the study findings illustrate that some landowners practice ways that increase the prices of such land; they sometimes develop it very slowly to make more money (e.g. compare with Kohlhepp 2012; Cheshire et al 2014). One landowner, deemed to be interested in infrastructure development, has a large piece of land close to the UGB from the east side of Riyadh. He spent seven minutes clarifying, by giving a tangible example with his land, how he deals with land to maximise profits in the present, as explained below.

"I will give you a significant fact which I doubt that landowners mention as many of them regard it as a secret. I have 8 million square metres of raw land [without infrastructure]. In order to benefit from each metre and cover the cost of infrastructure, I sell the public shares [...] I make a very small part of the land available and divide the total value of it, say 400 Riyals per square metre, plus the cost of infrastructure, say 100 Riyals per square metre, into shares that investors can buy. Here <u>I try to develop it very very very slowly</u> to achieve the highest price."

Researcher: "How?"

Interviewee: *"I make the cost of land, 400 Riyals, increase for me with the*

investors' money. For example, I make the development equipment available in the project. This can increase the land price a little, and then I start constructing streets with the investors' money. This can make the value of the square metre for example 500 Riyals. It also increases the value of the rest of the land, I mean the rest of the 8 million that I leave for the future [...]. <u>Anyway, it is within my own interest to make the duration of development as long as possible</u>."

(Owen) [<u>Emphasis added</u>]

The above technique of Owen, selling only a part of shares to the public, is similar to the concept explained by (Coase 1972), that selling part of the land to be developed can increase the other withheld part for the original landowner. The only difference seems that the latter sell part of the land, while the former makes the public share in developing part. As some landowners develop land very slowly which creates large parts of white land for a long time, the data also reveals that land is sometimes totally withheld from the supply in the market owing to their certainty that the land market in the future is much more valuable. PMMRA4 gave several examples that display how investment in land was (and to some extent still is) very profitable for landowners in a way that encourages them not to intervene by selling or developing, one of which is illustrated below.

"A large piece of land on Al-Imam Saud road belongs to [xxx mentioned his name]. I saw his ownership title. He purchased the land in 1995 for 300 Riyals per square metre, and now it has reached to 32,000 Riyals per square metre. Is there a better investment than this! [...] It is not only in the kingdom [of Saudi Arabia], if you notice the <u>very very wealthy</u> families, who excel in business, over the world [...] they invest at least half of the outcome in productive properties [e.g. building for rent], but not in white land like we do."

(PMMRA4) [<u>Emphasis in interview</u>]

One substantial question: what has been tried to bring land forward for development, as an ultimate goal, then? At least until 2017, the answer is 'nothing' (after 2017 there are some initiatives from the MH to encourage selling or development, such as White Land Fees and the 'Shrakat programme', for more details, see Sections 5.2.3 and 5.3.2).

However, a few policymakers explained, by narrating some real stories, that there is freedom for landowners to bring their assets to market for sale or development. In other words, the decision of developing any given land is absolutely made by the landowner based on their own interest, regardless of the trends of the city and its development. The compulsory purchase power does not occur to tackle the monopoly behaviour (e.g. see Evans 1999), but occurs only under very restricted circumstances, such as delivery of infrastructure. The role of the city administration here is only to persuade the landowner to develop:

> *"[…] There is a large prime location near the city centre for [xxx he mentioned the name]. This land can function well if it was developed due to its perfect location. After attempting to persuade the landowner to develop, he said that it was not within his own interest to develop it now […] and he did not need it now and would not benefit from it at the moment."*
>
> (PMMRA1)

Landowners, specifically those who are not interested in development, often tried to evade saying that their own interest is to use land as a storage of wealth, regardless of the trends of the city and its development. This was noticed while arranging interviews as many of them refused to be interviewed. The researcher asked one (who accepted), three times, in different scenarios during the interview, about the actual reason behind their land (they are inheritors after their father) not being in the market. The question was repeated three times because the researcher noticed that Lobab was flexible to give an answer but hesitant (e.g. the question was related to their land, but the answer was generalised to other landowners, for example maybe landowners …, some landowners …, and so on). Eventually, he explained, in a hesitant voice, that as long as they do not need liquidity, they will not sell it:

> *"The land was not really on the market, but we received some offers, but you know! Ummm, there is not that need [for money] in order to sell it presently."*
>
> (Lobab)

The above quotation implies that land is used as an asset without making it available in the market. That is why Lobab said that the land was not 'really' in the market; they did

not intend to sell it but they received some offers through a sub-market (e.g. some friends, neighbours, or connections).

5.2.1.3 Land and *Zakat*

Accordingly, from an Islamic viewpoint, not intending to sell land can excuse its owner from paying the *Zakat*. In other words, there is a common belief that owning land for the purpose of saving money (not making money) does not place a religious obligation on the landowner for paying *Zakat*. This is, as was discussed in Section 4.2.1, based on the fatwa of the Maliki School (Islamic Fiqh Academy 2001). A few officials and real estate agents claimed that this fatwa has encouraged saving money in land, which influences the planning culture. One official (PNHSC) asserted that the landowners would not say they use land as a saving method as there is no *Zakat* on it, because it is not positive for their reputation.

Interestingly, only two landowners hinted at using their lands as a method of saving, one is Lobab (see the previous section), who explained that "there is not that need in order to sell it presently". One should note that Lobab (and his siblings) inherited the land after their father passed away, and hence there is no *Zakat* on it, according to the Islamic scholars (Islamic Fiqh Academy 2001). The other one is Ehab, who owns a small plot, which could be used in future as a personal need (e.g. for housing), as quoted below.

> *"There are some people who buy land in order not to pay Zakat, because if it was [the money] as liquidity in a bank, it would be subject to the payment of Zakat, but land no there is no Zakat on it."*
>
> Researcher: "Ok, but if you [in Islam] already intend to sell your land or make it as a future investment, you would pay *Zakat*. Would not you*?"*
>
> Interviewee: *"I have not made the land available in the market for sale. I am really hesitant about what to do with it."*
>
> <div align="right">(Ehab) [Emphasis added]</div>

Note that Ehab does not have the intention of sale or making money, otherwise the *Zakat* will be an obligation. From an Islamic point of view, therefore, it seems obvious there is an underlying difference between those who withhold land for making money and those who do the same but to save their money with uncertain intentions for the future. The difference lies in the fact that the latter does not have to pay *Zakat*. Interestingly, these two elements are comparable with two of the reasons for withholding land, which Evans (2004) discusses, including speculation and uncertainty, where the latter is 'ownership of option' that include all types of options such as use, development or sale, while the latter only includes the option of selling that aims for profit (see Section 2.5.2). This implies that some landowners, by adopting the uncertainty option, do not have to pay *Zakat* by following the Maliki School's fatwa, a valuable option.

Nevertheless, as clarified in Section 4.2.1, the fatwa of Maliki School is not settled as a religious principle since there are three other Islamic schools, one of which is followed by the Saudi Law, which do not agree that using land for saving money exempts one from paying the *Zakat* (Islamic Fiqh Academy 2001). However, the fatwa of Maliki School is common and landowners are free to adopt it.

5.2.2 Economic fluctuation

Macroeconomic fluctuations have a major role in increasing and decreasing land prices (e.g. Fischer 1993; Ferderer 1996; Haddow et al. 2013; Liu et al. 2013). In the Saudi context, the value of land is connected to the price of oil. This linkage can be noticed from the oil prices, and comparing them with what is explained by some participants. For example, it is a well-known fact, said by some interviewees, that 2013 - 2014 was the peak in land prices before they dropped steeply at the end of 2015 (see also Al-Amri 2018).

Figure 19 illustrates that oil prices in 2012 - 2013 reached a peak at just above $105, then suddenly decreased to approximately $26 per barrel in 2015 (Statista 2019).

Therefore, land prices can be affected immediately after the oil prices are affected, with a time-lag of about one year. This is also true in the past, when the oil prices were about $35 in 1982, and then fell to almost $18 per barrel in 1986 (Figure 19)[22]. During this time, one interviewee purchased a plot (his house now). He described the situation:

> *"I bought my piece of land [his house now] in 1982 when the cost of a square metre was 500 Riyals. In 1987 the price of the square metre dropped to 200 Riyals as the oil price dropped those days, and now the square metre reached to approximately 3500 Riyals. Thus, there is a strong correlation between oil and land prices, and our economy heavily depends on oil, which is the country income."*

> (PMMRA4) [Emphasis added]

Figure 19: Number of land transactions and oil prices
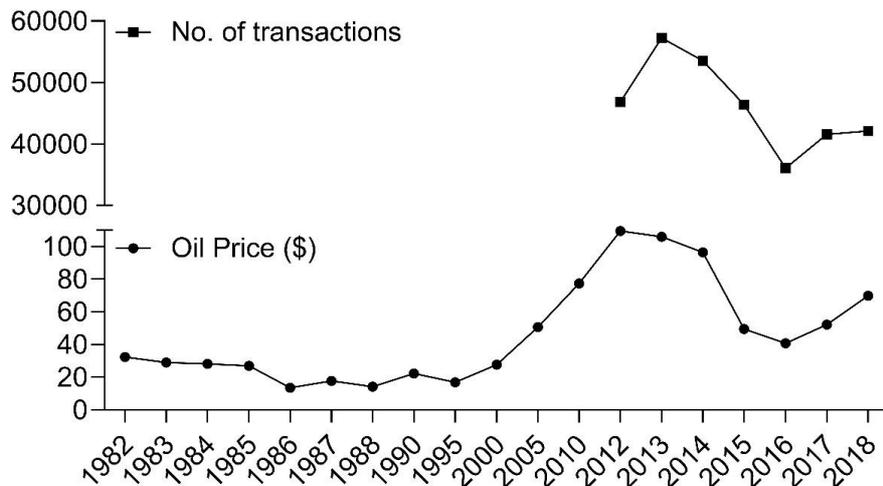
Source: Created by the researcher according to (MJ 2019; Statista 2019).

Figure 19 also illustrates the existence of a positive correlation between the number of land transactions and the oil prices. If we assume that the number of transactions reflects a higher demand, then such higher demand implies higher prices, as argued by some scholars in Section 2.4 (e.g. see Balchin et al. 1995; Cheshire et al. 2014). This correlation would not exist in nations that are interested in industry. In more detail, in

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[22] No accurate data available for land prices. The MJ database shows the number of transactions starting from 2012.

industrialised countries that produce oil such as Russia and the USA, as was discussed in Section 2.3, the oil price increases often minimise the process of industrial production due to the extra cost, and therefore the macroeconomy can be influenced through the decline of the industrial production volume (Ferderer 1996). By contrast, the macroeconomy in Saudi Arabia mainly relies on oil returns (not industry that consumes oil) as it is the highest oil exporter in the world (see OPEC 2019).

Indeed, the linkage between oil price and land price can be understood more from the government's yields. When they increase, the government often spends on projects that move the wheels of the economy that normally result in increasing the demand for land, and hence land prices, for example by giving the REDF to a higher number of beneficiaries. This correlation, thus, tends to occur in an indirect way, which means that land prices would not increase if the government does not liquidate the oil returns into projects, even with the high oil price, as clarified by one landowner:

> "It is [land price] linked with the government spending rate. When the government has money, it pumps it into projects and activities and the overspend reaches many people, even the government employees sometimes have overtime [...]. I mean the oil price went down to 45 dollars and then went up this year to 60 dollars but the land prices are still in recession. Why? Because the government has not yet spent money on projects."
>
> (Lotfi)

However, the study illustrates some interesting findings in terms of how the macroeconomic policy that depends on oil can cause negative implications on the urban development process, specifically by creating further white land. These negative implications are embedded in the national budget being linked with the oil yields which are subject to external factors (due to the unpredictability of oil price volatility which is out of the nation's control). The phenomenon of white land can further be exacerbated especially when the government, whose budget is highly subject to external economic fluctuations, plays a major role in the development processes, exactly the situation in Saudi Arabia. In more detail, when there is a collapse in the oil markets resulting in the government budget becoming tight, the government in this case, owing to the shortage

of money, applies two strategies: 1) use land as a compensation to reward people (this will be analysed in Section 5.3.3) and 2) suspend infrastructure provision. Suspending infrastructure, with fast growth taking place can be a main reason behind the existence of white land, as believed by one official:

> *"A main cause of white land is the enormous economic fluctuations. How? In the late seventies and beginning of the eighties we had a great economic boom that positively reflected on constructing giant infrastructure, hospitals, universities, roads and so on. This was of course followed by immigration. Oil prices nosedived during the Gulf War. Prices started plummeting after 1983 and they did not recover, or increase clearly until 2002. What happened [during that time] is that the population was increasing rapidly in Riyadh but the services and infrastructure did not keep pace with the increasing population. Keep in mind that the government, through the Land Grant Programme [LGP], was mainly the only developer. This economic crisis affected the nation and stopped building infrastructure, and consequently it is normal to see white land!"*

> (PMH1) [Emphasis added]

A significant disadvantage of white land spread, discussed by the vast majority of the interviewees, is that it represents a financial burden placed on public infrastructure and services, electricity the most expensive. This implies that when oil prices nosedive, the government would not be financially able to subsidise infrastructure projects, especially as they are not in a compact form. Consequently, as described by the findings, plots are granted to some beneficiaries for the aim of housing but without infrastructure. To illustrate, Laith, who tried to evade talking about his lands by blaming the MMRA, gave three examples which occurred in Riyadh that related to government inability to provide infrastructure. From his argument, he seems to suggest that if the government could not develop its lands despite its powerful ability, then do not blame me when I could not develop. This can be inferred from the quote below when he said "Ok, these are grants …" with an approving voice:

> *"The development stopped! Do you know the land grants in Narjis Neighbourhood?"*

Researcher: "Yes."

Interviewee: *"It was distributed from the government as grants in 1976, and some areas of it are still without infrastructure! Ok, these are grants from the government!"*

(Laith) [Emphasis in interview]

A participant with a high-ranking position in the MMRA, who is responsible for the LGP, confirmed the above point about the absence of infrastructure, adding that the beneficiaries consequently do not often benefit from the land grant, which leads them to sell it to powerful landowners:

"Most of the land grants are not serviced, and as a result the inhabitant cannot build on it, which makes them sell it at a very cheap price to real estate sharks [e.g. powerful landowners and real estate agents]. Thus, these sharks were assembling these granted lands and now are exercising a monopoly."

(PMMRA2)

Again, it can be deduced from the above argument that the situation has reached to the inability to construct infrastructure mainly because the government, which is responsible for it, sometimes encounters unpredictable external factors that negatively influence oil revenues, and its financial ability for construction. As a consequence, the powerful landowners took advantage by assembling unserved plots and exercising a monopoly, because the inhabitants would not benefit from land without infrastructure (for more details about monopoly, see Sections 6.2 and 6.3.1). According to several policymakers and real estate agents, the absence of tax on land also encouraged the behaviour of monopoly, which will be analysed in the following section.

5.2.3 Land value taxation

Given the above, the discussion about the impact of the absence of the land value taxation was brought forward to the situation today (i.e. the influence of its absence in the past). The government has recently imposed fees only on white land (for more

details about the aims of White Land Fees, see Section 4.4) equivalent to land value taxation (e.g. see Abrams 1964; Dwyer 2014). One vital point lies in the fact that the nations that apply the land value taxation often have historical experience in the taxation system, where taxes are one of their national incomes. Perhaps this is one reason why the land value taxation is seen as efficient in different countries, where the degree of such efficiency depends on the local government being professionally capable enough to implement such taxes (see Amirtahmasebi et al. 2016).

However, it is a well-documented fact, as was mentioned in Section 4.4, that the fiscal policy in Saudi Arabia does not rely on taxes as an income, which may make studies related to the taxation system challenging. Due to the absence of the taxation system in the Saudi culture (until recently), most of the participants are not familiar with the White Land Fees, especially as the collection process started in 2018[23], which creates rather a non-focused discussion during interviewing. Thus, the researcher tried to narrow the data to include only the information that attempts to investigate the potential concerns of imposing these fees, which sometimes go beyond the White Land Fees to explore the reasons such fees are inefficient in making land available in the market.

One official in the NHSC stated that the MH did not introduce the system of White Land Fees for financial purposes, but as a tool to address the market failure. This failure, as clarified in the preceding section, is rooted in allowing powerful landowners to assemble land, including land grants assigned for the public, and then monopolising them:

> *"Is the word of financial or raising money mentioned in the aims of White Land Fees? No, so we do not want money. Our objective is to correct the situation of the market. [He later adds] that is why it is called a fee not a tax […]. The difference is that the fee is imposed for a service! [In support of this argument, also see Ministry of Finance 2020]. What is the service? It is the infrastructure that costs the government a lot of money."*

> (PNHSC)

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[23] The same year of the data collection (see Section 3.7).

However, some landowners and real estate agents have a crisis of trust by doubting that the MH intends to meet the aims of White Land Fees. They claim that the MH only seeks to increase the income of the country, like any other taxes. One of them (Raed) claims that the MH only checks whether you have land that is subject to fees or not, without careful consideration about solving the issue of white land. One landowner (Lafy) wonders why the MH only imposes fees without helping them as landowners. He thinks that the MH ought to use 'a carrot-and-stick approach', not only the 'stick' (i.e. fees). Maybe what supports these landowners' claim that the MH seeks raising money is what is indirectly alleged by an official member in the committee of White Land Fees:

> *"I am a member in the committee of White Land Fees, and I see the positive results of them. Ummm I am not really sure but I think about 15 billion Riyals have been raised from the fees up to now, but I am not sure about the exact figure, it is big though."*

> (PMMRA2)

Virtually all the landowners of large land[24] are opponents of such fees, maintaining they are not effective. The common ground among them in judging the effectiveness of these fees is whether they motivate the landowner to develop or sell the land, or not. Most of them have a belief that the fee is exactly the same as any extra bill, that will be added during the sale. In more detail, two criteria can be concluded from analysing the data, which inspire landowners to weigh the effect of the fees, in order to decide whether to develop / sell the land or pay the fees.

The first criterion is 'uncertainty'; the expectation of whether the project can be successful. This uncertainty in the market has a hand in how landowners respond and behave towards their lands; that may result in affording the fees rather than exhausting their budget in unsuccessful projects, as a landowner non-interested in development argued:

> *"It is illogical that the fees are imposed while there is no purchasing power. It is impossible that one develops just to avoid paying the fees. You can ask other landowners, I challenge you to find a landowner saying: I developed only to get*

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[24] The White Land Fees are imposed only on lands with an area of 10,000 m^2 and more (see Section 4.4), meaning that the landowners of small plots are excluded.

rid of the fees [...]. For example, a company has 120 residential units for sale. They could not sell them, there is no market, and they are losing money with the passage of time. I have a large piece of land next to it. If you were me, would you develop it or pay the fees? [...] Of course I will pay the fees that will later be borne by the purchaser, instead of paying an enormous amount of money in a failed project."

<div align="right">(Lotfy)</div>

Lotfy here used his neighbour's project as a model to decide on the success of his potential project, regardless of why the project next to his land failed. This can lead us to explore the role of the high uncertainty, with lack of reliable information, in discouraging landowners to take a wise decision (for more details about uncertainty, see Sections 6.3.1 and 7.2.1). Similarly, the White Land Fees aim to put pressure on landowners mainly to build or - if they fail - to sell land to one who would not be prepared to bear such fees without the intention of building.

A landowner interested in development confirmed that the system of White Land Fees essentially violates property rights. This is the case because the government intervention, through the White Land Fees, can lead to market failure, by minimising the size of the competition (bidding), which finally affects the price system and then the actual value of land. This failure can cause a recession in the land market, and thus they would not even be able to sell. This landowner maintained:

"How can I sell? I do not mind selling, but how? [...] <u>Now every potential buyer says to me: sorry I do not want to have trouble with the MH in terms of the fees</u>."

<div align="right">(Osamah) [<u>Emphasis added</u>]</div>

The sentence emphasised above implies that the potential buyer is not the end-user, but still less powerful landowners. This is because there are no fees imposed on land with less than 10,000 m^2, which implies that this landowner would like to sell very large pieces of land, at least 100,000 m^2. The rationale for fees not being applied to smaller plots, according to one official, is that the government often prioritises public interest. It would like to solve the issue of white land without harming the ordinary people, who

tend to own small plots (e.g. 600 m^2).

The second criterion is comparable with identifying the suitable rate of the land value tax that tends to differ from one nation to another (see Amirtahmasebi et al. 2016). A few landowners compare the annual increase in land price with the annual rate of fees, which is 2.5%. If the former is higher, then they think there is no loss behind withholding. Such landowners showed a high reliability in their lands' value as they feel that the land price sometimes rises by 10 % per year, which can easily cover the 2.5 % fee. The previous two criteria, from the landowners' responses, can justify how landowners may be prepared to bear the fees for the sake of not developing or selling. That is why two real estate agents questioned the suitability of White Land Fees percentage with the continuous inflation of land price, as one of them assumed:

> *"The current fees are less than the annual inflation rate [...]. The value of land normally increases annually, and therefore the fees are supposed to be higher."*
>
> (Raji)

Not only this, but also, as maintained by two participants, there can be a serious underestimate of a given white land that results in less fees, as contended below.

> *"I know a landowner who paid 10 million as fees. His land was evaluated at approximately 375 million but the actual cost of it is 800 million."*
>
> Researcher: "Why do you think this happened?"
>
> Interviewee: *"I think the problem is in their [i.e. MH] <u>philosophy in the land assessment</u>. For example, they first deduct 40% from the area of the land [as public services], and then estimate the remaining [60%] as also raw land not serviced land. [...] <u>Maybe the lack of experience of staff or they have a certain aim</u> [...] I am not sure."*
>
> (PMMRA3) [Emphasis added]

The two emphasised sentences above suggest two interesting points. The first sentence implies the vital role of discretion in making decisions and the role of experience (discretion will be analysed in Sections 6.2 and 7.2.1). The second stems from the

PMMRA3's argument "or they have a certain aim". Although this official tried not to explicitly say what this aim is, it might relate to doubts of corruption, through who they know (e.g. *Wasta*) in the relevant institution related to the White Land Fees (ethical concerns will be outlined in Section 7.2.1).

One further situation that can make White Land Fees inefficient (i.e. beyond the White Land Fees) is when the landowner is exempted from paying the fees, as explained in detail by the PNHSC. A landowner does not have to pay the fee when they prove that a regulatory obstacle forbids them from developing the land, for instance if they are not given a building permit or there is a conflict issue on land between two landowners being investigated by the MJ. In this case, according to the official, the NHSC contacts the government institution and ensures that it genuinely suspends developing the land, so as to exempt the landowner from the fees. However, another official in the MH demonstrates that sometimes these government institutions are blamed instead of landowners. This happens chiefly due to the lack of collaboration and coordination between such institutions when they do not respond to the NHSC nor clarify the situation of a given land, as agued below.

> *"The problem is that when we contact a stakeholder [e.g. MMRA and MJ], to check if they have delayed a given landowner, we sometimes do not receive any responses. Therefore, we ask the landowner for proof. Normally, they have [i.e. landowners] the date and the order number of their transaction but do not have any documents. In this case, we say to the landowner that this is not our business, and thus we cannot exempt them from paying the fees and we ask them to bring the case to the BG. [...] I admit that there is a fault here; if we, as an official body, could not hear from them [as a government institution], then how will the weak citizen [i.e. landowner] who only seeks a document as evidence be treated. They would not give them [i.e. landowners] any documents."*
>
> (PMH3)

The lack of collaboration and coordination mentioned above, makes a high proportion of aggrieved landowners submit a complaint to the BG. One official gave some information about the size of objections:

> *"We issued 2800 bills [of White Land Fees]. 1200 of which are subject to an objection. 600 out of the 1200 are in the BG"*

<div align="right">(PNHSC)</div>

It can be concluded from this section that, although the Programme of White Land Fees in Saudi Arabia was introduced very recently and it is too early to judge how successful it is, the section has established valuable matters, significant not only in considering the success of imposing such fees, but also as elements resulting in the existence of white land, such as trust issues and doubts behind the aim of such fees, uncertainty that discourages development, discretion, corruption, and lack of collaboration and coordination, which will all be analysed in the rest of the data analysis chapters. Finally, as one aim of the fees is to make land prices more affordable (see Section 4.4), the issue of affordability and its impact on white land existence is essential investigate, which will be in the next section, shedding light on how funding style reacts to tackle the issue of unaffordability.

5.3 Funding issues

5.3.1 Unaffordability of land for the end-user and possible funding

Based on the previous sections and according to many participants, the action of dealing land as a commodity through speculation and monopoly has inflated land prices too much, making owning land not easy, which urged the government to intervene through the White Land Fees. The action of speculation and monopoly, for example, is expressed by an official as a kind of deprivation:

> *"Depriving people of land [due to withholding it] has greatly increased the land prices. It is not that easy to own a piece of land, and this is what we actually suffer from in Riyadh. It is not easy to own a plot despite its abundance. Anyone who visits Riyadh says; it is illogical that the land prices <u>are too expensive while you have large undeveloped areas. It is a desert</u>."*

<div align="right">(PMH1) [<u>Emphasis in interview</u>]</div>

Due to costly land prices, the issue of unaffordability has emerged for the end-user, who currently cannot afford the cost of a plot and cannot build immediately after purchasing the land[25]. One official (PAsM) believes that the citizen saves money for 10 years, with taking out a supportive loan, to buy a plot. They then have to save for another 10 years to build their house. The outcome of this is lot of undeveloped plots, whose owners cannot build today. The issue of unaffordability of land for the end-user was also the response of some powerful landowners, justifying why they do not develop and sell their land tracts. An example is given below, which surprisingly shows the difficulty of owning land even for the high-income class:

> *"I have many pieces of land for sale, but the market! The market! The market! If there are no customers, the land will not be developed."*
>
> Researcher: "W*hy have not you then sold them?"*
>
> Interviewee: *"Again, because people do not have money […] even the high-income class cannot afford purchasing a house without a great support."*
>
> (Laith) [Emphasis added]

One can infer from the emphasis above that the vast majority of speculators are powerful landowners who are a limited group, most of the public have no purchasing power. One potential cause behind the weakness of purchasing power, not only because land prices are too expensive, but also that the income of the public does not respond to the high land prices by increasing, as mentioned by a couple of landowners. Since the 1970s the income of the government employees has risen only by 15% (in 2005), which is far less than the inflation rate (Alriyadh 2005).

Thus, smaller plot areas that are affordable were sought by the public. A study conducted by the researcher quantitatively found that a hefty 80% of the residents in Riyadh cannot afford a house plot larger than 200 m^2, with only 1.6% of them able to afford a house plot larger than 351 m^2 (Alsulaiman 2016). A real estate agent, from his experience, identifies the average of the plot area that can be afforded by many inhabitants in Riyadh (300 m^2), from the demands he received every day:

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[25] This means that the culture of owning a house consists of two phases: buying the land itself and then building it from scratch (for more details, see Section 6.2.1).

"Most individuals buy plots of 300 m^m. [...] The middle-income class, whose monthly income does not exceed 10,000 Riyals, are barely able to afford a villa with an area of about 300 m^2."

(Rakan)

The above areas of plot thought to be affordable for most of the citizens, do not match with the standard area of granted plots (625 m^2) (MMRA 2004), which can, according to a few participants, make the public see such area as an ideal in our society, and then compare their plot with it (i.e. the 625 m^2 plot has created a culture in the society that one should own a plot no less than 625 m^2). More obviously, the above area does not match with the minimum plot sizes allowed by the MMRA's conditions, which is 400 m^2 (RCRC 1996; Al-Mayouf and Al-Khayyal 2010). This requires the owner, after buying the plot, to further seek subdividing it into smaller areas, also under certain conditions (e.g. see MMRA 2006) in order to sell an affordable plot to the end-user. That is why one official in the MH confirmed that there are residential products in the market that are not affordable due to the modest purchasing power of the residents.

This implies that the rules and regulations related to land are formulated in isolation with the forces of demand and supply, and therefore imperfect information can be one crucial element exacerbating the phenomenon of white land (for more details about imperfect information, see Section 7.2.1). Maybe worse, the findings show that the planning system itself entails a failure in responding rationally to the issue of unaffordability. This is the case because the government introduced the REDF as a funding system, but the issue of unaffordability still exists, which also led us to outline any connections between this system and white land.

It is thought, as discussed in Section 4.2.2, that one disadvantage of the REDF's loan is the long waiting list, which sometimes reaches 15 years (see CEDA 2016). This can make it negative exacerbating the phenomenon of white land. This is because one of the main conditions for applying for this loan is to own a piece of land, as clarified in Section 4.2.2. One official in the REDF pointed out that an underlying reason behind not giving the applicants loans once they apply, again, is the government budget, which is subject to the oil price that sometimes sharply fluctuates:

"Another point, there are plots that people have bought and are waiting for the loan from the REDF. Bear in mind that the proportion of them is high. They do not have money for building[26]."

Researcher: "Why is the loan not given to the beneficiary immediately?"

Interviewee: *"Because we [the REDF] rely on the government budget, and the government budget relies on the economy in general. The indicator of loans is linked with it [the economy]. That is why we have a long waiting list."*

(PREDF1)

This suggests that the existence of undeveloped plots (not undeveloped parcels) can be a result of a planning failure by pushing the applicants to own land just in order to apply for the loan, and then waiting many years to acquire it. One famous real estate agent discussed the impact of this failure on the proliferation of white land by linking the government intervention, through the REDF, with hindering the development and creating a chaotic culture in such development:

"Sometimes the government wants to please people. Well, yes, the REDF helps people to own houses but it contributes to increase the quantity of undeveloped lands […] because one has to have a plot in order to apply for the loan. This implies that such a plot will not be developed until the beneficiary receives their loan! I think this has a major role in ummm I have a negative opinion towards the REDF that it has hindered the development and created a chaotic culture in development."

Researcher: "Could you explain how this creates a chaotic culture in development?"

Interviewee: *"In the West, for example, they generally buy homes not pieces of land as the concept of housing in their culture is a home not land. Land should only be a means to an end. Our concept of housing is unfortunately land. Hence, we have enhanced the concept or the value of land. When it comes to the REDF,*

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[26] Note that one condition to apply for a loan from the REDF was to own a plot (for more details, see Section 4.2.2).

they require land in their application. When it comes to the AM, you seek applying for land as a grant ... Everything is Land! Land! Land! If you own land, you are a good person. If not, you are nothing."

(Rabeh) [Emphasis added]

Recently, however, the REDF, in cooperation with the MH, updated the system of the free-interest loan, by transferring the beneficiaries to banks who assist them in paying the interest (for more details, see Section 4.2.2). Overall, the interviewees are not familiar with the new system and most of their discussion is based on expectations and opinions, with no tangible evidence. One specialist gave some information, as stated below.

"It is too early to say that the new system of funding is successful, but we are [in the REDF] optimistic about the outcome of it [...] as it enables the beneficiary to receive the mortgage quicker from the bank. [...] Unlike the old system, now you do not have to own land so as to apply for the mortgage since it gives different options such as buying a house or an apartment from the market directly."

(PREDF2)

5.3.2 Unaffordability of developing for landowners and possible funding

It is not only the end-user who encounters some difficulties with affordability, but also some who lack cash. Some landowners, especially those non-interested in development, claim if they had cash they would develop (e.g Labeeb). Some landowners stated development costs too much money. One official, in support of this, notes that some landowners are honest about not having money to complete the infrastructure, and want the MMRA to permit them to sell some areas of the parcel with the target of financing the rest of the infrastructure:

"Remember that one million square metres of land costs 100,000,000 [Riyals]. Who of the landowners has this as cash! [...] We [in MMRA] give the landowner an initial permission to develop, but they cannot implement any sale

transactions unless they acquire the final permission [...] and the final permission is given after completing the infrastructure in full. The problem that we face is that <u>many landowners complete only half of the infrastructure and then ask for the final permission in order to sell</u>. When we ask them: why? They say they did not have sufficient money to complete it, and they promised to complete it after selling. Their idea is that selling can financially support them, so they can complete the rest of the infrastructure. I know that some of them have honest intentions and truly they do not have cash."

<p align="right">(PMMRA3) [<u>Emphasis added</u>]</p>

The statement emphasised above can be comparable with Owen's evident intention, which was explained in Section 5.2.1.2, that he develops and sells land slowly not because of the shortage of funding but to maximise profits. This implies that it can be true that granting landowners permission to sell parts of their land tract can ease the problems related to funding the project, but that landowners often seek this approach for their own interest. As some issues regarding development are connected with the availability of funding, how about seeking a loan from banks then? Approximately one out of five of the participants indicated the struggle to secure a loan from banks to develop their lands. Banks often require something valuable to be mortgaged (mostly the owner's land). Despite having land to mortgage, however, a landowner revealed the struggle in seeking money from banks, as Loay said:

"Our financial system is so bad. I went to all the banks to acquire a loan. They asked me if I have a monthly salary. I said: no, but I have a piece of land that you can mortgage. Then they, with an uncaring voice, started asking about the land; what does it look like? How much is it worth? After a lot of questions they said: sorry we cannot lend to you. The problem is that buy-to-let loans are not popular."

<p align="right">(Loay)</p>

Loay does not know why banks refused his mortgage, but a real estate agent (Rami) identified the problem; as land is immobile and durable (e.g. Doebele 1987; Hui 2012), banks do not lend money if they are in any doubt about the validity of the

landownership titles. This is because the identified land would be mortgaged, and thus the clarity of the rights by legalising and documenting is a crucial step for banks (e.g. see Hanstad 1997; Feder and Nishio 1998; De Soto and Kennedy 2000). This argument suggests that the issue of trusting titles of ownership is a critical subject for investigation, and therefore it will be analysed in more detail in Section 7.2.1.

The MH lately became aware of the issue of funding and launched an initiative called 'Shrakat Programme[27]' to motivate landowners to develop. This initiative has two purposes; 1) helping landowners with the 'know how', which will be explained in Section 7.2.4, and 2) funding them with a free-interest loan to tackle the financial barriers, to lead them to develop their land tracts. This initiative is an encouraging tool to address white land. One of the officials said that the actual aim of this initiative is not announced to the public to avoid a negative reaction; people might question why the MH supports such powerful landowners, without supporting the public. The MH introduced this initiative as it has been trying to find any possible solutions to push landowners to develop, which ultimately can increase the land supply for the public:

> *"If you [i.e. landowner] do not have money, we have cash with free-interest. We told all landowners about it; this programme pays the White Land Fees on behalf of the landowner and contributes to funding the infrastructure costs […] but on one condition; that you have to sell with a fair price. You [i.e. landowner] cannot set too high prices, no, we give the land a specific value, which it is worth."*

> (PNHSC)

In contrast, though the majority of the landowners have rather different opinions about Shrakat, they are unanimous in their opposition to being involved because of the defects of its system. To illustrate, one landowner interested in development (Omar) had a long meeting with one responsible for this initiative, finding out that the MH does not give guarantees if there is no demand for the housing products, but they would only send him some beneficiaries. Another landowner attempted to clarify how this initiative can

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[27] Arabic word meaning partnership. It was established in 2017. Its main aim is to establish a partnership with the landowners by funding them with a free-interest loan and assist them with the 'know how'. The know how means that Shrakat programme can help the landowners with the construction process, especially for those who do not have experience (MH 2020c).

worsen the market failure; it is unfair as it can further damage the competition for sites through the price system, as he demonstrated:

"I met them [i.e. responsible for Shrakat] and what they say is incorrect."

Researcher: "Really*?"*

Interviewee: *"They have a maximum price for apartments, for example do not exceed 500,000 or 600,000 [Riyals]. How come! I My land cost me 2000 Riyals per square metre. How do you compare it with land in Shafa [a district in the south of Riyadh], when a square metre there might only cost 600 Riyals! It is illogical that we both sell apartments at the same price. My land is more expensive."*

<div align="right">(Labeeb)</div>

Given the above defect, the core problem is not rooted in the availability of funding itself, but in the matters that go beyond funding and prevent the benefit. Based on the findings, some shortcomings, which stem as a result of the government intervention, can generally make landowners show a lack of trust towards any government initiatives, even if they are positive. As the issue of trust is vital here, it will be investigated in more detail in Section 7.2.4.

5.3.3 Government budget and the issue of unaffordability

It is not only the end-users and landowners who suffer from the issue of affordability, but also the government when its macroeconomics (i.e. oil prices) is influenced and, consequently, its income decreases. This affects the development process, by for instance providing public infrastructure, as was analysed in Section 5.2.2. However, one vital issue illustrated by the data analysis is that, with the collapse of macroeconomics, natural resources such as land can be used by the government as an alternative strategy for giving people money, as clarified by four officials and real estate agents:

"[…] Some powerful individuals were given money during the reign of King Abdulaziz and King Saud. When King Faisal came to the throne [in 1964] the

oil prices nosedived [...] and owing to this, the king did a dramatic shift by granting land instead of money. Some of these grants were very large. They reach to two, four, five, and sometimes 10 km². This process [of granting land] expanded late, and now I can say that almost all Riyadh is granted. Land that belongs to the country is very rare."

(PMMRA4)

It appears from the above quotation that seeing land as an alternative to money is a culture that started from 1964 owing to a political decision. This interesting finding is parallel to Section 5.2.1.2 - that introducing the LGP in 1967 contributed to capitalising and commodifying the land market. Another similar example also illustrated how the government benefited from land as an indirect approach to reward hard-working employees, as another official in MMRA explained:

"In some periods of time, it [i.e. giving people land] was a way of compensation. Right? I mean the government was not able to give money. Therefore, some employees who work 24 hours for the government and their income is low, they [i.e. the government] compensate them with land every two years for example. They [who are granted land] then can sell the land to real estate agents to have cash."

(PMMRA2)

Again, as monopolising and speculating on land can bring about further white land (see Sections 6.2 and 6.3.1), the above idea of compensating people with land can aggravate the behaviour of monopoly and speculation. This is because those who are compensated with land do not compete for it (i.e. they do not buy land because they need it), and thus the idea of withholding it would not generate a loss, especially in a market that grows massively. Due to the significance of the LGP's implications on white land, it will further be clarified at the beginning of the following chapter.

5.4 Summary

The chapter outlined the economic and funding issues that impact on white land and illustrated that investing in real estate is more common in Riyadh than other types of investment due to the safety and reliability of it as an investment. It does not generate a loss and there is a lack of investment alternatives (Section 5.2.1). Investing in land does not sometimes consume money in *Zakat* when used as ownership of option (parallel to Evans' (2004) thesis about withholding land because of uncertainty). If the landowner's intention is to make money then *Zakat* is obligatory (parallel to Evans' (2004) argument about withholding land for speculation).

The *rentier* state and the oil boom that increased society's financial level, have led the public, powerful landowners, and real estate agents to treat land as a commodity, enhanced by the acceptance of the payment for land from the public in instalments. A culture of withholding land rather than transforming it into productive property was created, resulting in land being a valuable commodity through enhancing saving it and speculating on it, greatly increasing prices of white land that is often unaffordable (Section 5.2.1.2).

The absence of White Land Fees until recently, equivalent to the land value tax discussed in the literature, was highlighted (e.g. see Abrams 1964; Dwyer 2014). Some interviewees believe that the absence of such tax encourages withholding land, and they are optimistic about the new system of White Land Fees. Others, mainly landowners, argue it is an additional bill in the total cost when selling. It is too early to judge the success of the White Land Fees system because it is very modern. However, the findings show that the annual rate of increase in land prices is higher than the rate of the white land fees (2.5%), emphasising the importance of identifying the rate of the land value tax appropriately (e.g. see Amirtahmasebi et al. 2016). More importantly, the findings reveal that 45% of the White Land Fees bills are subject to an objection, and some are exempted from paying fees (Section 5.2.3). This implies there are further reasons that are out of the landowners' hand (they will be analysed in the following two chapters).

Additionally, it was explained that the increases and decreases of land prices are subject

to the macroeconomy (also see Fischer 1993; Ferderer 1996; Haddow et al. 2013; Liu et al. 2013), where the oil market has a major part. The findings illustrate three cases where there can be an increment of white land areas when the oil prices decrease, especially as the government is involved primarily in facilitating development.

First, the government stopped developing when the oil prices, and the government budget, dropped. Similarly, the government reduces the amount of funding for the free-interest loans assigned for the public, people are not able to build their own houses, and land remains undeveloped. Third, due to the lack of money during an economic recession, the government rewards some people with land instead of money. This strategy might play a major role in increasing the percentage of white land in terms of distributing more land to people who do not need it, even without infrastructure. The grantees here see such land as an asset because the government grants it as compensation (for more details, see the following chapter).

Finally, the issue of funding for enabling the demand for land was analysed. The substantial problem of funding the end-user with a free-interest loan was that any applicants have to own a piece of land, and have to wait many years to acquire the loan, while the land is vacant. Again, the economic fluctuations of oil, some of whose returns are used for the REDF, can delay funding the end-user. The findings illustrate in Section 5.3.2 a financial barrier, that taking a loan from the bank is sometimes too difficult for landowners, as the bank must mortgage the landowner's land as a durable asset (also see Feder and Nishio 1998; De Soto and Kennedy 2000), and there can be some issues with the titles of ownership, which discourage banks. Thus, the MH recently launched an initiative to provide a free-interest loan to landowners to develop their land, who sometimes reject a loan due to trust and fairness issues (for more details, see the debate about Shrakat Programmed in Section 5.3.2).

This chapter focused on the potential impacts of economic and funding issues on the phenomenon of white land, the next will concentrate on the government intervention in land market and its role in such phenomenon.

CHAPTER 6 : The impact of government intervention, in land market, on urban development and white land

6.1 Introduction

Despite the high impacts of economic and funding issues on the existence of white land explained in the previous chapter, the data analysis exposes a greater emphasis around the government role in dealing with land development, and its potential effects on white land. Even the previous chapter shows how the economic and funding issues, and their implications, are chiefly informed by the government responses (for more details about the influential impact of government intervention, see Webster 1998; Evans 1999; Harvey and Jowsey 2004). Thus, this chapter presents and examines the impacts of ownership system, land-use planning and the land administration system on white land proliferation. The government has established policies, rules and regulations that can affect the land development process and may contribute to white land, which this chapter will analyse.

The chapter is split into three themes: 1) the impact of intervention in the market through enabling landownership (land allocation) on white land, 2) the possible influences of the planning system on white land, and 3) the potential implications related to the system of land administration on white land. The first theme will investigate whether the ownership system, which relies on the ultimate right to own land through both municipal and royal grants, plays a role in increasing the areas of white land, and how, explaining how a building style of self-construction emerged and became mainstream in Saudi. More importantly, any potential connections between this self-construction style and the increasing proportion of white land will be analysed.

The second theme discusses planning causes of white land, particularly the consequences of the UGB and low-density development. It will explain how the UGB was influenced by the land allocation process, and as a result was not an ideal example in tackling the issues related to market failure (e.g. uncertainty and monopoly). This section also will outline the relation between identifying maximum densities of building

and discouraging developing land. The land administration system theme will investigate how the governance system in dealing with land results in delaying development, in a centralised system. This final section will explore how the relevant policies, rules, and regulations are managed in the relevant institutions.

6.2 The impact of intervention in market through enabling landownership

Section 4.2.2 explained how the government intervention has established the concept of private ownership of land through the LGP. The empirical findings here analyse any impacts of such intervention on the land market, particularly on white land. The findings show that the LGP is a logical solution in the short-term in the past, but in the long-term (in the present) we pay the cost. This is because it does not meet the economic efficiency of best distribution of land (see Harvey and Jowsey 2004), creating an increasing proportion of white land. This can be explained by dividing land granted into two types 1) municipal grants which are for the public, and 2) royal grants which are for special cases such as rewarding individuals.

The municipal grants

According to the findings, three key issues arise from the municipal grants, which can result in the proliferation of white land: 1) being far from the city boundaries sometimes, which led to 2) the absence of infrastructure, which encouraged 3) selling.

First, some participants explained that such grants in the beginning were an ideal way of accommodating people as the city was not prepared, with sufficient construction companies, needed technologies, and so on. One way was to give the people plots to build their houses individually. However, a major problem arose. These locations, according to some participants, had not been assigned based on planning studies. The LGP started before the formal planning was introduced to the city[28].This implies that the development process and the fast population growth, with allocating land grants,

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[28] The LGP started in the 1960s, while the formal planning (i.e. the first master plan) began in the 1970s, and more importantly the UGB was introduced in the late 1980s (see Sections 4.2.2. and 4.3).

preceded the start of city planning. It was realised that some land subdivisions are too far from the urban area after introducing some planning tools:

> *"After introducing the UGB in 1989, we saw some of the residential [land] grants were outside it and the grantee has to wait until the land becomes within the UGB."*

<div align="right">(PMJ)</div>

Thus, some grantees were fortunate as their plots are within the UGB and available for housing and, as a result, their prices increased suddenly (e.g. see Evans 1999; Pennington 2003; Downs 2005; Kim 2011; Cheshire et al. 2014). By contrast, those who found their plot outside the UGB were not able to benefit by building since it is not covered with services. The process for allocating land through the LGP is completely dissimilar to land distribution described by the location theory (see Section 2.3), LGP does not offer one to bid for a particular land subdivision or a specific plot; some participants describe it as a process of 'luck'.

The data analysis illustrates three different approaches for allocating grants. The first and most common approach links the applicants with sequential numbers. Once a land subdivision scheme becomes available, the AM draws lots to match those who are first in the waiting list with the plots (for more details, see AM 2021). Many participants find this way logical, while the other two approaches can be arbitrary. The second relies on the government connecting a particular group of society, based on their type of employment, with an identified land subdivision scheme. Figure 20 shows Alhamra neighbourhood which was granted only to the academics at universities. The third approach is to acquire a granted plot by involving *Wasta* which can be, as Al-Khalifa et al. (2015) describes, the mentality that motivates individual behaviours through their own connections. One can infer from the following argument of Rashed that he links *Wasta* with a granted plot in a good location:

"Most of the grants, let us say at least in the last 30 years, are situated in completely remote and unserviceable areas. No one can build! [...]. The word 'grant' is a trick, and nobody benefited from it except for those who applied for it in the past, <u>and those who have good connections</u>."

<div align="right">(Rashed) [<u>Emphasis added</u>]</div>

The above three approaches match the description of those interviewees who associate the allocation process of the land grants with 'luck', including the first logical approach. Only the government has been the responsible for providing infrastructure for the municipal grants, leading us to the second issue of the municipal grants (i.e. absence of infrastructure). As the grants spread in different parts of the city[29], the delivery of infrastructure became a significant burden beyond the government budget, especially when it became tight, as in Section 5.2.2. This has resulted in the absence of infrastructure for many of these granted plots. Indeed, the study findings explain that the government was dealing with the LGP and the infrastructure provision as two separate cases, where the latter was later subject to some plans, as will further be analysed in Section 6.3.1. Some interviewees think there is no benefit from these unserved land grants because the beneficiary cannot build:

"There is a small number of subdivisions located in good locations [within the urban area], which are assigned for municipal grants, such as Alquds and Alaqiq [Figure 20 shows the locations of these neighbourhoods]. Other grants are far [outside the UGB], and therefore there is no point for the grantee to own it without infrastructure and services [...]. <u>Most grantees would sell it</u> as it can take too long time for it to be developable. Such grants have to be within the UGB as the aim is to house a family inside a city."

<div align="right">(PRCRC) [<u>Emphasis added</u>]</div>

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[29] Land subdivision schemes here are not serviced but known only by marks (made from concrete) that identify the boundaries of plots, as shown in Figure 21.

Figure 20: Locations of a couple of municipal grants within the UGB
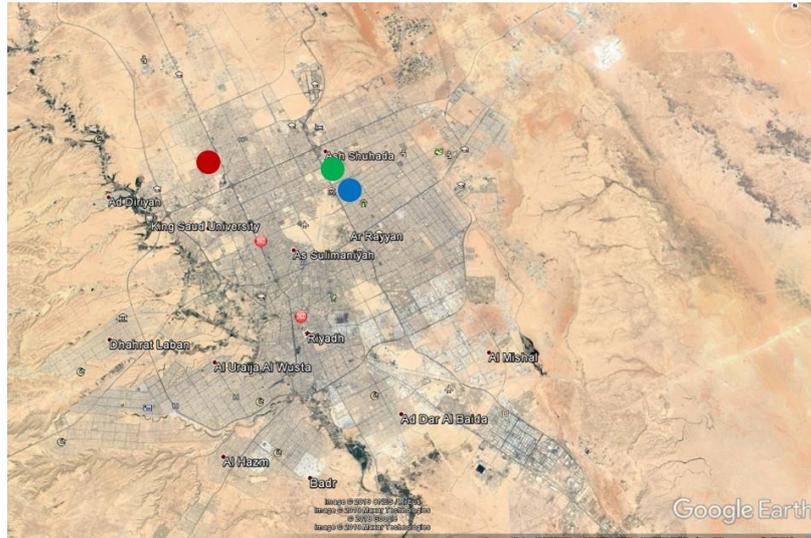
● Alaqiq neighbourhood   ● Alquds neighbourhood   ● Alhamra neighbourhood

Source: Google earth

Figure 21: A marked land subdivision scheme without infrastructure

Source: Al-Dawsari, 2015

Due to the absence of infrastructure, many participants (e.g. see the above emphasised words) clarify that land grants are for sale not living (the third issue). Granting plots without infrastructure and services, as the study findings show, is the key reason for cheap sale to more powerful landowners. Those landowners speculate on them until they become developable then resell them to the public with far higher prices.[30]

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[30] Note that there is a timescale for developing these land grants, but also note that sometimes the timescale fails to be fulfilled when there are economic challenges (see Section 5.2.2).

The three approaches for allocating the municipal grants indicate that the allocation process for land does not depend on market-based considerations as with location theory (e.g. see Wendt 1957; Wheaton 1977; Wilson and Schulz 1978; Kivell 2002; Harvey and Jowsey 2004; Kennedy 2009; Cheshire et al. 2014; Kabba and Li 2011; Ayeni 2017). Due to the absence of the market-based considerations in the LGP, competition for land through the site selection is also absent, which can lead to the refusal of a granted plot. One official (PMMRA1) clarified that even when the plot is in a serviced subdivision, many grantees asked to change as the location does not suit their interest. This official continued that their system does not allow people to change their plots, so they sold them. Selling grants became over time a popular culture in the society, as they saw it as a parallel to money, as a real estate agent said:

> *"I think the government grants you land just in order to liquidate it. The grantee goes to those who have boxes[31] and sell their grant. For the grantee, <u>the plot is regarded as 50,000 Riyals[32] from the government</u>."*

> (Rabeh) [<u>Emphasis added</u>]

In support of Rabeh's argument above, an unpublished report illustrates that only 4% of the built plots (houses now) were gained directly through the LGP (MH 2015). This implies that either the vast majority of the inhabitants did not acquire a granted plot or, as supported by some interviewees, many grantees sold their plots. As a consequence of this, long and short-term speculation has arisen from the popular behaviour of selling land grants, resulting in monopolists assembling these grants from the public. Even those who are interested in development wondered why they should develop while the government is taking such a costly role, they preferred solely to buy land from the public and speculate, as clarified by an official below.

> *"There is no obligation that the grantee cannot sell the land. Therefore, the grants opened up a speculation market, the developer would say: why do I bother myself with developing, the government develops, so their job was just*

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[31] People whose business is to speculate in land. They normally have small rooms (i.e. boxes) on the side of the street, especially in the past.

[32] It does not literally mean that every individual plot costs 50,000 Riyals; some granted plots can be cheaper while others more expensive, depending on some factors such as the location, the availability of infrastructure etc. (Ahmed). It seems that Rabeh said 50,000 Riyals only to explain his opinion that the plot is equivalent to money from the government.

> *purchasing the residents' grants. People lived this experience [...]. In the end, the services will cover the granted plots, but [at that time] instead of 1000 individuals who would own 1000 plots, only 50 powerful landowners would own the 1000 plots [i.e. through such developers acquiring smaller plots and aggregating them]."*
>
> <div align="right">(PMH1)</div>

The royal grants

In respect to the royal grants, as in Section 5.3.3, there was a government shift during the 1960s from rewarding individuals with money to rewarding them with land, including the allowances of the royal family. The royal grants tend to be very large, as claimed by five participants. One landowner (Owen) explained that he bought 8 million square metres of land located in the east of Riyadh from one of those who had been granted. This implies that the main grantee is the main powerful landowner, and Owen here is a less powerful landowner whose job is often to supply the land tracts with infrastructure. The relationship between any powerful landowners and the purchaser (the less powerful landowner) is strong. According to Lammah and Raji, the less powerful landowner buys the land and pays the original landowner after subdividing and selling.

Royal grants have created a market that differs from the municipal grants in terms of the end-user. While the latter lies in granting the end-user a plot directly (with no choice of bidding), the former has established a market where the end-user can bid and compete for land, but subject to the original landowner's decision to release their land tract in the market. As there are two bodies for allocating land (i.e. the Royal Court for the royal grants and the MMRA for the municipal ones), the study findings reveal that this can cause some negative competition; the MMRA at that time spent great efforts to seize any available parcels to be allocated as municipal grants, regardless of how far away and in what direction the location is, as one official stated:

> *"Do you know all lands in Riyadh are privately owned now? <u>We barely found few available lands for the public</u>. Once we found an available one, we*

immediately seized it and allocate it for the public."

(PMMRA4) [Emphasis added]

The statement emphasised above supports the reason many municipal grants are far from the urban area, leading to white land (see the previous argument about the municipal grants). The above argument indicates that having two different bodies responsible for allocating land can negatively affect land development. However, this does not mean that having one institution responsible for land allocation would be the perfect solution. Rather, the data analysis indicates a strong correlation between granting land and the monopoly action, where the latter can worsen the phenomenon of white land. The monopoly action lies in having few sellers who do nothing for the society (e.g. Evans 1999; Bentley 2017). The study findings similarly show how granting land not only can be a fertile ground for monopoly, but also exacerbate the imperfection in the land market since it does not benefit the government economically nor achieve the best distribution of land for the society, as maintained by the academic:

> *"Owning [granting] land to individuals without selling it to them is a main cause of white land. This is because granting one, two or three[33] people can destroy the economic cycle that solely benefits a limited number of landowners, while the government can sell the lands [instead of granting it] and then take the money and spend it on public services."*

(Ahmed)

To summarise, the grantees of both the royal and the municipal grants tend to sell their land, the former as a compensation for money as it often exceeds their personal need for living, and thus they are encouraged to sell it, or sometimes speculate and then sell it later. The municipal grantees however, are motivated by the fact that their plots can be in remote and undevelopable areas with no infrastructure, or the location does not suit them. As a result, some new potential landowners took advantage by assembling these land grants and speculating to resell in the future to the public. Interestingly, based on the study findings, the LGP has created a distinct culture of building; everyone builds their house individually from scratch, as will be analysed in the next section.

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[33] The number is obviously higher, but Ahmed said "one, two or three" as a kind of expression that few people have been granted land.

6.2.1 Building style and the quality of building

The LGP has created a culture of self-construction, where the potential landowner hires a small builder and arranges with him personally. The study findings reveal that the concept of the LGP has both greatly contributed to establishing self-construction as a prevalent building style, and discouraged the government to involve the private sector (i.e. the housing developers) in the development process[34] (also see MH 2015). This implies that the self-construction style is the default approach to urbanisation that is often associated with fast-growing cities, rather than a response to a lack of a development industry.

Nearly one quarter of the interviewees stated the government with the existence of the LGP did not find a great benefit in supporting the role of the private sector. One policymaker (PMMRA2) confirmed that when the current minister of the HM was appointed, he found only nine housing developers at the national level, who are originally landowners[35]. Due to the absence of the government support, the developers have a negative impression of development, which generates "a phobia about building" in this type of market, as Rashed describes. Likewise, Osama explains their suffering as landowners who are interested in development:

> *"The developers are oppressed as they have to do multiple jobs and deal with all. They have to secure land, seeking planning permission, find money, and persuading the end-user to buy. That is why they are [almost] absent."*

Researcher: "But I think all developers in the world have to do the same!*"*

Interviewee: *"Yes, but here everyone is against you as a developer. In getting the planning permission, they [move the goalposts[36]]. Your rights [as a developer] have to be clear when dealing with the relevant actors […] for me I*

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[34] The private sector of housing started slowly from 2017.

[35] The profile of the Saudi private housebuilding sector has become more apparent after establishing Roshn in 2020, which is "a national community developer powered by the Saudi Public Investment Fund, committed to delivering high quality communities to the people of Saudi Arabia" (Roshn 2021). They build on public land owned by the government (which are originally municipal grants). When they start selling, the land will be zero cost for the beneficiaries instead of the traditional method of granting land.

[36] Osama mentioned an Arabic proverb, which can be equivalent to this.

am stuck and want to get rid of what I developed as soon as possible. If I can do so, I swear to Allah I do not stay one day wasting my time in development."

(Osama)

The core question here: how can the self-construction style create white land? The data analysis demonstrates that this can occur in two different ways. The first, and more obvious one, is when a given subdivision's plots are sold individually to many residents; everyone has their own decision about when to build. One policymaker (PMMRA4) complained that he has been living in his house since 1982 and described his neighbourhood as "a construction site until now". This is consistent with the argument that the subdivision takes at least 30 years to be filled with houses (see Alskait 2003). In fact, some interviewees believed that there is a strong correlation between the culture of self-construction and the white land, where the former can offer an 'ownership of option' (see Evans 2004), as can be observed with the sentences emphasised below:

"It should be a comprehensive development [housing development]. If you only subdivide the parcel and construct the basic infrastructure, <u>the problem of land still continuous in terms of speculation and so on</u>. Due to the idea of self-construction, we heard proverbs like '<u>land is an open cheque</u>' or one says '<u>leave it to my children'</u>. This is not correct [...] as one is supposed to buy land for an aim. Ok, do you want it for your children, you can build it for rent but do not leave it undeveloped. In my opinion, selling land [for self-construction] creates speculation, but selling a product [a house] ... as you know products normally have a limit in exercising speculation."

(Othman) [<u>Emphasis added</u>]

While the first reason above lies in the enormous government intervention in the land market (i.e. the culture of self-construction style as a result of the LGP), the second lies in the absence of the government intervening when it should. The data analysis indicates that the self-construction style was (and still is) concurrent with poor-quality of building owing to poor building codes and unskilled labour. Approximately one third of the interviewees claimed the absence of building standards, where there are no

conditions regarding the building materials, has a major hand in worsening the building quality, as Obaid responded regarding why the central areas have cheaper prices than by the urban-rural fringe:

> *"Because we do not have building codes or guidelines to follow […] and that is why after 20 years the house becomes completely consumed and cannot stand, because it was built on a wrong basis. [He later added] They [the builders] are originally farmers or shepherds or drivers, and they come and become contractors, plumbers and electricians [say it with anger]."*
>
> (Obaid)

In support of the above argument, two real stories are drawn on by two landowners who own small plots, one of which is narrated below.

> *"As you know, it was the first time I built a house so there are some faults in my house, so I am thinking of selling it and building a new one […]. I want to avoid such faults in connection with the electrics and plumbing systems. […] For example, all the electrics are 110 volts, and all people are surprised why I did not put 220 volts as it is very important. I do not know, the electrician should have told me during the building work."*
>
> (Eissa)

According to a couple of policymakers (PMMRA1 and PAsM), the government in the past spent effort on 'quantity' (how many plots granted) and unintentionally neglected 'quality' (how the building is durable) by introducing rules and regulation regarding the process of building. The vital point here is that as the housing quality deteriorates quickly, there is a continuous demand for new neighbourhoods. Thus, households tend to be mobile, the older houses with construction deficiencies tend to be occupied by people on lower income such as the non-Saudi workers (see Section 7.3.1).

As long as there are new land subdivision schemes being constructed to satisfy the increasing demand, the white land percentage would increase because we will again return to the first point above (i.e. when a given subdivision's plots are sold individually to many residents, everyone has their own decision when to build). This, again, implies

that the new subdivision's plots, under the self-construction style, would give an ownership of option (see Evans 2004). This ownership of option supports Ahmed's argument in Section 5.2.1.2 that option has opened a market for land that the society does not need, motivating sprawl and extra white land.

To conclude, this section has explained that the self-construction style can lead to white land, analysing two underlying elements associated with the self-construction style, including the idea of the LGP and the existence of poor-quality of building (i.e. poor building codes and unskilled labour). While the government has intervened heavily in the land market through the LGP, it has not intervened to ensure the sustainability of the building process[37].

While the government role in the land development and its potential impacts has been analysed, it is important to study the potential implications of the planning issues on white land in the following section. The issues related to urban development are covered before the planning issues as in Saudi Arabia it preceded the introduction of formal planning.

6.3 Planning issues and white land: an emphasis on the UGB and density

Based on the study findings, the late introduction of formal planning worsened the issue of white land. More significantly, the population reached almost 1.4 million before the UGB in 1989 (see Section 4.3). This was a great contributor to what is called a non-uniform growth (see Bhatta 2010; Fischel 2015), as also argued by some interviewees. One landowner interested in development stated:

> *"The reason behind the existence of white land is the lack of control … or the absence of UGB. The UGB was introduced recently […] I will tell you … in short, real estate investment preceded planning. The real estate investment was faster than the regulation of it. This is the story."*

> (Omar)

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[37] The government in July 2021 introduced a system for obligating contractors to provide insurance for residential buildings (MMRA 2021).

In fact, and in terms of the planning system, the data analysis reveals there are two elements that can relate to white land, the UGB and the density issues, as analysed below.

6.3.1   The UGB policy and application

The UGB was the main planning tool extensively discussed by the majority of participants. It was explained in Section 4.3 that the UGB includes three phases: the UL1 until 1995, the UL2 until 2005, and the UEL as a protection zone which was later divided into further phases. Although the UGB was introduced principally to slow and control the physical expansion and unbridled land subdivisions (RCRC 1997a), the study findings indicate that its influence on tackling white land has not been completely successful for two reasons[38], which stem from a legacy effect of allowing urban growth to take place before introducing planning tools. The two reasons include 1) unfettered urban growth, and 2) the provision of infrastructure in the UL2 by landowners.

First, when the UGB was introduced, there was already unbridled urban sprawl as a result of several events such as the impressive population growth (e.g. see Al-Mogren 2016) and the reliance on the motor car (e.g. see Doxiadis Institution 1971; Freilich et al. 2010; Gillham 2002; EEA 2006; Freilich et al. 2010). Nevertheless, the intensive process of granting land was not only a substantial reason for unbridled urban sprawl, but also a main player in defining the UGB. According to a couple of interviewees (PMMRA2 and Raif), the area of the whole UGB (i.e. EUL) had to be extended too much just to include the plots already granted, Rumah[39] is only an example of the subdivisions far from the built environment.

Similarly, and more significantly, the study findings illustrate that the phases of the UGB (i.e. UL1 and UL2) were not defined with market-based considerations, which relate to the location theory considerations (see Section 2.3). In detail, the location theory concepts rely on the competition processes for selecting sites through bidding, which diminishes moving outwards until it is substituted by rural use (e.g. Wheaton

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[38] This does not mean that not introducing the UGB is the right choice as without it the problem of uncontrolled development would be worse as said by some interviewees.
[39] An area situated to the east of Riyadh that is assigned for municipal grants. It is about 130 km from the centre of Riyadh.

1977; Alonso 1964, cited in Balchin et al. 1995). While this process of market-based substitution from urban to rural can shape the UGB, the data analysis show that the role of market can be too marginal. The UGB with its phases in Riyadh were defined built on several, non-market, dimensions.

The topographic features such as Wadi Hanifah (a valley), located to the west limit of Riyadh, is one example of these dimensions (e.g. Aldalbahi and Walker 2015). Another is the construction towards the north, which was set by King Abdul-Aziz (see Al-Hathloul 2017). An additional dimension, based on the study findings, is whether to include the state's property and its strategic lands (e.g. military lands may not be included while lands related to the MMRA is preferred to be included, such as Rumah area which was mentioned above). Maybe more importantly, as argued by some participants, defining the phases of the UGB can be arbitrary in a way that is subject to the power of the landowners. One high-ranking employee explained such power as an underlying dimension in defining the urban limits:

> *"When we were planning to set the UL1 and UL2, there was some ummm like pressure from some [powerful landowners]. Sometimes the land of X is outside the UL1 and the land of Y is also outside it, <u>but because X is strong, they exercised their power to make their land within the UL1</u> … this is not a joke! That is true."*
>
> (PMMRA2) [<u>Emphasis added</u>]

The second reason the UGB may contribute to white land lies in the provision of infrastructure. In particular, the following paragraphs will analyse why the MMRA allowed the development to take place in UL2 before its official start in 1995, as well as the impact of the removal of government-funded infrastructure subsidies for the UL2 on land markets, both of which were mentioned in Section 4.3 (e.g. see RCRC 1997a; Hathloul 2017). One important official (PMMRA4) gave a distinct interpretation of why the MMRA gave permission to build in the UL2 before its start, as quoted below.

> *"[…] Our original plan was to stop the development in the UL2 until the turn comes to it [in 1995]."*

Researcher: "Okay, why then did not you stop the development in full and why did you allow the landowners to subdivide their land if they provided infrastructure?"

Interviewee: *"Because there are powers that we cannot stop (pauses) because they are stronger than the minister himself. So, we were looking for a smart way to prevent development in the UL2 without saying NO to them. The way we were using ummm I can say we had to play against external powers in a clever way [...]. We say that is fine, you can subdivide your land and we will give you the permit, but at least you have to provide the necessary infrastructure."*

(PMMRA4)

The original idea for allowing development in the UL2 with the condition of providing infrastructure seems to be a way of making the subdivision process too difficult for landowners, and to meet the original plan mentioned by the PMMRA4. However, according to a couple of participants (PRCRC and PAM), the idea was surprisingly accepted by a few landowners leading some participants to argue that Riyadh is not an ideal example in applying the UGB. In support of this one landowner interested in development (Omar) asserted that he developed some of his lands in the UL2 before 1995 as he accepted he had to provide infrastructure. The key question then is: to what extent has the removal of government-funded infrastructure subsidies for UL2 land affected the land market? The study findings demonstrate a couple of joint impacts on white land, including increasing the level of uncertainty and the implications of monopolistic behaviour.

Increasing the level of uncertainty & implications of monopolistic behaviour

Uncertainty, as a type of market failure, can occur not only when identifying the most profitable use of development (see Neutze 1987), but also when expecting growth (see Mills 1981). While such uncertainty can be addressed through government intervention, as was discussed in the literature (see Section 2.6.1.2), the study findings show that this uncertainty was not tackled by the government intervention, for example through developing the system of urban information on land needed in the future (see

Klosterman 1985; Kim 2011). The contrary can be true, some participants clarified how the removal of government-funded infrastructure subsidies for UL2 land has greatly increased the uncertainty towards the land market by making landowners more uncertain in taking the right decision (the more profitable one) for them.

The MMRA's decision about the removal of government-funded infrastructure was clear that those who want to develop their land tracts in the UL2 before 1995, have to provide the basic infrastructure. However, it is not officially stated in the decision that the government will cover the infrastructure costs after 1995, but only assumed. The PMMRA3 claimed that they intended in the MMRA not to state it explicitly to give them flexibility to evaluate the situation and take the more rational decision later. The researcher found an official decree, number 175 issued 23 April 1989, which does not state anything about what would be decided after 1995. This kind of uncertainty can be rooted in the impact of this decision on the land prices.

After the above decision the prices of land in the UL2 automatically decreased (also see Evans 1999; Pennington 2003; Kim 2011; Rowe 2012; Cheshire et al. 2014; Woo and Guldmann 2014). However, as the burden of infrastructure in the UL2 falls into the landowners' responsibilities, the prices of land in the UL2 (with infrastructure) became comparable or similar to the UL1 without infrastructure, as argued by five participants. The distinct difference is that in the former case, although not originally intended by the MMRA, landowners bear the infrastructure costs and then transfer them to the end-user, a comparable approach to the impact fees idea (see Burge et al. 2013; Coutts et al. 2015; Jiang and Swallow 2017).

The study findings illustrate uncertainty and a trade-off process, whether it would be more profitable for landowners in the UL2 to take the risk and develop their lands, maybe despite the uncertainty about the potential growth (see Mills 1981) or wait until 1995 hoping the government would cover the infrastructure costs. Interestingly, the landowners whose lands are located in the UL1 were also uncertain whether it would be more profitable for them to precede the government by providing infrastructure, taking advantage of the proximity of their lands to the central areas, or wait until the government delivers the infrastructure, as narrated by one official:

"Some landowners were brave enough and delivered infrastructure and coordinated with the electricity and water company. All this took place before 1995 though their lands are in the UL2 [...]. Those who own lands within the UL1 thought that the government after 1995 would cover the infrastructure costs for the UL2, and thus the UL2 lands would be parallel with their lands with the advantage of proximity of theirs [but] what happened was the opposite; the situation has continued as it is in a way that the landowners in both the UL1 and UL2 have understood indirectly that they are responsible for providing the public utilities as a norm [although there is not an explicit rule] Ummm, maybe the UGB has contributed to establishing an idea that the government is no longer concerned with providing the utilities to the landowners, and the landowner has to take care of their lands."

Researcher: "Even for the land in the UL1? I mean the government committed to delivering infrastructure in the UL1, but you said that the owners whose lands are in the UL1 have understood they are responsible for infrastructure*".*

Interviewee: *"Let me explain it. Just before 1995, we saw that the idea [that landowners in the UL2 bear the infrastructure costs] was acceptable, and then we decided to continue this way. Some landowners in the UL1 started developing their lands after 1995 because they realised that the clients [end-users] would not buy unserved plots from them. They [the end-users] would like to go a few kilometres further but with utilities [...]."*

Researcher: "But again, why did not the government deliver such utilities for them in the UL1?*"*

Interviewee: *"Actually, the government is not committed to provide infrastructure in the UL1. But we say the landowners: we will deliver you infrastructure based on the government ability, maybe after 5 years, 10 years, 20 years, we do not know. The government was developing slowly depending on its ability."*

(PMMRA1) [Emphasis added]

The statement emphasised above asserts the situation of uncertainty, which according to some participants, motivated some landowners in the UL1 to take the decision of delivering infrastructure instead of waiting for unpredictable time for the government to deliver. However, one can notice from the explanation in Section 4.3 that the development of the UL2 officially started while 37 % of land remained undeveloped in the UL1 (RCRC 1977a). Not only this, but also one can infer, from Section 4.3, the approximate percentage of the area whose landowners developed them in the UL2 by 1995. 17 subdivisions were approved in the UL2 by 1995 with a total area of 170 km^2 out of 1149 km^2 (the total area of the UL2) (see RCRC 1977a; RCRC 1997d). This means that the percentage of lands whose landowners decided to develop them is almost 15% from the total area of the UL2 lands.

The above analysis implies that those landowners who developed their land tracts responded naturally to the MMRA's decision about delivering infrastructure to suit their own interest (for example see the model of rational actors discussed by Healey 1991; Ball 1998; Ross 2016; Cronje 2018). In contrast, another group of landowners benefited from a positive externality by monopolising lands while the surrounding developments (by those who did not wait for the government to deliver infrastructure) contributed to increasing the prices of these monopolists' lands (e.g. see Klosterman 1985). Based on the previous paragraph, it can be assumed that those who were withholding their lands constitute less than 37% from the UL1 (assuming some lands are allocated for municipal grants), and about 85% from the UL2. Consequently, both the implications of monopolistic behaviour and the high level of uncertainty, which was analysed earlier, result in white land:

> *"All landowners at that time financially benefitted, but the question who benefited more. It is too difficult to say but maybe who withheld their lands benefited more as they took advantage from the fast development that was taking place [as a positive externality] […]. As you might know, <u>there are several large lands today in the UL1 are still undeveloped simply because their owners are exercising monopoly […] and they realise the government no longer would deliver the infrastructure</u>".*
>
> (PMH2) [Emphasis added]

The above emphasised argument implies that those landowners either cannot afford the infrastructure costs and they are not prepared for a partnership (this is discussed in Section 5.3.2), or they withhold it as an asset because they do not need liquidity, as Lobab stated (see Section 5.2.1.2), but also this approach can excuse one from paying *Zakat* as was analysed in Section 5.2.1.3.

The non-market-based way of introducing the UGB in Riyadh embodied two forms of market failure (uncertainty and monopoly) and resulted in white land. The next section will outline how identifying maximum densities of building not only increases property prices (e.g. Cheshire 2013), but also discourages developing land.

6.3.2   Horizontal expansion and raising the density

It is a well-documented fact that planning controls, such as the UGB, can increase land prices owing to the restriction in supply (e.g. see Evans 1999; Nelson 2002; Pennington 2003; Cheshire et al. 2014). It was also discussed in Section 2.6.1.1.1 that other planning ideas should be introduced simultaneously with the UGB to lessen the negative impacts, which include increasing the density within the UGB (e.g. see Oluseyi 2006). However, the data analysis reveals that, despite the challenges rooted in the land supply (e.g. the UGB and the monopolistic behaviour, and the fast population growth), the government has not intervened through rules and regulations to increase land densities. For example, the use of residential land, with a two-storey house (see MMRA 2005), did not respond to the increasing price by allowing more intensive use, such as vertical development.

Interestingly, it appears that the end-user not being able to easily afford land, which was analysed in Section 5.3.1, ultimately relates to the rules and regulations that support low-density, as it can be associated with too high prices of land, leading to social exclusion of some groups, especially the low-income (e.g. see Madanipour 2011). This can interpret what was explained in Section 5.3.1, that many plots are undeveloped because many residents cannot easily access them.

By contrast, according to one quarter of the interviewees, increasing density can raise

the land productivity, and then stimulate it for development. Neutze (1987) states that uncertainty about whether higher density in the future might be more profitable can be a reason behind withholding land. In Riyadh, it is almost certain that the current density can discourage landowners from development. Some non-interested in development landowners claimed that allowing them to build denser areas, for example multi-storey buildings, can be an incentive to develop (e.g. Lotfi, Lammah, Loay). This is because they think that the point where marginal revenue equals marginal cost has not been reached yet (see Harvey and Jowsey 2004), and thus extra development density is seen as profitable. Density here is seen as too low, compared with the increasing current value of land. Any updates in building regulations to allow additional densities may lead to developing many pieces of white land, as explained by a real estate agent:

"If you notice the King Fahad Road [an arterial road]; when multi-storeys were allowed, the landowners immediately began to develop. They started developing because they found it better, from an investment viewpoint, than if they leave it undeveloped. I think planning regulations, such as raising the density by allowing multi-storeys or minimising the front width to be for example six metres, […] would encourage the landowner to say: ok now the land is worth developing, and I can make money from such development. Instead of having 100 units, I can build 150 units."

(Rashed)

Given the above, why do the rules and regulations in Riyadh not support intensifying housing density? Based on the study findings, the tendency not to deliver denser uses lies in two elements. The first can stem from the acceptance of the motor car as a main means of transport with the absence of public transport, which was proposed by Doxiadis (Doxiadis Institution 1971). Interestingly, all the definitions of sprawl, illustrated in Section 2.6.1.1, clarify that there is a strong relation between the dependency on the motor car and low density, where both can cause sprawl (see Gillham 2002; EEA 2006; Freilich et al. 2010). What can make the situation prevail in the Saudi context, according to the PMH1 and Rami, is the cheap energy prices (traffic congestion can also be considered). Table 1 shows how the energy prices in Saudi Arabia, with 0.16 US dollars per litre, are the cheapest among many countries.

Maybe more importantly, the second reason why intensifying the housing density is not governmentally supported lies in how individuals own land. It was explained earlier that the LGP entails the residents to build their houses from scratch (for more details, see Sections 6.2 and 6.2.1). This strategy of building can, at least, prevent the construction of multi-storey buildings (e.g. from three to five floors), as a few participants argued.

Table 7: prices of petrol in different Western and Gulf nations

Country	Average price of petrol in 2014 (US$ / litre)
United States	0.76
United Kingdom	1.92
Italy	2.14
Spain	1.63
France	1.79
Germany	1.80
Saudi Arabia	0.16
Qatar	0.23
Kuwait	0.22
Oman	0.31

Note: Some data about other Western and Gulf nations are unavailable.
Source: Created by the researcher based on World Bank, 2017.

While this and the previous sections focused on the intervention through the planning system (i.e. how the UGB and the housing density may result in white land), the next one will concentrate on how land is administered in the relevant government institutions, with an emphasis on the effects of the centralised system as a governance structure on the land market.

6.4 Land administration system: an emphasis on governance system

Any potential impacts of the government intervention on white land, analysed earlier in this chapter (i.e. land allocation through granting land, the UGB, density issues), is highly informed by the way planning itself is practiced and managed (e.g. see Evans 1999). The strategy of land administration and its nature of power by the relevant government institutions is a key influential factor not only in the development process, but also in shaping the planning system (e.g. see Othengrafen's and Reimer's 2013;

Stead et al. 2015). Land administration here includes the potential issues that stem from the governance structure, more significantly the issues related to bureaucracy and centralisation in dealing with land.

The study findings reveal a strong correlation between bureaucracy and centralisation in land administration, showing that a failure to develop land is caused by a system that is more centralised. While the majority of the policymakers and real estate agents explicitly state a centralised system can be strongly be associated with market failure, the landowners do not seem to be aware of the issue of centralisation. However, these landowners expressed their opinions in a parallel way; they complained bitterly about encountering huge slowness in the government procedures, especially in granting planning permission. The most optimistic landowner (Obaid) indicated that permission can take up to three years with the MMRA. Sometimes the deal takes longer, as another landowner said:

> *"I have a 500 thousand square metres of land. I do not want to develop it nor sell it."*

Researcher: "Why*?"*

 Interviewee: *"I went to the MMRA seeking planning permission, but they created one thousand things[40]. Now it is seven years since I applied without granting such permission. I got bored!"*

(Loay)

Consuming seven years seeking planning permission indicates that the government bureaucracy in negotiating permission is an externality that impacts on viability. This implies that the costs of externalities are not necessarily to be addressed through government intervention as Stiglitz (2010) claims. On the contrary, the government intervention can add extra transaction costs, as the above citation illustrates, through potential delays from the relevant institutions, and the negotiation process of building permits and plan approvals (see Alexander 2001b).

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[40] It is an idiom that can be equivalent to 'moving the goalposts'.

Based on the study findings, the above potential delays in the negotiation process of the planning permission encountered by Loay can sometimes exacerbate the issue of transaction costs, by making the option of development out of the landowner's control. As an illustration, a very long process in negotiating can make the inheritors the decisionmakers (e.g. after their father), which could lead to some problems among them, thought by one quarter of the participants. Further legal processes may need to be taken, which also takes a long time. One official (PNHSC) stated that such issues sometimes last for 30 years in the court. During which time the inheritors cannot manage their land. Ultimately, the land remains undeveloped, as clarified by a landowner:

> *"Two bodies are behind not developing the white land, the MMRA and the MJ. The sluggishness of these two bodies in dealing with land procedures makes the main landowners not the decisionmakers. The decisionmakers are their inheritors. The inheritors then might have problems, which is another separate matter. This is a problem. I am not saying all the white lands are related to this reason, but I assume 40% of them. The lands of Saleh Al-Rajhi are only an example[41] [Figure 22]."*

(Osamah) [Emphasis added]

Figure 22: One parcel of land for Saleh Al-Rajhi

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[41] Saleh Alrajihi left some tracts of land to his inheritors in great locations within the UGB, one of which has an area of about 708,000 m², with 476 residential plots. The average area of the plot is 750 m² (Al-Rasheed 2017).

Source: Al-Rasheed, 2017.

The statement emphasised above about the sluggishness refers to the MMRA and the MJ, institutions at the national level. This underpins the recognition of most policymakers and real estate agents that the majority of issues related to market failure in Riyadh is embedded in the dependency on the centralised system in land development. The top-down centralised decision-making process, based on the data analysis, can be a main reason of the above sluggishness in granting planning permission, where it is usually issued by the MMRA, after being revised by the AM (i.e. the regional body). This top-down approach, compared with the decentralised system, entails a slower process for taking decisions and less effective communication between those who take the decisions and performers (see Alushchak and Halushchak 2015). One policymaker in a high position in the MMRA added that they are often responsible for suggesting any necessary modifications before granting the permission, as stated below.

> *"The adjustment of any necessary changes is centralised. Therefore, the responsible department of this, in the ministry of course, takes time in giving the final approval because the notes for a given planned subdivision go back and forth, back and forth, back and forth [it returns to the landowner for modifying the suggested changes]. It takes time."*

> (PMMRA2)

In fact, the mechanism of land administration as a whole (not only in granting planning permission) is strongly centralised with the neglect of enhancing the role of the cities'

local administrations. The study findings show that the MMRA is a centralised not city initiative. The MMRA, therefore, can be blind to local imperatives, evoking further externalities, as one policymaker believed:

"The reason [of externalities] is that the centralised government plans through the MMRA, which is not aware of the externalities for each local context. I mean … the body that does not own land [MMRA] plans for the body that owns the land [AM]. This [ultimately] leads us to not hold the local government accountable for not tackling the externalities. Do you know that the MMRA introduced the UGB to 100 cities without considering it with the local administrations!"

(PAM) [Emphasis added]

The distribution of the budgets explains why the local government is not accountable for not addressing the potential externalities. The issue with distributing the financial resources is that the top levels of the government (i.e. ministries) are responsible, marginalising the local governments and their vital roles. Indeed, this approach of funding projects was heavily criticised by some interviewees, because it can restrict and weaken the local role in the process of urban development. The fees collected from white land in Riyadh, as an example, go to the MH, which can spend it in projects in different cities, based on their strategic plans, as confirmed by two policymakers (PMH1 and PNHSC). One example supporting this argument is also narrated by one real estate agent, explaining how such centralisation can in the end impede land development:

"I think our problem in Saudi is the way we finance the government projects. We still depend on funding the sectors [i.e. ministries], and I believe we should fund the local administrations. […] I think we will not succeed if we still finance the MMRA in order to rebuild a road! The money should immediately go to the local institution in Riyadh, which can consider its needs. Otherwise, the development can be in a mess."

Researcher: "What do you exactly mean by saying the development can be in a mess? What is the linkage here?"

Interviewee: *"I mean when it comes to a given land subdivision, <u>electricity might have already been connected but the drainage system is not! Why? Because financially every institution has its own plans</u>. But if the local administration has its own budget, then they can spend a larger proportion of it in development this year, and in education the year after and so on. The current system, however, is that the local administration has a certain budget in every sector, and use it or lose it. Ok, how about if I do not need a large budget in healthcare in a particular year, and instead, I need to spend more in education. The system does not enable you to do so."*

(Rabeh) [<u>Emphasis added</u>]

The sentence emphasised above supports an argument drawn by the PMH1, that Masharef Hills[42] is an integrated project but the sewage network is not connected with the public network. In this case, the local authority has little power to address such an issue. As a consequence, dealing with the city's budget under the centralised system might cause a lack of coordination in the essential development, keeping the affected plots as undeveloped.

Finally, while it is acknowledged by most of the participants that the centralised system in the government procedures can worsen market failure and hinder land development, the Etmam initiative was introduced to ease the centralised and bureaucratic procedures, especially in terms of granting planning permission, as analysed in the following part.

Etmam initiative and planning permission

The relevant government institutions understand the centralisation in granting planning permission, which takes a long time. The Etmam[43] initiative was introduced to accelerate the progress of the accreditations and licences for building to address the embedded transaction costs. The data analysis reveals two issues that can hinder the success of this initiative. First, the strategy that is used in applying it is still centralised, under the supervision of the MH. One responsible for this initiative clarified how

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[42] A neighbourhood located about five kilometres after King Salman Road to the north.

[43] Etmam is an initiative that was introduced based on decree number 7262. It aims to implement and follow through the progress of the accreditations and licences for residential or commercial residential projects that cover more than 50,000 m^2 (for more details, see Section 4.4).

Etmam works, one can deduce from his statement below that the centralisation mentality still exists and Etmam's task is mostly to follow the deal and coordinate among the relevant institutions:

> *"Instead the landowner goes and follows up accrediting their land subdivision scheme from different institutions, we have representatives from the Ministry of Justice, the Civil Defence, municipalities, the Electricity Company, the National Water Company and so on [...]. Today we have the power to accredit land subdivision schemes through us directly up to 90 days [...]. The reason is that we conducted statistics recently and we found that the accreditation of land subdivision schemes takes from three to five years [...]. Etmam has come to be neutral; it is not with the MJ nor the MMRA [...]. Its aim is to solve the landowners' problems as this stimulates the land supply."*

<div align="right">(PMH3)</div>

A couple of officials (PMH2 and PNHSC) clarify that there are some challenges accrediting land subdivision schemes through Etmam, where it is too difficult to issue a planning permission within 90 days, as the PMH3 claimed in the previous quotation. This is because, according to PMH2, the MMRA (centralised) still refuses to give permission to proceed[44] (conflict of interest and power struggle are also two potential reasons, see Sections 7.2.2 and 7.2.3). According to the academic Ahmed, as long as the procedure is centralised, it will entail too much time, exactly as described in the earlier section, or inefficient in the way it is run; that can be effective in theory but not in practice. This leads us to the second issue related to Etmam, which lies in the difficulties in applying it more perfectly due to the limited capacity.

Etmam can issue permission directly, but they would be responsible for any problems. Thus, based on the data analysis, they would prefer to wait for the final approval from the MMRA. One in three of the landowners agreed that the employees in Etmam are positive and would like to help, but ultimately the matter is out of their control. One landowner (Laith), tried to persuade the researcher of this; he called his secretary to ask him when they applied for an accreditation for one of his lands. Five minutes later, the

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[44] Interestingly, a royal decree number 322 was issued in 2021 to combine the MMRA and the MH under one ministry, called Ministry of Municipal Rural Affairs & Housing (Arqaam 2021).

secretary called back to say that they applied for planning permission with Etmam two years ago. There is a noticeable failure here for Etmam to reduce developer risks and uncertainties. This is simply because the potential landowners, such as Laith, apply for a planning permission assuming they would acquire it within 90 days. However, it would often consume much more time, leading to extra transaction costs due to the unexpected delays (e.g. see Alexander 2001b).

The reason behind the seeming failure of Etmam, based on the study findings, lies in the lack of experience of the Etmam's employees, as cited below.

> *"They [Etmam's staff] cannot issue a permit without knowing what a street level means. It is not an easy job for them. Ummm, they have good intentions and I like them, but they understand nothing about the master plan, how infrastructure should be implemented, plan details, levels of streets with the neighbouring areas etc […]. All the system is in the MMRA. Etmam's staff have too limited an understanding and they need 20 years to understand their job."*
>
> (Osamah)

6.5 Summary

This chapter explored the impacts of the government intervention on white land. It includes three central issues, allocation through land granting, planning issues with an emphasis on the UGB and density, and centralisation. It was found that allocation of land does not relate to market-based considerations as with the location theory (e.g. see Wendt 1957; Wheaton 1977; Wilson and Schulz 1978; Kivell 2002; Harvey and Jowsey 2004; Kennedy 2009; Cheshire et al. 2014; Kabba and Li 2011; Ayeni 2017). Instead, the government is the major player through granting land. It was found that this type of allocating land would not be a sustainable and rational strategy. This was explained through analysing the impacts of both municipal and royal grants on white land.

It was explained how two bodies allocating land can lead to negative competition resulting in defining municipal grant parcels based on availability rather than market-based considerations. As a result, a lot of the assigned plots are situated in remote areas

and it is too costly to deliver the public utilities. This absence of infrastructure has created a popular culture where grantees simply sell their undeveloped plots. Not only this, but also the arbitrary allocation of plots encouraged selling due to the unsuitability of the site selection, with the exception of plots assigned through Wasta. A report reveals that a mere 4% of the houses have been built through a granted plot (MH 2015).

It was explained that the royal grants are fertile ground for making money, where they are often allocated as compensation. Interestingly, as the monopoly action is a form of market failure (e.g. Evans 1999; Bentley 2017), it was demonstrated that this failure is highly embedded in the government intervention through granting land, as such intervention has led to few powerful landowners, who then exercised monopoly (see Section 6.2).

Additionally, a culture of self-construction style has been established owing to the LGP and the free-interest loan, generating additional undeveloped plots in two related ways. There is a strong possibility that a number of these individual plots would not be developed as it depends on the owner's own decision. The poor-quality of building, due to poor building codes and unskilled labour, can damage houses quickly. As a result, there is a continuous demand for new residential areas, which are also subject to the landowner's own decision.

One of the negative impacts of the UGB is that it was introduced too late, preceded by land development and allocation through granting. One outcome of this was to extend the UGB to cover too large areas to accommodate the unfettered plots already granted. The UGB was also defined based on non-market considerations; it did not follow the economic concept that a process of bidding diminishes moving outwards until the urban use is substituted by the rural (e.g. see Wheaton 1977; Alonso 1964, cited in Balchin et al. 1995).

The UGB in Riyadh is subject to several influences, including the power of landowners to include their land within a given phase. Therefore, the phases responded greatly to the intensive process of granting land, where the latter can be a key player in defining former; the market has marginal effect. Another issue with the UGB is allowing the development in the UL2 to take place before 1995 and removing the government-

funded infrastructure (e.g. see RCRC 1997a; Hathloul 2017). The intention of allowing development in the UL2 was basically to prevent powerful landowners from development, expecting they would not accept to deliver infrastructure. However, a few landowners unexpectedly accepted, leading to two elements of market failure, uncertainty and monopoly (Section 6.3.1).

It was also clarified the density has not increased, in response to the UGB's implications such as shortage of supply and increasing prices (e.g. see Evans 1999; Nelson 2002; Pennington 2003; Cheshire et al. 2014). It was found this has resulted in more unaffordable land, and consequently to social exclusion (e.g. see Madanipour 2011). The data analysis suggested that increasing the density would be an incentive for development, where land is seen as too expensive to be developed at a very low density, which restricts the productibility (Section 6.3.2).

The final issue in this chapter is the land administration system. The failure to develop land is caused by a system that is more centralised, where the government intervention has raised transaction costs (e.g. see Alexander 2001b). The local administrations of cities are marginalised, with no institutions accountable for addressing any potential externalities. This chapter demonstrated how the centralised mechanism of financing projects can give rise to lack of coordination and organisation in providing the necessary services for land subdivision schemes, leaving them underdeveloped. Although Etmam was introduced to tackle some failure, it has not shown much success because it is still applied at the centralised level (Section 6.4).

It seems that the high dependence on the centralised system in land administration goes beyond the above transaction costs and is associated with some interpretive positions that can affect land development indirectly, as will be explained in the next chapter.

CHAPTER 7 : Potential interpretive positions and white land

7.1 Introduction

This is the final chapter of the empirical findings, which highlights the relation between the spread of white land and some interpretive positions. These positions are in a separate category (chapter) because: 1) they can be more directly and strongly connected with the sociocultural factor (e.g. see Earle and Claydon 1998; Cvetkovich 1995; Forsyth 1999; Offe 1999; Carmon 2010), and 2) they do not neatly fall into the issues examined in the first two chapters of the empirical findings, but are often motivated by them. For example, it was investigated in the earlier chapter how centralisation as a governance system can add extra transaction costs leading to deferring land development. However, the data analysis exposes that there are four interpretive positions that arise from the existence of this centralised system, and can cause white land indirectly, including discretion and ambiguity of rules and regulations (including their implications of uncertainty and some ethical concerns), conflict of interest, power struggles, and diminishing trust between the relevant actors.

While the first heading will cover the interpretive positions that relate to the decision-making process in the relevant institutions (e.g. by officials/policymakers), the second will outline the interpretive positions by one group of landowners (i.e. the end-users) in terms of the site selection process, identifying how some sociocultural aspects can influence the landowners' decisions, with an emphasis on how such decisions can cause further undeveloped plots. This section is combined with Section 7.2 (i.e. interpretive positions caused by the centralised system) in one chapter as they are both related to interpretations, with the sociocultural factor playing a major role in the behaviour of the above actors in the land market.

7.2 Interpretive positions caused by the centralised system

First of all, the origins of the dependence on centralisation as an operative system of political decisions, at least in the Gulf region, are in traditional governance, where the tribal leader was responsible for decisions (e.g. resolving issues related to land, allocation and ownership), which has later been substituted with modern governance, where the top officials in governments have a major hand (e.g. see Akbar and Shaw 1988; Salama 2015; Yolles 2019). However, one should note that it is out of scope of this research to deeply investigate why the Saudi context heavily relies on centralisation. Instead, the following subsections will consider the effects of such centralisation on generating some interpretive positions, which ultimately can influence urban land development, specifically white land.

The study findings reveal that a highly centralised governance system is connected with some interpretive positions, often caused by the centralised system, but surely not limited to it. These include discretion and ambiguity of rules and regulations in the government procedures, conflict of interest, power struggle, and diminishing trust between the relevant actors, as analysed below.

7.2.1 Discretion and ambiguity of rules and regulations in the government procedures, and their impacts on uncertainty and ethical concerns

Based on the study findings, there is a strong relationship between discretion and having a centralised system from one side and the ambiguity of rules and regulations from another, where the latter can increase uncertainty regarding the land development processes. A high level of administrative discretion at the centralised level can lead to unclear rules and regulations, especially in granting planning permission. According to a few officials, the Council of Ministers enables the MMRA's minister to enjoy a high level of discretion. This means that the whole process of planning system is delegated to the MMRA, where every minister[45] can introduce rules and regulations, as well as defining the responsibilities (sometimes after gaining the final permission from the Prime Minister i.e. the King). A policymaker (PMMRA2) said that sometimes the AM

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[45] The ministers change regularly, normally every four years.

does not need to return to the MMRA for approving planning permission and sometimes they must, depending on the current minister's view, with little criteria guiding his discretion.

While the existing procedures (e.g. for planning permission) derive their authority directly from the MMRA, one should note that there is no Planning Act. Sometimes there is an absence of rules for dealing with a particular situation or the system of rules has a gap, which is still regarded as a negative outcome of discretion (see Forsyth 1999; Kwok et al. 2018). However, as believed by a number of officials, the absence of the Planning Act can increase the level of discretionary domain and cause the ambiguity of rules and regulations. There is a need for a Planning Act that not only identifies a way of controlling land uses, but also who may control them, establishing precise powers, procedures, and responsibilities for the relevant institutions (PMH3).

Why has the Planning Act not been introduced yet? Again, the reason is deeply rooted in the highly centralised structure of the government, which can enable any new appointed officials (e.g. ministers) to practice a high level of discretion away from the Planning Act, thought by two policymakers (PMMRA2 and PMH2). Introducing a Planning Act would mismatch with what the PMMRA4 explained in Section 6.3.1 that there are powers that are stronger than the minister himself, who could violate a Planning Act, as another policymaker supported this claim:

> *"If we established a Planning Act, there would be some people who have power and authority, and therefore they can violate the law or the rules of it. Therefore, there is no need for it [the Planning Act would not show much success]. You got it now?"*
>
> (PMMRA1)

The existence of a high level of discretion at the centralised level, the study shows, can lead to instability and unsustainability in the work environment and negative effects on the employees' following clear and professional instructions, especially as they normally face the public and deal with their transaction (though the final approval tends to be centralised). This unclarity in the rules and regulations can be attributed to the poor communication between those who take the decisions and the performers (i.e.

employees) (e.g. see Halushchak and Halushchak 2015), especially as the local employees are not involved in the decision-making process, and not aware of the regulations they deal with (maintained by PRCRC and PAM). Employees can receive vague information, especially as the discretion towards given rules at the centralised level changes regularly (e.g. when the minister changes). The employees also exercise discretion at a lower level; opinions about one situation or case can differ extremely from one employee to another in the same institution.

Despite the fact that all rules and regulations require some interpretation, some can be more open to this than others. This is clear from the suffering encountered by many landowners. One landowner (Osamah) clarified that the relevant employees sometimes are unsure how to deal with applications related to planning permission, with a lot of grey areas in the rules and regulations that can be open to various interpretations[46]. This problem was mentioned by at least half of the landowners with different stories, as quoted below.

> *"The fault in my opinion is that there is no clear system. The consumer or the landowner does not receive the instructions at once. I mean when I have a land subdivision scheme that needs to be planned, I find a planning company to contract with. The contractor then goes to the AM to receive the requirements. They say to him: our requirements for this project are this and this and this. After following the requirements carefully, they say: NO NO NO, we mean this and this and this! Unfortunately, this what happens in the ministries like the MJ and the MMRA."*

> (Obaid)

> *"Sometimes they [the MMRA and the AM] bother you. [For example], they asked me to cancel the loop streets for a safety purpose. When I changed it and came back to them, I found another employee having another view, he said: on the contrary, the global trend now is to put loop streets in terms of a safety*

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[46] It should be mentioned that the rules and regulations of small projects (e.g. building a house) are often well written and accessible. However, the owners of large projects (e.g. developing a large piece of land) would seek instructions from the responsible institutions themselves, with little accessible information online.

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purpose, so just change it please. In the end, sometimes one year passes only for satisfying the different views of the employees, and this is a disaster."

(Owen)

Even some policymakers admitted to ambiguity in the systems, as stated below.

"The problem that we found is there is no clear regulations followed by the relevant bodies. This makes the landowner have an endless journey of gaining planning permission. The landowners told us they face obstacles in this and, to be honest, they are saying the truth."

(PMH3)

Thus, the discretion and ambiguity in the rules and regulations, analysed above, have also potential impacts on three different issues, as derived from the data analysis. These three issues relate to uncertainty, ethical concerns, and power struggle (the power struggle will be outlined in Section 7.2.3).

First, it is true that the above three quotations demonstrate how the existence of unclear rules and regulations (grey areas) can further exacerbate transaction costs due to the negotiation process of planning permission that leads to delays (e.g. see Alexander 2001b). Worse, the study findings show that the existence of unclear rules and regulations can also worsen the uncertainty of the landowners. Landowners are often keen on identifying the most profitable use of development, otherwise they would withhold their land until the image becomes clearer (e.g. see Ohls and Pines 1975; Titman 1985; Neutze 1987). Some interviewees claimed that the government regulations, especially those related to planning and building, are changing too fast. One should note that these fast changes exist, as clarified earlier, owing to the centralised system that gives the top officials (normally the ministers) the authority for a high level of discretion, implying that the interpretation of the loose rules and regulations changes when the current ministers change.

Fast changes, based on the data analysis, can give rise to uncertainty. It seems obvious that some landowners interviewed prefer to withhold their lands as the planning and building regulations remain highly unstable. This is because once development takes

place, reversing it is too costly (see Irwin and Bockstael 2004). One landowner, justifying why development may not be the right option, said:

> *"Planning regulations are not very clear. The master plan changes every day [exaggeration]. The planning regulations are always changing. This makes the future unknown. No one knows what will happen. In one day duplexes are allowed, the other day multi-storeys are allowed. Today, you can build three storeys in specific zones but such regulation can be changed overnight to be four storeys."*
>
> (Laith)

In support of the above argument, planning has temporarily been suspended in a few important areas in Riyadh, asserted by two officials (PMH3 and PNHSC), as the government is going to study the building regulations carefully. This decision was welcomed by a landowner interested in development (Osamah), who has land in that area. This is because he does not want to begin the development until the image becomes clearer. He fetched an official letter, with a royal decree number 5151 issued on 10 October 2018, to show the researcher that the suspension of granting planning and building permission comes from the government, to avoid being blamed for withholding his land.

The uncertainty goes beyond the rules and regulations to the lack of both the land information system and organisation of the land market. Some interviewees argued that there is a severe lack of data available to the public, as a guideline for the seller and the buyer. This can exacerbate the uncertainty, generating a gap in the negotiation between the seller and the buyer, as one landowner encountered:

> *"The sale intention is not excluded. We [they are inheritors] discussed the price with some potential purchasers but we did not agree about a price. We thought the land deserves a higher price, and the buyer thought it does not."*
>
> (Lobab)

The potential seller here, such as Lobab, might not prefer to ask a broker, for example real estate agents, to assist them in selling land. This is, as believed by some officials

and landowners, due to the weakness of property management and its organisation. Landowners may be worried they are cheated by brokers, who could take advantage of their land by underestimating its value to buy it. Uncertainty may remain not only owing to the lack of data, but also because of avoiding seeking information or assistance from brokers. This can decrease transactions as individuals not only encounter uncertainty, but also would not have a network (i.e. brokers) to find a potential purchaser or seller easily.

> *"We do not have a market ... or let me rephrase it, we do not have an obvious marketing system [...]. For example, in Canada and I think in America the broker cannot buy land from the seller and if they did, they would be severely punished [...]. This organises the market and increases the reliability of it. Without such law [such as the case in Saudi], the broker might cheat you and does not inform you the actual price in order to buy the land from you themselves, especially if the seller is unaware and easy to trick such as the elderly people."*
>
> (Ahmed)

Again, the reason for not considering small details in respect to organising the market mostly relate to the low involvement of the cities' local administrations, which lead to "not hold the local government accountable for not tackling the externalities", as was analysed in Section 6.4. Most importantly, the legal structure reflected by land registration can be an integral part of the land information system. Absence of a land registration system is a serious issue that was indicated by the vast majority of the participants.

It is well-documented that because of land durability, rights tend to exist for a long period of time (Webster and Lai 2003; Hui 2012), which can strengthen the concept of private ownership of land (e.g. Gillham 2002). However, the study findings reveal some serious obstacles against land development related to legalising rights; there is inefficient system of legal registration for land, raising doubts about the validity of landowners' titles of ownership. One high-ranking position interviewee described how land can remain undeveloped because of this fault, which ultimately leads to a conflict

between two potential landowners in court:

> *"We in the Kingdom have a special case. We do not have registration for land, and land is not well described [in terms of the area, location, dimensions etc]. Therefore, overlaps between ownership rights happen [i.e. a piece of land with two ownership titles for two people who do not know each other]. This fault causes conflict between landowners in the court, and land has to be vacant until the issue is solved. The percentage of this is not insignificant and we in the White Land Fees committee exempt them from the fees."*
>
> (PMMRA2)

Another official, who is a specialist in legalising land rights (PMJ), clarified that sometimes an overlap of a small common area between two parcels of land occurs. In this case, the two parcels must remain as white land until the court rules. The PMJ also added that not using a smart system in legalising land rights has produced a problematic situation because mistakes are highly likely with manual operation, as the PMJ continued to explain:

> *"There are problems in ownership titles ... big problems. Enormous mistakes happened. For example, one judge in one court issues an Istihkam [an ownership title] for a given land, and then another judge in another court issues another Istihkam for the same land but for a different person! [...] The fault here is that lands are originally not linked with coordinates which are connected with the system. When the new Comprehensive System [the first attempt for land registration] was started in Riyadh in 2005, we rejected to legalise some land grants which came from the MMRA because they sometimes granted the same plot for more than one. In my opinion, one of the problems is that legalising ownership titles was manual"*
>
> (PMJ)

At least half of participant landowners who own a large tract(s) of land have encountered a problem caused by the absence of land registration. Indeed, some of the problems are related to an ownership title that does not reflect the actual area of land, as happened to Labeeb. The researcher, while waiting to interview one official (PAsM),

observed a landowner who had already sought a building permit but came to complain that the width of his 29 metre plot is 30 metres in the ownership title. Problems associated with ownership titles are dealt with in the MJ, where addressing legal issues can further delay adding further transaction costs. This means that the subject lands remain as white land for a long time, as argued by one landowner:

> *"My ownership* title *is legal and there is no problem with it, but I found out a problem with the land's boundary. It overlaps with my neighbour's one. Since 2001 until now we are waiting for a judgement […] I swear to Allah that it has not been resolved. Of course, there was a judgement but it was refused by my neighbour, and actually both of us are influenced as we cannot develop."*

<div align="right">(Owen)</div>

The impacts of having a poor registration system on land development cannot be neglected. It might be inferred from the previous argument of the PNHSC, that they issued 2800 white land bills but 600 are subject to an objection in the GB, that the percentage of faults is significant (see Section 5.2.3). This is because any fault that is out of the landowner's control is excused by the government, and the landowner does not have to pay fees, assuming that the vast majority of faults are related to land registration as thought by the vast majority of interviewees.

Another famous example about the problem of ownership titles is the area of Qiran[47], where the ownership rights of many landowners overlapped. Qiran area was suspended for about 35 years until it was solved recently (e.g. Raji, Rami and Osamah). In support of this, Al-Qasim (2010) mentions that the area of Qiran reaches 100 million square metres, with a capacity of 160 thousand residential units, and was not developed due to legal problems in the titles. All the above examples of poor legal registration system of land can negatively affect the process of using land because of the unclear rights, leading to insecure market for land exchange (see Hanstad 1997; De Soto and Kennedy 2000), an issue that impacted some landowners. This can damage the trust in ownership titles and lead to fewer transactions, not only because of the purchaser's doubts of a given title but also of the seller who trust theirs and does not wish to buy it, as claimed by a landowner:

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[47] A large area situated in the north of Riyadh (Figure 23).

"If I sell the land, I will look for another one. My personal view, I keep land that I know has a clean [valid] title of ownership better than involving in another land that I know nothing about the legality of its ownership."

(Lotfi)

Figure 23: Qiran district

☐ Approximate location of Qiran
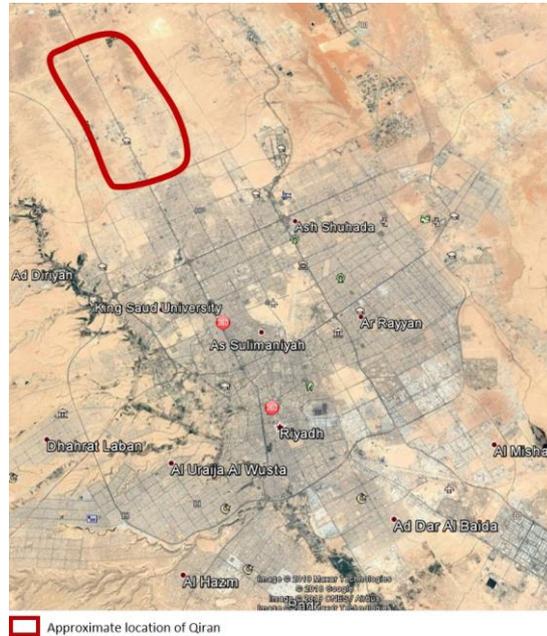
Source: Google earth

Second, the discretion and ambiguity in the rules and regulations can also have some impacts on the ethical concerns. It was explained earlier that discretion can occur as a natural part of the decision-making process (see Forsyth 1999). Discretion here, based on the study findings, can also be exploited by interpreting the rules and regulations in a way that satisfy a sociocultural value (e.g. PMMRA3 narrated some real examples). This part will investigate how discretion is also a link to the sociocultural factor.

It is acknowledged that actors do not use the discretion to the same extent nor in the same way (Forsyth 1999) mostly because the actors' culture produces discretion, and can vary among officials or employees (e.g. see Claydon 1998; Forsyth 1999; Kwok et al. 2018). It was clarified in Section 4.2.1 that the Saudi context is influenced by *Wasta*[48] the mentality that motivates individual behaviours through their own connections (see Al-Khalifa et al. 2015). *Wasta* appears clearer when dealing with the

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[48] "A process whereby one may achieve goals through links with key persons" (Smith et al. 2012, p. 3).

family members, friends, and those who belong to the same tribe, where the commitment to meet the private interest of each other can be seen as a symbol of reputation and dignity (for more details about the importance of these meanings, see Al-Faleh 1987; Dickson 2015).

The commitment to family, friendship, or the tribal adherence, based on the study findings, can lead the government officials or employees to interpret the loose rules and regulations in a way that can achieve their private purposes. This seems much clearer when having a high level of administrative discretion, where one can exploit the rules and regulations even within the lawful power (Forsyth 1999). This can occur when discretion allows an exception to "swallow the rule" as Smith (2000, P.742) describes. What might exacerbate this, as discussed earlier, is the ambiguity of rules and conditions that can motivate one to interpret their decisions in a way that satisfies the private interest, as Osamah claimed. Indeed, more than one quarter of the participants confirmed that having *Wasta* with a responsible employee can assist the potential applicant for the LGP or the landowner to complete their procedures smoothly. Several examples were narrated by different interviewees.

One example is related to the argument of some interviewees that allocating land grants is subject to 'luck', where one element of such luck is related to those who have *Wasta* (for more details, see Section 6.2). One official (PMMRA3) asserted that one landowner tried to change the land-use from residential to commercial, where his land is located in a 28 metre wide street. He tried hard but could not, selling it to one who changed the use to commercial immediately. The official stated that this happened because he has some strong connections with individuals in the responsible institution. In support of this argument, the researcher noticed that only one landowner (Obaid) supported the White Land Fees and did not complain about any government institutions in terms of issuing planning permission. However, he later mentioned that he has *Wasta* with some employees, as quoted below.

> *"If the landowner has a good connection with the MMRA or the AM, gaining the planning permission normally takes three or four months. [He later added] praise be to Allah; all my matters go smoothly."*

(Obaid)

In favour of the above statement, a policymaker encountered some situations, where landowners seek to find an employee who they know to complete their requests, as he pointed out:

> *"Some landowners simply say: I have good connections, for example with the AM, and I can gain what I want from them under the table. Therefore, why shall I come to you. Some landowners say that they could take some particular exceptions not to meet rules and regulations precisely [...] and they say that explicitly."*

(PMH3)

While the above argument indicates that exploiting the rules and regulations can occur within the lawful power when there is a high level of administrative discretion, achieving the private interest can also happen with breaking some rules and regulations as an issue of corruption. For example, a few participants clarified how connections sometimes are based on money. A high-ranking position employee (PMMRA3) confirmed that some landowners attempt to bribe some employees in a clever way, by bypassing some official systems. He said he did not absolve all the employees, claiming that some of them "have bank accounts with millions".

One landowner (Loay) stated that he had not been given a planning permission for seven years, alleging that they are moving the goalposts "because they want me to pay … I do not want to say a bribe". In support of Loay's claim, the study findings show that forging titles of ownership can be due to such bribes. The main reason behind suspending Qiran area is forging of titles of ownership as it caused overlapping among rights (argued by PMJ, PMMRA, Raji and Osamah). The official interviewed in the MJ admitted collusion between judges and potential landowners, resulting in titles being forged, exploiting the manual system of land registration, as was outlined previously.

There are reports about some convicted judges who were officially dismissed (e.g. Al-Dawsari 2017). Another piece of proof, eight titles of ownership, with an area of around 352 million square metres, were suspended by an order from the minister of the MJ for

the same reason (e.g Arqaam 2017). The Control and Anti-Corruption Authority was founded in 2011 to fight corrupt practices (Nazaha 2019). A royal decree was made in 2019 to investigate cases related to financial corruption, including extra wealth a government employee might have if it does not harmonise with their income (SPA 2019).

This section explained the relation between discretion and ambiguity of rules and regulations, where the latter can become worse when the former is practiced greatly, especially at a centralised level. The section then examined how this relation between discretion and ambiguity of rules and regulations can lead to issues related to uncertainty and ethical concerns, which can delay land development. The following section will analyse how conflict of interest among the relevant government institutions also can impede developing land.

7.2.2 Conflict of interest

The study findings also illustrate a connection between a centralised system of governance and conflict of interest, although some evidence related to Singapore shows that a highly centralised government can be positive in eliminating the conflict of interest in the decision-making process (see Heng 2016). What differentiates Saudi Arabia from Singapore, based on the data analysis, is that the urban land development processes are not administrated by one single institution, but rather by various 'centralised' institutions, resulting in conflict of interest as well as poor collaboration and coordination among such institutions (e.g. see Xie and Costa 1993).

The process of completing the accreditation of land subdivision schemes, according to the PMH3, can be hindered by the requirement of 14 signatures from the relevant governmental actors, which make it more complicated. This is because, as claimed by a landowner, it is too challenging to deal with institutions that have parallel powers with dissimilar aims and abilities, hampering the process of developing land, especially as the essential services are controlled and managed by different institutions:

> *"If you want from me a thing, I might give it to you, but if you want a thing from*

my brothers, father, mother and uncles … it is out of my hands. I cannot control them, and everyone is free. This is exactly the problem with land or housing. The MH is connected with the other 14 or 15 different institutions. It is too difficult [for the MH] to control them all. It is too hard to rely on the MH while the land is managed by the MMRA, ownership titles *by the MJ, electricity by the Electricity Company, water by the National Water Company, schools by the Ministry of Education, mosques by the Ministry of Islamic Affairs [and so on]. Each institution has its own strategies and goals."*

(Omar)

It does not seem there are any mechanisms that try to promote some degree of policy coordination. This is because plans and projects do not have identified budgets, and each institution spends based on their annual budget, which varies from one year to another (explained by some policymakers and real estate agents). The second reason is, again, the rooted centralised governance, which has promoted the first reason, and at the same time restricted the vital role of local communities (see Section 6.4).

Conflict of interest can delay the granting of planning permission. This can be derived from the argument of one employee with a high-ranking position in the MMRA, that the affected landowners tend to blame them for any delays in planning permission, but in reality, other institutions are also involved, as he explained:

"Planning permission takes sometimes years but do not blame us for the others' mistakes. I mean the MJ, for example, takes a long time to reply to us about the validity of ownership titles [see Section 7.2.1]. We cannot grant permission without making sure that the title of ownership is valid. This delay is from the MJ, but unfortunately some landowners do not know this reality, and we sometimes show them [when they come and ask for updating] in the computer that the deal is stuck in the MJ."

(PMMRA3)

Interestingly, due to the various institutions responsible for land administration at the national level (centralisation), as stated by Lammah, they - as landowners - do not have a 'one-stop shop' to go to and follow through their applications, but one day they go to

the MMRA, and the other day to the MJ and so on, which imposes extra transaction costs and delays. The researcher, while waiting in the reception to interview an official (PAsM), noticed a landowner who had already applied for a building permit licence. The municipality then asked him for a letter showing that the Civil Defence had done the necessary procedures for health and safety.

However, the landowner was persuading the employee in the municipality that the Civil Defence refused to do the check process without an official letter from the municipality, where the latter's system does not provide a letter. When the researcher asked the employee, he said that a person responsible for the Civil Defence had recently been appointed and knew nothing about the system[49] (also see the example narrated in Section 5.2.3 about the exemption from the White Land Fees and how it is affected by the lack of collaboration and coordination between the relevant institutions). The lack of collaboration and coordination among the relevant institutions is highly likely to not only exacerbate the conflict of interest, but also cause employees to throw the responsibility on to another relevant institution, as one official stated:

> *"I know one developer [landowner], he spent three months only to find out the electricity office responsible for his land. Every time he went to an office they said: no you are in the wrong place, go to that office please, and in the other office they said exactly the same, until finally he found his feet."*

> (PNHSC)

This section demonstrated how conflict of interest can become more obvious when the land administration is shared between different centralised institutions, causing poor collaboration and coordination and delays in land development. Power struggles can also be associated with a highly centralised system, as discussed in the next part.

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[49] This employee only assumed that the person responsible for the Civil Defence knows nothing about the system. Meanwhile, the official responsible for the Civil Defence might have used his own discretion in dealing with such as these cases, which conflicts with the existing system in the municipality (for more details about discretion, see the preceding section).

7.2.3 A power struggle

The study findings also illustrate that power struggles can exist with a centralised system of governance, especially with a high level of discretion. Some interviewees, mostly the policymakers, asserted the existence of struggles around who takes the initiative of leadership among the government institutions with common interests. These struggles can happen when there are overlapping areas in responsibilities. Every institution relying on a royal decree or a decision from the Council of Ministers, wants to prove itself by taking over responsibilities. This, according to an official (PMMRA3), comes from how much the minister is powerful. Events of power struggle were narrated by a couple of policymakers (PMH2 and PMMRA4).

One significant example of such a struggle is related to the proposal for a land registration system. One policymaker (PMMRA2) explained that before 1986 the MMRA tried hard to persuade the MJ of the necessity of introducing a system for land registration. The MJ, however, refused the idea on the basis that their ownership titles are valid and there is no need. This was the case until the appointment of another minister for the MJ, who supported the idea, and established a committee consisting of a representative from each relevant institution. However, this idea was declined due to a struggle between two high-ranking position officials at the centralised level, as claimed by a policymaker who was a member of that committee:

> *"We contracted with some Australian, Swedish, Egyptian, Moroccan and Tunisian consultants who are instrumental in land registration. We used to meet once every two weeks, and these meetings lasted for two years [...]. We completed the work in 1988 and it was evaluated and all the representatives were persuaded of its future positive results [...]. It was submitted to the Supreme Judicial Council[50] and took years there. The minister [xxx mentioned his name] of the MJ went to them without benefit, though it is the concerned authority. The minister of the MMRA changed twice [xxx mentioned their names] and everyone went to persuade [xxx mentioned the name who refused the proposal in the Supreme Judicial Council] but also without positive*

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[50] It supervises the courts and judges, considers their affairs, and issues rules and regulations and relating to them (Unified National Platform 2021).

response. Every time he was ... like private or reserved not to give any information [...]. You know the minister of the MMRA was knocking his door every day just to approve the proposal, I am not exaggerating ... every day. Until he said ok he would send an official letter. When we received it, <u>it only included that the proposal has some defects</u> <u>without explaining what they are</u> [...]. In the end I knew why he was being a private person. <u>It was clear for us that there are some personal things and conflicts between him and [the minister of the MJ at that time as the latter was the chairman of the committee]</u>."

(PMMRA4) [<u>Emphasis added</u>]

The first above emphasised argument indicates the strong freedom of discretion; the official was able to take the decision of refusal without justifying or explaining his action (e.g. see Forsyth 1999). The researcher found out that the two officials in the second sentence emphasised above were peers of similar ages, which could be a kind of struggle between peers, especially as both have a very high-ranking position at the national level with some overlapping responsibilities. Regardless of the exact motive of such power struggle, it seems from the above quotation that it was an underlying cause behind not introducing the land registration system, an issue that has damaged the trust of titles and had a major role in hindering developing the influenced lands (for more details, see Sections 5.3.2 and 7.2.1).

Trust between the relevant actors is another issue that can be associated with a centralised system of governance, as outlined in the following section.

7.2.4 Diminishing trust between the relevant actors

A culture has developed, at least in the landowners' views, that the relevant institutions do not behave in a responsible manner; they do not operate in a way that matches their own values and interests (e.g. see Earle and Cvetkovich 1995; Offe 1999; Carmon 2010). This culture gave rise to approximately two thirds of the landowners of large land tracts showing a shortage of trust in the relevant institutions. Although most of these landowners cannot answer exactly why they do not trust such institutions, it appears from the data analysis that they attributed this lack of trust to the ambiguity of

rules and regulations, where decision-making heavily relies on discretion, which was already analysed in Section 7.2.1.

One landowner (Osamah) wondered why he must use very high-quality expensive water pipes in the infrastructure, whilst the government itself uses the cheapest pipes. Osamah later in the interview attributed the decisions that do not guarantee their rights/interests - as landowners- to the existence of grey areas in the rules and regulations, which can be too open to discretion and various interpretations. This implies that the 'crisis of trust' can go beyond to include those specialists in how they interpret the rules and regulations and how they employ their discretion in the right way (e.g. see Swain and Tait 2007).

Maybe the most common and obvious examples are those related to the Shrakat Programme, which was mentioned by many landowners, expressing their lack of trust. The study findings illustrate that the landowners are involved in the development process heavily but with a lack of experience, which could discourage them to take a decision for development easily (also see Kohlhepp 2012). Therefore, according to one official (PMH3), it seems that the government recently realised this fact and introduced the Shrakat Programme, which includes the 'know how'[51] to provide the necessary skills and experience absent in many landowners in developing their lands. However, the study findings show a severe lack of trust among most of the landowners in the relevant government institutions in general and the Shrakat Programme in particular.

Some landowners completely refused the idea of involving the government in their lands under Shrakat not only due to the lack of experience of the MH's employees that makes it questionable for landowners to accept the MH as a partner, but also because of the unclarity of systems that make landowners lose faith in the institutions' promises. One may infer from the citation below that Laith referred to the ambiguity of regulations as 'complicated regulations'.

> *"You want the government to be involved with me in a partnership! Am I crazy?*
> *They would bother me all the time. I am not safe from them and their*

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[51] This refers to the Shrakat programme. The 'know how' means that Shrakat programme can help the landowners with the construction process, especially as for those who do not have experience (MH 2020c).

complicated regulations while they are not a partner. Just imagine I allow them to be my partner in my land! […] There is no trust in them I mean.”

(Laith) [Emphasis in interview]

Again, as in Section 7.2, there is a connection between trust and having a centralised system. It is revealed by the study findings that trust diminishes in the presence of a highly centralised system, as communication with the public, through citizen participation in decision-making is vital in enhancing trust among the actors in the land market (e.g. see Stiglitz 1999; Rowe and Frewer 2005; Tenney et al. 2006; Florini 2007; Hollyer et al. 2011; Mukhopadhyay 2017), but would be too difficult when centralisation greatly prevails.

As only an illustration, it was explained in Section 6.4 how the white land fee collected go to the centralised institution (the MH), where it can be taken from a landowner in Riyadh, as an example, and spent on projects in different cities (confirmed by PMH1 and PNHSC). This action, according to Ahmed, is an obvious example of why the landowners feel they are totally ignored and away from some important matters related to the administration of development of their local context, and consequently they would not trust the relevant centralised institutions. Ahmed blamed this inefficient process of centralisation by maintaining that "the centralised institutions exercise the guardianship of managing the cities".

More importantly, the lack of trust among landowners in the government institutions can have disadvantageous impacts on the land market. This is because these institutions are not only responsible for introducing the rules and regulations but also for organising the market. Any conflicting or unclear systems here can, Raed argued, affect market organisation, and then trust in the market itself. According to Woro and Supriyanto (2013), the absence of a system of accountability in the government institutions can decrease trust. Interestingly, this absence of accountability, as the study findings demonstrated in Sections 6.4 and 7.2.1, happens due to marginalising the crucial role of the local administrations, local administrations are not blamed nor held accountable for not addressing any externalities related to the market and its organisation.

Having carefully analysed the participants' responses regarding their trust in the lettings

system, the researcher found that some landowners believe that the land market is not organised in a way that serves such lettings, where there is no institution responsible for addressing such externality. For instance, a couple of landowners (Loay and Labeeb) clarified that the system of rent does not guarantee them their rights from the tenants. When it becomes common in landowners' minds, whether from their experience or what they hear, that business in lettings contains an element of risk, they would try to avoid this activity, as demonstrated by one landowner:

> *"I know a landowner who built on his land for rent. Somebody rented it in whole [20 apartments] and they agreed on 500,000 Riyals payable annually. The problem here [...] the real estate agent is careless ... I mean he did not take full information and details of the landlord and the tenant and make sure they are valid [...] and that is what I mean there is no organisation [in the rental market]. Anyway, what happened is that the tenant rented the 20 apartments to different individuals. Let us say the apartment is worth 30,000 Riyals per year [600,000 Riyals in total], he tricked the tenants by offering a cheaper price if they paid for two years in advance. I think he offered 45,000 Riyals for the two years [900,000 Riyals in total]. (He laughed in surprise and then said) he simply collected the sum of 300,000 and disappeared! No one knows where he is. Believe it or not, that is what happened! [...]"*

> Researcher: "What a strange story! Ok, have you not heard of Ejar[52]? It is a new programme by the MH."

> Interviewee: *"I have heard of it and I hope it focuses on faults like this. To be honest with you, landowners hate the business in lettings because (pauses) you know, personally I feel I am worried with it and the regulations do not support landlords."*

> (Labeeb)

Finally, Section 7.2 (interpretive positions caused by the centralised system) investigated the possible correlations between a highly centralised system and issues

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[52] An Arabic word meaning 'rent'. It is a new programme run by the MH that aims to organise the leasing process between the parties (tenant, landlord and real estate broker). One of its services is to conclude unified tenancy contracts online and under the supervision of some ministries for the purpose of increasing trust in rent.

related to discretion and ambiguity of rules and regulations in the government procedures, conflict of interest, power struggle, and diminishing trust between the relevant actors. Although the study findings above, show how the land market can be influenced when these different elements prevail (further discussed in the following chapter), the land market is also influenced by the individual decisions of the end-users of land.

7.3 Individual decisions related to the site selection process and the sociocultural matters

This section is combined with Section 7.2 as both of them are related to interpretive positions, with the sociocultural factor playing a major role. It was analysed under Section 7.2 how the four interpretive positions have a hand in affecting the land market and its development negatively in a way that can impede the development of white land. These interpretive positions can be strongly influenced by discretion, which is subject to the sociocultural factor of the relevant actors (i.e. the relevant government institutions). This section, similarly, will examine the impact of a different group of actors (i.e. landowners, especially the end-users) on the development of white land, based on their different interpretations and views related to the social element.

7.3.1 Social relations and locating housing

Social relations among Saudi society tend to be strong, where the tribe, family, and friendship have significant meaning in their lives (e.g. see Al-Faleh 1987; Alsaeeri 1993; Lutfiyya and Churchill 2012; Dickson 2015). Some interviewees demonstrated how such non-financial factors (i.e. social relations) can influence people in determining where to live. It was thought that the demographic aspect, specifically the type of ethnicity prevalent in the neighbourhood, is an influential factor in choosing housing. As Riyadh is a cosmopolitan city, ethnicity here can refer to those from the same region or city. Though various examples were given, one real estate agent, who seems interested and has experience in this influential factor (i.e. ethnicity), narrated his family's experience in moving to several houses:

"Another example, we used to live in Al-Shemaysi then we moved to Al-Sharafeyah. After that we moved to Al-Muhammedia, and from the Al-Muhammedia to Al-Malqa [all are neighbourhoods in Riyadh]. We are moving to the north [where the Al-Shemaysi is located near the city centre and the Al-Malqa is further to the north] [...]. In the past [when they were living in the Al-Muhammedia], who were our neighbours? All of them are from Najd[53], and people who are elegant ummm traders and have money, such as [xxx he named some families] [...]. What happened is that the Al-Muhammedia became to be old and people started selling their houses [...]. Some foreign population during that period started moving to the Al-Muhammedia. With the passage of time, the Al-Muhammedia became popular with foreign population [...] and the value of it decreased. The Saudis [the second class of Najdi families] do not want foreign families to be their neighbours, and therefore they started moving as well. Do you understand me? That is why there are areas [in Riyadh] that are popular with only Sudanese, Yamanis, Pakistanis [and so on]."

(Rayyan) [Emphasis added]

Distinct pieces of information can be derived from the above statement. First, the type of neighbour can be a key element in selecting residential location. As social relations have a priority here, Saudis are often keen on knowing their neighbours before buying land. The reason is not related to a racist attitude but, according to an official (PRCRC), because such people would interact with their surroundings, and thus it is normal that one searches for those with whom one has a lot in common. A landowner of a small plot (Ebrahim) mentioned a popular idiom that 'the neighbour comes before the home[54]'. Secondly, people often are mobile, which is confirmed by other participants (PMMRA4, PRCRC, Rakan, Rami and Elias).

One reason for such mobility can be to follow original residents who moved to newer areas. It is worth considering that the main motivation behind the original residents moving to newer areas could be the decay of older areas due to the poor-quality of buildings, as analysed in Section 6.2.1. Therefore, it is highly likely that Rayyan meant

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[53] A geographic region in a central location in Saudi Arabia, with a population who represent approximately one third of the total population in the nation (Riedel 2001).
[54] It means that one should choose their neighbours before choosing the home.

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by "the Al-Muhammedia became to be old" in the sentence emphasised above, 'poor-quality' instead of 'durability' of Al-Muhammedia.

The third point is related to what Rayyan may mean by saying "people who are elegant". This can indicate that high-income families can substitute for the selection of a certain social fabric. While ethnicity might have played a more noticeable role in the past, the wealthy class can be more influential now, contributing to social exclusion (for more about social exclusion, see McFarlane 2010; Madanipour 2011). Social exclusion can occur by using the density element to try and promote specific income demographics. For instance, establishing minimum plot sizes, based on the study findings, can be an indirect way of achieving exclusion (e.g. see by Zabel and Dalton 2011). Indeed, subdividing larger plot areas can ensure richer people who can be 'elegant', with preference for selecting the same ethnicity:

> "In some neighbourhoods they [the residents] want specific people but they do not categorise them by names or regions. What they do is to subdivide the land into plot areas with no minimum than 1000 m^2, and they stipulate to the potential buyer not to further subdivide it [...]. Therefore, anyone who buys it must be rich as it costs maybe 3 million Riyals without building. In this case, the residents ensure that no one would pay such a huge amount of money unless they are a high-income class person."
>
> (Rakan) [Emphasis added]

Again, one can deduce from the argument emphasised above that Riyadh is a cosmopolitan city, with population coming from different regions and tribes. The high-income class, thus, might subdivide large plot areas to achieve their objectives of ensuring neighbours with whom they would interact better. It is important to mention here that Riyadh mainly expands from one direction to the north, as discussed in Section 4.3 (see RCRC 1997b; RCRC 2003). This means that the residents mostly have only one direction for further development, which is apparently consumed by the higher income class, where other groups may not afford bidding and be excluded. That is why some interviewees believe that a lot of prestige is attached to owning a house in the north (e.g. Ahmed, Elias, Ehab, Raed, Raji and PAsM). As the higher income class

often takes advantage of newer areas in the north, this can be one explanation why such areas are sometimes much more expensive, by square metre, than areas closer to the city centre, which was explained in Section 4.3[55].

Besides the role of relatives and/or class in determining where to live, the role of the close family, specifically parents and children, can be much more evident and crucial, as is explained in the next part.

Family ties

The hefty majority of participants attributed the existence of small undeveloped plots to the role of social relations, particularly family ties. Small plots could be subject to social aspects more than large lands, specifically 1) to secure the land to live next to their parents, where there is a strong dutifulness towards them (e.g. see Asgari et al. 2012; Arifin and Chiroma 2014; Rassool and Sange 2014), or 2) to secure such land for their children to live next to them in the future.

The choice of location that is near to parents can be first in the list of priorities. Many participants emphasised the importance of this at the expense of other reasons to opt for a residential location, such as the journey to work (e.g. see Wingo 1961, cited in Ayeni 2017). Interestingly, all the landowners of small plots were unanimous in this principle. Ebrahim does not take the journey to work into consideration, and he believes that choosing a location to live depends only on the location of his mother's home, as stated below.

> *"My work is in As-Suwaidi [to the south of Riyadh] and impossible, very impossible even if you give me gold that weighs my weight[56], I would not live there [...]. If I lived there, I would feel I am far from people ... I do not know why ... I would not feel I would settle in. My house now is close to my mother; I visit her every day. Imagine I was far, I would not be able to see her daily. Now*

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[55] In Section 4.3, the researcher analysed and calculated the percentage of white land in different areas, and showed the prices of land according to: Al-Hayeer Municipality 2018; AM 2018b; Al-Maather Municipality 2018; Al-Malaz Municipality 2018; Al-Naseem Municipality 2018; Al-Shimaisi Municipality 2018; AL-Sulai Municipality 2018; JLL 2018; RCRC 2019.

[56] An idiom which means that there is no way I would do a particular thing even if you encourage me by giving me valuable things.

I see her every day in the evening, and also my children go to her. Allah be praised! It is a blessing to have your home next to your parents. This is important."

(Ebrahim) [Emphasis in interview]

Similarly, Elias has two plots, one is in the north and the other is to the east of Riyadh. His preference is to live in the north. However, his uncertainty in what to build lies in the fact that his mother lives in the east and she would like him to live next to her. He said:

"My mother's wish is that I build the one in the east, and I want to obey her and follow her wish."

(Elias)

Securing land for children can also be another significant reason for withholding small plots, as discussed by some interviewees. Due to the difficulty of life in terms of affording a plot for housing, some plots can be withheld as an individual initiative to guarantee land for future generations. One official assumed that some pieces of land remain undeveloped only because parents attempt to secure land for their children's future, as he thought:

"The matter of children has a role [behind withholding land]. I will give you an example, there are neighbourhoods that were constructed a long time ago, but they still include some vacant plots. If you carry out a study and ask the residents there, you would find most of them [i.e. the vacant plots] are owned by those who already live in such areas themselves. One may have two plots, they built one and left the other to their children. They [the residents] would say they saw disasters when they paid nothing for their plots, and now the prices are unaffordable ... I mean they would think to secure the land to their children because they would not be able to buy land easily in these days."

(PMH1)

In support of this, some responses of small plots' owners are compatible with the above argument. Eissa argued that the central reason for buying three plots is to live in one and

secure two for his children, who were -and still are- too young to be independent. The motivation behind securing such plots stems from the fact that 1) land is fixed in location that adds preference for such plots in particular as he wants his children to be close to him (e.g. see Doebele 1987; Hui 2012), and 2) land is fixed in supply which can increase land prices with any increases in demand (e.g. Doebele 1987; Evans 1999; Harvey and Jowsey 2004), and hence he does not want his children to encounter any difficulties with securing land, as he clarified:

> *"I do not want my children to face any problems with finding and buying land … or they go to live in a remote area. I want them next to me. To be honest, I want them to be comfortable, because I -myself- suffered from the issue of finding land as my father did not expect that the prices of land would increase rapidly […] so he did not secure land for us [he and his siblings]. It was not easy to buy land and then save money again for building. Therefore, I learnt from the lesson and secured land for my children, so they can only think about the cost of building."*

<div align="right">(Eissa)</div>

7.4 Summary

This chapter covered some interpretive positions that are brought about by the existence of a high level of centralisation, particularly discretion and what can cause ambiguity of rules and regulations, power struggle, conflict of interest, and diminishing trust between the relevant actors. Centralised institutions enjoy a high level of discretion and can change with the change of the officials (e.g. the minister), and this can consequently make the interpretation and understanding of employees greatly vary. What may exacerbate the situation can be attributed to poor communication between employees at the local level and those who take decisions based on discretion (e.g. see Halushchak and Halushchak 2015).

Although discretion can be acceptable, it was demonstrated that depending on it heavily at the centralised level can create long delays in granting planning permission. This type of discretion can also increase the uncertainty because the rules and regulations are

unstable, negatively affecting the process of organising the market, leading landowners to withhold their land until the image becomes clearer (e.g. see Ohls and Pines 1975; Titman 1985; Neutze 1987).

More significantly, it was revealed that the poor land registration system influences market reliability, causing many legal issues while the affected lands are held from development until issues are resolved in court. Interestingly, as was outlined in this chapter, one underlying reason behind not introducing an efficient system for land registration returns to a struggle for power between the government officials at the centralised level, where the discretion of one hindered approving this vital system without justifying his opinion, reflecting the strong freedom of discretion (e.g. see Forsyth 1999) (Section 7.2.3).

Furthermore, too much discretion can be a fertile ground for exploiting situations simply by interpreting the relevant rules and regulations to serve one's private interest. As the discretion can vary from person to person (e.g. see Claydon 1998; Forsyth 1999; Kwok et al. 2018), some officials/employees can take advantage to satisfy a sociocultural value, for example through *Wasta*. Although this private interest (i.e. *Wasta*) can be achieved within the lawful power (Forsyth 1999) by "swallow the rule" (Smith 2000, P. 742), ethical concerns were shown (e.g. bribery and forgery of some ownership titles) (see Section 7.2.1).

This chapter also exposed that having various 'centralised' institutions involved in land administration can evoke the conflict of interest, unlike Singapore that has one centralised institution (see Heng 2016). It was found that this conflict of interest can become worse as these institutions construct projects based on their annually assigned budget, which can have dramatic effects on completing the infrastructure in full, and hence the area cannot be used. Thus, this conflict of interest is strongly associated with having poor collaboration and coordination among the relevant institutions (e.g. see Xie and Costa 1993). This situation can slow the granting of planning permission, especially as there is no 'one-stop shop' for landowners (some situations were explained in Section 7.2.2.

Additionally, as was analysed in Section 7.2.4, there can also be a strong association

between having a high level of centralisation and the lack of trust between the relevant government institutions and landowners, where the latter tend to feel that the government institutions do not operate in a way that matches their own values and interests (e.g. see Earle and Cvetkovich 1995; Offe 1999), especially as they are away from the participation process in the decision-making (for more details about the importance of citizen participation, see Stiglitz 1999; Rowe and Frewer 2005; Tenney et al. 2006; Florini 2007; Hollyer et al. 2011; Mukhopadhyay 2017). Likewise, it was found that this 'crisis of trust' is largely because of the ambiguity of rules and regulations, which are drawn by those who may not employ their discretion in the right way (e.g. see Swain and Tait 2007).

It appears that there is a huge gap between the landowners and those who take decisions, which can decrease trust. This diminishing trust, as was shown in Section 7.2.4, can dramatically affect acceptance of ideas and initiatives provided by government institutions, such as the Shrakat Programme. Thus, a general rejection of the government initiatives and a lack of trust can dramatically damage the land market, at least in terms of not developing many white lands, as was demonstrated in this chapter.

The study findings disclosed that social relations have a substantial role in determining the location of one's residential plot. Many families tend to be both keen on knowing their potential neighbours and mobile following neighbours who moved to a newer area. It was also found that the class based on ethnicity can sometimes be substituted by the class of the high-income families. Consequently, and based on the nature of urban expansion (north), many of the modern areas are consumed by one particular type of people, especially by applying minimum plot sizes (e.g. see by Zabel and Dalton 2011), resulting in social exclusion (McFarlane 2010; Madanipour 2011).

Finally, the data analysis showed a greater emphasis on the close family, specifically parents and children, where many plots can be left undeveloped for this purpose (saving land for future generations). Thus, the choice of residential sites does not seem to consider the aspects related to the location theory, such as the journey to work (see Wingo 1961), nor age, number of children, and travel time to facilities (see Harvey &

Jowsey 2004). Rather, it fundamentally depends on social aspects related to family ties.

The following chapter will discuss and compare all the empirical findings with the literature review in more detail.

CHAPTER 8 :   Discussion of the study findings

8.1   Introduction

This chapter will discuss and compare the study findings in the previous three chapters, including the contributions that emerge, with the review of literature. Discussing the empirical findings is to address the research question (i.e. what explains the existence of a large proportion of white land in the Arab Gulf cities?). To methodically fit the findings in to broader patterns and relationships, the researcher opted for two main categories to discuss the study findings. These two categories represent the three main objectives of the study (see Section 1.3).

The first category covers the first study objective; the potential challenges and obstacles causing white land. While the obstacles here normally include causes that are out of landowners' control (e.g. a problem in the ownership title), the challenges refer to the causes that do not legally (officially) prevent them developing their land but development might not be the right decision due to market failure aspects (e.g. uncertainty). The second category reflects the second study objective; the potential opportunities causing white land, which normally include causes derived from the landowners' will. The third study objective (i.e. to contribute to theory on non-market factors affecting urban land development) will extend throughout the two categories discussed below (Section 8.2 and 8.3). Additionally, each category (section) will include the relevant discussion, whether related to the first, second or third chapter of the empirical findings (sociocultural, economic and/or political). Thus, the research question is answered by discussing the empirical findings under the following two main sections.

8.2   Potential challenges and obstacles causing white land

One of the most significant empirical contributions in this thesis lies in the exploration of non-market factors as key in failure to develop white land. The literature review -

Section 2.3- showed very high significance of market in allocating land, especially in Western contexts (e.g. see Wendt 1957; Wheaton 1977; Wilson and Schulz 1978; Kivell 2002; Harvey and Jowsey 2004; Kennedy 2009; Cheshire et al. 2014; Kabba and Li 2011; Ayeni 2017). Nevertheless, this significance seems secondary in the Saudi context, where the power of the government intervention can dominate. One influential form of this dominance lies, as was analysed in Section 6.2, in the intervention in granting land without market-based considerations.

Indeed, this intervention in the market through granting land has contributed to the proliferation of white land in four different directions, one of which can be categorised as an opportunity, discussed later in Section 8.3 (the allocation of land through granting was the first important attempt at government intervention in the market, and thus it had different influences on what has been applied later, but surely the influences of what has been applied are not solely limited to granting). The other three directions centre around 1) defining the UGB, 2) the centralised system of governance and the failure to develop land, and 3) infrastructure responsibility and economic challenges, as follows.

First: defining the UGB.

The literature review reveals that location theory can interpret and shape the logic behind how the UGB is defined, where the process of bidding on urban sites diminishes, moving outwards until it is substituted by the rural areas (e.g. see Wheaton 1977; Alonso 1964, cited in Balchin et al. 1995). It seems clear that such established models of behaviours for market actors fail to effectively describe how actors in the different culture (i.e. Riyadh) behave, where the study showed completely incompatible findings. As analysed in Section 6.3.1, defining the UGB was influenced by several aspects, the most important land granting, indicating that the UGB was not essentially defined based on market factors. For example, the UGB was extended largely to include the unbridled sprawling municipal grants. The data analysis found that such powerful landowners put pressure on the MMRA to include their land within a specific UGB phase. This suggests there is a strong possibility that defining the UGB's phases is affected by this type of non-market force.

As a result, it appears clear that legislation and planning in the government institutions

can be impacted by non-market forces. Policymakers in these government institutions (i.e. the MMRA) deal with such forces by using discretion in a way that suits the situations they encounter, and respond naturally built on their own culture (for more details about attributing discretion to culture, see Claydon 1998; Kwok et al. 2018). Interestingly, it seems that the discretion here reflected the thought that motivated the MMRA to take a crucial decision to protect the UGB from external forces. This decision interprets the main reason behind allowing the development to take place in the UL2 before its official start in 1995, on the condition that the landowner provides the basic infrastructure.

The original idea of the decision was not to imitate the strategies in many nations by adding infrastructure costs to the end-user through taxes or impact fees (it happened unintentionally) (e.g. Burge et al. 2013; Coutts et al. 2015; Jiang and Swallow 2017). Rather, based on the study findings, the UGB was intended mainly to control unfettered growth (e.g. see Healey 1998; Brueckner 2000; Dutta 2012; Halleux et al. 2012; Ewing et al. 2014). The interesting finding here is that the decision (those who want to develop in the UL2 before 1995 must provide infrastructure) was to ensure legal protection for the UGB against forces that may negatively affect its application in the built environment. The MMRA took this decision as a seemingly clever way to make development too difficult for the powerful landowners, expecting this would discourage them from developing in the UL2 (see Section 6.3.1).

Surprisingly, the idea of delivering infrastructure and bearing its cost was accepted by a few landowners, resulting in 'leapfrog' in development, causing urban sprawl (for more details about leapfrog in development, see Balchin et al. 1995; Bhatta 2010; Fischel 2015). While the existing literature has attributed this leapfrog to some market forces such as fast demand in front of slow supply (e.g. Markusen and Scheffman 1978), this study has clearly attributed leapfrog to influential government decisions and the role of the discretionary domain in treating local issues, such as the motivation behind shifting the responsibility for infrastructure. It is highly likely that this action can explain why 170 km^2 of lands in the UL2 were granted planning permission before 1995 (RCRC 1977a) while a large proportion of white land is still available in the UL1 (RCRC 1977a).

Amati and Taylor (2010) believe that the effectiveness of the UGB is subject to location and nation, where the UGB in Riyadh is not an ideal example (see Section 6.3.1). This is mostly, as argued in this section and depicted in Figure 24, because the government did not directly intervene to define the UGB to address market failure, taking market-based factors into consideration. Rather, intervention focused too much on allocating land through granting, and defining the UGB was heavily influenced by the process of granting land and the issues stemming from it (e.g. private interest of powerful landowners), as well as the discretionary decisions as a proactive reaction to the anticipated impacts of private interest (i.e. allowing the development in UL2 on condition of providing infrastructure). Consequently, it can be argued there is a strong possibility that the UGB has, to a certain degree, contributed to leapfrog in development, and hence to increasing the white land percentage. This is because it was dramatically influenced by the process of allocating land, which has minimised success (Figure 24).

Accordingly, the type of failure above can be related to the strategy of preparing appropriate plans that suit the factors embedded in the local context (compared with the rational comprehensive theory in Section 2.6.1). The existence of white land also lies in the uncertainty caused by the above discretionary decision, which will be discussed later in the following part.

Figure 24: The connections between the government intervention and white land
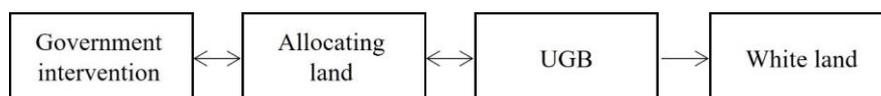
Second: the centralised system of governance and the failure to develop land.

The market is secondary in the Saudi context, where the power of the state has oriented the market through allocating land. The findings from this viewpoint emphasise how a failure to develop land is caused by a system that is more centralised, indicating a possible relation between strong intervention in allocating land and a highly centralised

system. Therefore, dissimilar findings in this study have been exposed compared with countries that apply decentralisation or devolution (e.g. see Halushchak and Halushchak 2015). The review of the literature clarifies connections between the features of land market, which often consider market forces (see Section 2.4), and the performance of the market by its actors.

However, it can be argued that having a highly centralised system in managing land markets can be a key element that can dominate and affect market performance. The centralisation process in granting planning permission can noticeably influence the performance of the land market by impeding its development, where the actors (i.e. landowners) can do nothing except wait (see Section 6.4). This suggests that having a more centralised system can bring about higher transaction costs, as it is strongly associated with delays in planning permission, which can be alleviated by the devolution of some tasks and responsibilities to local governments (e.g. see Alexander 2001b).

It is well known that sluggishness in supply in front of increase in demand can even happen in countries that take market forces into consideration (see Balchin et al. 1995). This suggests that the highly centralised system can make the supply much more sluggish, which partly explains the proliferation of white land (and why Etmam has not shown a great success as a centralised initiative, see Section 6.4). There is evidence from China demonstrating a possible association between both the centralised system and market failure, which can cause a lack of housing and transport facilities, as well as the centralised system and conflict of interest, which can cause a lack of collaboration and coordination among institutions (e.g. see Xie and Costa 1993). This study revealed some similar findings, but in terms of how conflict of interest at the centralised level can play indirectly on the existence of white land.

Several examples narrate the above argument, including how having two different bodies for granting land has resulted in unfettered and non-organised development, neglecting the local administration role in land allocation (see Section 6.2). Maybe worse, as was investigated in Section 7.2.2, land administration tasks are shared by different national institutions, where the distribution of budgets goes to the national not

local administration. Funding the centralised institutions can delay developing land owing to the conflicting aims or the disparity in financial capabilities among such institutions[57], which was not explained by Xie and Costa (1993). This can create imbalance in meeting local imperatives (see Section 6.4). Similarly, due to having several responsible institutions, there is no 'one-stop shop' for landowners to follow their applications, one underlying interpretation for why the process of granting planning permission sometimes fails, leaving land undeveloped for a longer time.

It is true that the literature reveals some evidence that applying the centralised system can give rise to some promising results, such as Singapore (see Heng 2016). Nevertheless, what differentiates between the situation in Singapore and Saudi Arabia is that the latter has involved several national institutions in the process of land administration (e.g. the MMRA, the MH, the MJ, the REDF etc.). This suggests that, perhaps countries small in area and population, such as Singapore, can more effectively apply the centralised system by having one core body for administrating land, it was not too difficult for Singapore to control and implement the Land Acquisition Act, which facilitated their goals (see Section 2.6.2.1). It is most likely that this effectiveness does not happen in large nations, implying a better use for decentralisation. In 2020, For example, Riyadh (as a city), with more than seven million people (Macrotrends 2021), is larger than Singapore (as a country), which has less than 6 million (Worldmeter 2021).

This study has gone beyond the potential connection between conflict of interest and centralisation, which was mentioned by Xie and Costa (1993), to explore further influential interpretations associated with the centralised system. They include discretion, power struggles and trust matters, which will further be discussed in the following part.

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[57] It seems that the Saudi government has recently realised the need to minimise the number of government institutions responsible for land development. For example, a royal decree (decision number 322) was announced very recently, on 24 January 2021, to combine the MH with the MMRA (though the process is still centralised) (SPA 2021).

Discretion at the centralised level

Addressing market failure such as imperfect information is the main justification for government intervention (e.g. Lee 1981; Klosterman 1985; Dawkins 2000; Alexander 2001a; Staley 2001; Cunningham 2006; Alexander 2008; Kim 2011; Jones 2014). Decreasing uncertainty about future prices can give rise not to delay the development, and one role of government intervention is to ensure this (e.g. see Titman 1985). This research provides different insights into where government intervention can cause this uncertainty. The main cause, based on the data analysis in Section 7.2.1, lies in exercising discretion heavily at the centralised level, marginalising the role of local governments in a way that generates ambiguity in the rules and regulations.

For example, as explained earlier in the first point (i.e. defining the UGB), the rationale behind the removal of government-funded infrastructure subsidies for UL2 was based on discretion at the centralised level to protect the UGB from influences by the powerful grantees. However, The MMRA decision was too open to different expectations and interpretations as to whether the government would cover the infrastructure costs in the UL2 after 1995 or not. Similar to the argument of Mills (1981) and Neutze (1987), this led landowners both in UL1 and the UL2 to be uncertain of the right decision - whether it is more profitable that they provide infrastructure or wait until the government does, especially as providing infrastructure in the UL1 is not obligatory for the government; it is subject to its financial capability. Thus, this type of intervention can explain why some landowners developed their lands while others did not, increasing the spots of white land.

The ambiguous decision taken by the MMRA shows that centralised decisions tend to be more generalised and broader to both fit many local contexts and give the decisionmakers future opportunities to evaluate the situation, without considering the small (but important) details. That appears the case when the MMRA stopped bearing infrastructure costs as costs were accepted by some landowners. This means that the 'rational actors' model is not only used by landowners (e.g. see Healey 1991; Ball 1998; Ross 2016; Cronje 2018), but also by the centralised government through considering how planning ideas are accepted by the public (dissimilar to the bottom-up approach of citizen participation (see Stiglitz 1999; Tenney et al. 2006; Florini 2007; Hollyer et al.

2011)).

Extreme use of discretion at the centralised level can obfuscate rules and regulations, having detrimental consequences for the understanding and performance of the employees, who deal with landowners. This means, based on the data analysis, that the rules and regulations regarding urban planning and development are both too open for interpretations and change constantly (e.g. owing to the change of the top officials). This can leave a lot of grey areas and negatively affect the employees' performance, especially in the local governments, with given procedures (some examples are narrated in Section 7.2.1 where landowners encounter conflicting decisions).

Although discretion can be an acceptable part in dealing with a specific situation with lack of rules or when there is a gap in the system (e.g. see Forsyth 1999; Kwok et al. 2018), it can be inferred from the discussion above that having a highly centralised system can itself obfuscate such rules and increase gaps in the system. This argument can be comparable with why Halushchak and Halushchak (2015) support the idea of decentralising the process of governance to avoid the detrimental consequences related to the employees understanding and performance. This suggests that the planning failure can sometimes be connected with having a more centralised system of governance due to its impact on limiting participation between the stakeholders (see Kenitzer 2016).

There is some evidence that the actors' sociocultural factor can produce discretion (e.g. see Claydon 1998; Kwok et al. 2018). Interestingly, this study found strong relations between them, in a way that indicates that societies which accept the culture of *Wasta*[58] may not be suitable for applying a governance system that entails a high level of discretion (i.e. the centralised system) (for more details about *Wasta* see Smith et al. 2012; Al-Khalifa et al. 2015).

The literature clarified some disadvantages related to discretion, including unfairness (e.g. discretion not used in the same way) and the exploitation of rules and regulations by one's own decisions (e.g. see Pynoos 1986; Forsyth 1999). The study found a significant point - that the culture of *Wasta* can far more exacerbate the unfairness and

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[58] "A process whereby one may achieve goals through links with key persons" (Smith et al. 2012, p. 3).

the exploitation of rules and regulations, and thus the high discretion at the centralised level can provides a fertile ground, as it leaves a lot of grey areas. For example, proceeding a landowner's request smoothly, allocating one a good plot location, and so on. Again, this suggests that societies that consider *Wasta* acceptable may be better suited, and public interest better served, by a model that is more specific and detailed to reduce the attempts for exploiting discretion.

Given the above, the sociocultural factor that often orients discretion can be misused by interpreting the rules and regulations in a way that satisfies some private (and social) interests, mainly through *Wasta* that can "swallow the rule" (compare with Smith 2000, P.742). It can also be argued that *Wasta* can lead to unfair treatment of the public, especially when used in allocating land. This is because it can be counter to the best distribution of limited resources (i.e. economic efficiency), when every individual has the choice to bid based on market forces (e.g. see Harvey and Jowsey 2004).Therefore, while McFarlane (2010) clarifies how social exclusion can occur based on some characteristics such as gender, financial level, religion, national origin, class or race, this study provides distinct insights into how *Wasta* can be a similar characteristic of the social exclusion; it provides some individuals with advantages because of the personal connections, excluding others.

Discretion and related issues (e.g. *Wasta* and ambiguous rules and regulations), can have a strong relation with trust issues. Despite the significance of maintaining trust between the public and government institutions (e.g. see Kumar and Paddison 2000; Molm et al. 2000), the literature review reveals some general arguments, for instance it attributes 'crisis of trust' to competing interests that do not have one certain set of rules or one right answer in planning (e.g. Tait and Hansen 2013) While this argument can justify the use of discretion, further evidence shows that trust can decline owing to the emergence of both pluralism (i.e. doubts about the response to an increasingly heterogeneous society) and liberalism (i.e. how specialists are trusted to employ their expertise in the right way) (e.g. Swain and Tait 2007). Nevertheless, this study explored enormous impacts of having a centralised system of governance on diminishing trust.

It seems this is the case because the gap between the landowners and those who take

decisions for their lands is too large, landowners themselves realise that even the employees in local government are also removed from the process of taking decisions. This diminishing trust can occur because these landowners feel that the centralised government institutions do not operate in a way that matches their own values and interests (compare with Earle and Cvetkovich 1995; Offe 1999), and doubts whether those who exercise discretion in the centralised institutions employ their expertise in the right way (e.g. see Swain and Tait 2007). Ahmed stated in Section 7.2.4, that "the centralised institutions exercise the guardianship of managing the cities". One interesting finding is that this diminishing trust can have damaging results on the performance of land market by refusing centralised initiatives that try to tackle market failure.

The study findings illustrated that the Shrakat programme does not show success as none of the landowners interviewed decided to be involved, though it provides them with a free-interest loan (see Section 7.2.4). One reason for refusing, connected with trust, lies in neglecting the considerations related to the market forces, which conflicts with what Goodchild and Munton (1985) demonstrate, that maximising profit is the aim of developers. Some feel this programme can be unfair for them as it identifies the range of the residential units' prices, regardless of the expense of the site is (see Section 5.3.2). This implies that the rules and regulations related to Shrakat are formulated in isolation from the forces of demand and supply at the local level. This action can totally differ from some published studies that call for the importance of the highest bidder, ending with a high possibility for damaging the price system as stated by Wheaton (1977).

Most of these centralised initiatives are seen as irrational as they do not consider the heterogeneity of land, where the quality varies between locations (Harvey and Jowsey 2004). Rather, they focus on addressing development issues based on a centralised discretion that is more likely to create general and broad views without carefully considering the small details related to the heterogeneous features of locations and the organisation of the market, which can provoke uncertainty. Therefore, the connection between a highly centralised system and the diminishing trust of the public (i.e. landowners) in those who take the decisions seems apparent, which can damage land

market performance.

Many scholars emphasise the importance of enhancing trust through accountability and transparency (e.g. citizen participation) to improve the urban planning and development (e.g. see Stiglitz 1999; Tenney et al. 2006; Florini 2007; Hollyer et al. 2011; Mukhopadhyay 2017; Polívka and Reicher 2019; World Economic Forum 2019). However, one underlying point shown by this study is that, as the local governments are marginalised and have little role in land administration (e.g. financial resources are not assigned directly to the governments for projects), the centralised government found it unreasonable to hold local governments accountable for not tackling the potential externalities, which has broken trust in both the government institutions and more importantly the market.

One major issue that greatly harmed the market is the existence of a poor land registration system, which seriously affected trust in ownership titles. This fault was exploited by some employees to commit corrupt acts such as forging titles (e.g. see e.g. Al-Dawsari 2017; Arqaam 2017). This implies that land registration system issues can be an integral part of the discussion of the literature about imperfect information and its negative impacts on markets, though it does not seem that the literature has covered this under the theme of imperfect information (e.g. see Akerlof 1970; Klosterman 1985; Cohen and Winn 2007). Interestingly, not previously discussed, this research found that the major cause behind not introducing the land registration system during the 1980s refers to, again, having a centralised governance, where those who have similar government positions at the centralised level can sometimes exploit their discretion to prove their power (i.e. power struggle).

What led to the situation, as can be deduced from Forsyth's (1999) argument, is the strong freedom of discretion; the official was able to decide against the registration system without a need to justify or explain his action (see Sections 7.2.1 and 7.2.3). This struggle affected trust in ownership titles, and hence the market and the process of development. This affected funding of landowners by banks as they do not tend to take the risk by mortgaging land if they have doubts about the validity of landownership titles, a situation that is asserted in the literature (e.g. see Hanstad 1997; Feder and

Nishio 1998; De Soto and Kennedy 2000). Many white lands remain undeveloped for many years due to overlapping in lands; some landowners cannot obtain a loan from the bank to develop, and more seriously the issue causes conflict between landowners and needs to be resolved in the court.

The data illustrated that sometimes the land goes to the inheritors before this problem (and others such as those related to delaying granting planning permission) is resolved. In Islam one cannot write a will to pass their inheritance to some of their children and deprive some, all must benefit (for more details, see Bowen 2003; Muhammad 2012; Akkila 2015). This suggests that all the inheritors become equal decisionmakers, leading to further potential delays from conflicting views.

To summarise, a failure to develop white land can be attributed strongly to uncertainty. Although such uncertainty can be a source of market failure as reviewed by the literature (see Section 2.6.1.2), the study found that it can be brought about by both ambiguity of government rules and regulations and the lack of market organisation (Figure 25). More significantly, a novelty of this study lies in the complex issues causing this ambiguity, as depicted in Figure 25. To illustrate, the high level of centralisation in land administration, particularly exercising discretion intensively at the centralised level, can be the keystone of obfuscating the rules and regulations.

This is not only because the centralised system can be connected with some issues that can negatively influence the land market and its development (e.g. conflict of interest, a power struggle, and diminishing trust), but also because the underlying impacts of some sociocultural aspects on the process of discretion, such as *Wasta* and local conditions that motivate the relevant actors (e.g. officials) to behave in certain ways in the decision-making processes (Figure 25). Finally, the freedom of discretion can lead to corruption. This implies that the ambiguity of rules and regulations, which is mainly caused by discretion at the centralised level, can sometimes lead to corruption by exploiting the lack of market organisation and ambiguity as a cover for illegal actions (Figure 25).

Finally, both sociocultural factors and centralised system of governance, shown in Figure 25, can reflect the planning culture discussed in Section 2.2, where the

centralised system is a traditional shape of governance (e.g. see Akbar and Shaw 1988). This can raise a question of whether the white land issue can be adequately addressed within the constraints of such culture of the Saudi governance, or this governance culture can be reviewed in a way that tackles the embedded faults inside such centralisation (i.e. conflict of interest, power struggles, trust matters, too much discretion).

Figure 25: The potential influences of the centralised system on white land
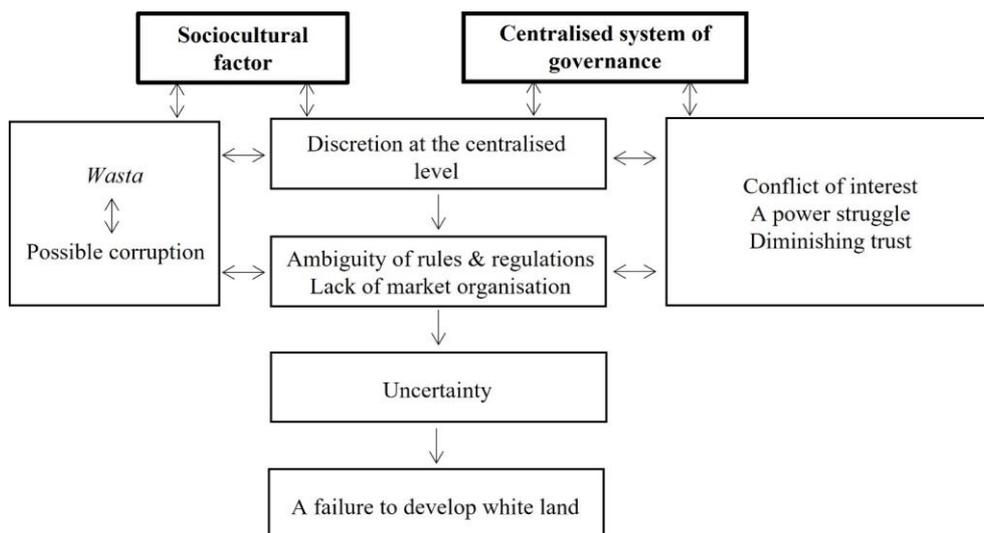
Third: infrastructure responsibility and density matters & economic and funding challenges

From an economic and funding perspective, the study findings showed two key issues behind the failure to develop land, related to the government's financial capability and the end-users' financial capability. The government introduced the LGP to facilitate the process of land development for people. Although the allocation process of land through

granting was not based on market considerations (see Section 6.2), it was easy for the government to do so, because land was abundant and seen as a gift from nature (Ricardo 1891). The study found that one key cause behind not developing white land is externalities related to the responsibility for delivering infrastructure, especially for the granted plots.

The literature review reveals externalities embedded in the responsibility for infrastructure provision, usually deducted from taxes and/or impact fees (e.g. see Brueckner 2000; Burge et al. 2013; Coutts et al. 2015; Jiang and Swallow 2017). The Saudi government, as a *rentier* state, committed itself to provide infrastructure depending on its financial resources. However, the crucial point here is that the macroeconomy in Saudi Arabia mainly relies on oil, different from nations that produce oil but mainly rely on industry (e.g. see Ferderer 1996; OPEC 2019). The difference is that the former context tends to be subject to external factors (oil price volatility which is out of the nation's control). It seems from the study findings that this is exactly what happened and affected land development; many granted plots remained undeveloped for many years, simply because they depend on the government financial ability, which is largely subject to oil returns (see Section 6.2).

Figure 26 shows how the shortage of the government's financial capability, under the *rentier* state concept, can lead to infrastructure absence, and hence white land. Some evidence confirms that a massive 96 per cent of people who built their houses bought the land (or house) rather than gaining the plot through granting (MH 2015). This does not indicate that 96 per cent of the public were not granted, but it seems clear that most of them were granted but sold their plot due to the absence of infrastructure, as analysed in Section 6.2. Figure 26 also illustrates the mutual connections between government intervention and government capability. Having irrational government intervention can worsen the capability to cover infrastructure costs.

While it was explained how the centralised process of allocating land through granting has resulted in unbridled sprawling (i.e. irrational intervention), the consequences of sprawl can dramatically exhaust the government budget for infrastructure (e.g. Speir and Stephenson 2002; Burchell and Mukherji 2003; Thompson 2013; ROGATKA and

Ramos Ribeiro 2015). This implies that the sort of problem related to extensive white land in Riyadh is strongly associated with the problems of urban sprawl (see Section 2.6.1.1), especially the economic ones.

Meanwhile, as depicted in Figure 26, the study found that the shortage of the financial capability of the government can be compensated at the expense of natural resources, where allocating land (i.e. government intervention) responds to economic issues stemming from the collapse of oil prices, by giving people land instead of money (see Section 5.3.3).

Figure 26: The potential relations between the *rentier* state and white land
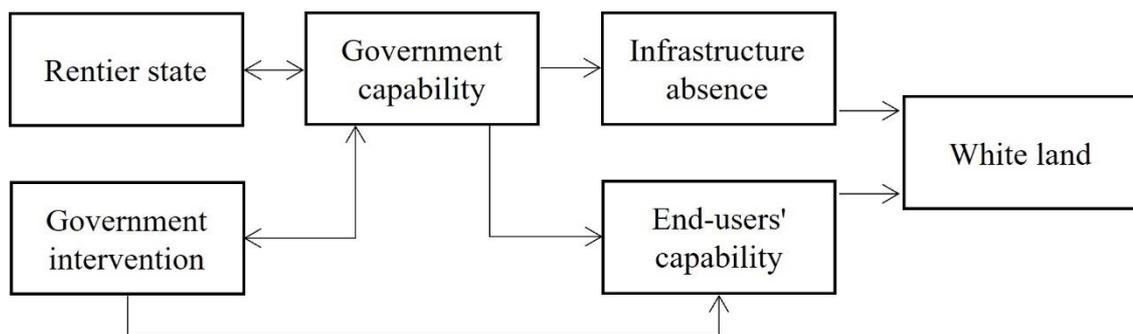
The second key issue behind the failure to develop land is the end-users' financial capability, which has two aspects, the government capability and government intervention (Figure 26). The same financial reasons for not delivering infrastructure are applicable here; the government would not be able to fund the end-user with the free-interest loan during economic recession (i.e. collapse of oil prices), which can affect the capability of the end-user to afford land, and then a failure to develop many plots. This suggests this free-interest loan is the main source of making credit available. Assuming availability of credit, demand responds by increasing (Balchin et al. 1995), and land prices go up (Cheshire et al. 2014). It seems this mechanism of funding has created a culture where the demand for land is strongly linked with the government support for the end-user.

Considering urban land economics, a negative side of nationals depending on one source of funding is the damage to the competitive market, which is seen as vital by some scholars (e.g. see Evans 2004; Harvey and Jowsey 2004). This original finding has not been discussed by the existing literature. This suggests that it would not be efficient for a city to establish a national programme (such as the REDF) that works as a rigid system. This inelasticity would damage the competition process by either making demand for land too high (i.e. during an oil boom) or too low (i.e. during economic recession) with limited influence by the users (i.e. bidders). This action indicates that the concept of the *rentier* state is counter to the logic of location theory that differentiates between users' financial abilities and requirements (e.g. see Wheaton 1977; Wilson and Schulz 1978; Cheshire et al. 2014).

At the same time, the correlation between oil prices and government spending can justify the fluctuation of land prices. The study, thus, provides detailed evidence for the model of the rational actors in responding to economic fluctuations (e.g. Healey 1991; Barras 2009), when many landowners prefer to withhold land until they encounter an oil boom to sell with higher prices benefiting from the increasing demand.

In respect to the influence of the government intervention on the end-users' capability, this was observed from interviewing powerful landowners who are interested in development. Some attribute their reluctance to develop land to the density that does not respond to higher prices, which can make land unaffordable. It is acknowledged that the UGB can increase land prices (e.g. see Evans 1999; Nelson 2002; Pennington 2003; Cheshire et al. 2014). Some scholars emphasise the importance to offset these price increases by allowing higher density through different means that support the idea of social mix, 'compact city' or 'smart growth' (e.g. Dantzig and Saaty 1973; Dieleman and Wegener 2004; Daneshpour and Shakibamanesh 2011; Madanipour 2011; Habitat 2014), For example different sizes of plots (see Zabel and Dalton 2011; Habitat 2014), intensifying areas vertically (see Oluseyi 2006), subdividing land economically (see Choppin 1993), and minimising side-yard setbacks (see NAHB 1991), which all support affordability and enhance economic efficiency (see Section 2.6.1.1.1).

However, the study found that any imbalances between land-use planning tools applied

can lead to white land. Although the UGB has increased land prices in Riyadh, the land-use planning has not allowed the density to respond to such increasing prices, for instance 40% at least is required for yard setbacks[59] (see RCRC 1996), with two storeys for residential use (MMRA 2005). This implies, as illustrated in Figure 26, that government intervention, introducing the UGB at the same time as restricting density, can ultimately have a major hand in making land prices unaffordable for end users, especially as income does not respond to increasing prices (Alriyadh 2005). This unaffordability for the end-user can explain the reluctance of some landowners (i.e. developers) to develop their tracts; they would not decrease their profit margin much simply because of the low purchasing power of the end-user. Landowners, Neutze (1987) states, prefer to withhold land if they feel that higher density would be more profitable.

Thus, it seems that the density does not meet the continuous increase in prices, where it should (e.g. see Cheshire 2013). As land prices increase, land producibility should increase, which can be reflected by increasing densities. This argument supports Harvey and Jowsey (2004); an extra density of development is considered as required if developers do not see there is a balance between the marginal revenue and the marginal cost. It seems that is why some powerful landowners think 'there is no market' (e.g. see Section 5.2.3), if they increase prices to satisfy the marginal revenue, it would not be afforded by the end-user, leaving land undeveloped.

Given the above, it can be argued that the government intervention, through rules and regulations in terms of density, can be key in making land more unaffordable for the end-user. One important question here might be: Why were the regulations that impose low densities introduced? The culture of building style making the resident build from scratch could be one reason. More importantly, it seems administering land through centralisation, as was discussed earlier, is another reason; it does not respect the distinctions of land productivity and heterogeneity (e.g. see Harvey and Jowsey 2004). Rules and regulation related to density were standardised, but land prices in Riyadh -as a capital city- would not be comparable with villages, or even a medium or small city,

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[59] In 2018 it has been reduced to 30% only for the ground floor (Okaz 2018).

suggesting that the productivity of land in more expensive areas must be increased through higher densities.

Finally, this section discussed situations when land cannot be developed due to funding issues. Nonetheless, the novelty here is that detailed evidence has been given that most funding issues are a result of the model of *rentier* state as well as some irrational government interventions related to the balances between the land-use planning tools applied. Therefore, it can be argued that the nature of the *rentier* state entails extreme intervention in land market through distributing financial resources, and consequently gives rise sometimes to a failure to develop land, where financial resources are subject to external factors and economic fluctuations.

Although the discussion above is related to economic and funding challenges, government intervention by rules and regulations (e.g. matters related to *rentier* state, infrastructure responsibility, density matters) is associated with the sociocultural factor in dealing with the built environment, as was argued in Section 2.2. This implies that the reality here is not external (i.e. the sociocultural element produces such rules and regulations in dealing with economic and funding issues), however an underlying issue which emerged in this regard is that all such processes are subject to external factors and economic fluctuations, as discussed earlier. This emphasises the need for innovating some models that match and respect the planning culture, but at the same time diminish the reliance of financial resources on external economic factors (i.e. oil prices), or at least lessen the dependance of land development on the government budget (e.g. by addressing the concept of *rentier* state)[60].

8.3   The potential opportunities causing white land

While the previous section includes three points related to potential challenges and obstacles causing white land, this section will cover one point regarding the potential

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[60] For example, the government in 2020 suspended the municipal grants in Riyadh (Royal Court 2020), which can support the above argument (though the reason they have suspended granting land, according to them, lies in the shortage of public land).

opportunities causing white land. Potential opportunities are causes that are derived from the landowners' will to withhold land.

Fourth: Monopolistic behaviour and ownership of option

It is argued in the literature review that monopoly is a form of market failure due to the imperfect competition embedded, and government is expected to intervene to address such failure through different strategies (e.g. see Abrams 1964; Dowall 1993; Evans 1999; Evans 2004; Wahbah et al. 2016). One interesting point in this research, however, is that it provides detailed evidence of when government intervention itself becomes a source of a failure to develop land. While landowners often respond to suit their own interest (Healey 1991; Ball 1998; Ross 2016; Cronje 2018), the study gave information about how the government has unintentionally paved the way for this private interest, by enhancing some monopolistic behaviours. The study found that granting land can create a group of few sellers, a problematic characteristic of monopoly (see Evans 1999).

This group of few sellers had two reasons; First, the public who sold their plots due to the absence of infrastructure or the unsuitability of location, where the study showed an emphasis on social ties in selecting housing. Some powerful landowners exploited these reasons to assemble plots and then monopolise on them (i.e. few sellers) (see Section 6.2). The second reason lies in those who were granted land as a compensation for money and rewarding individuals (see Section 5.3.3). This indicates that one negative effect of this type of granting, especially the second one, can be the fact that land is not distributed for a need (e.g. for living). Therefore, this type of granting can be added to the list of what can exacerbate the already imperfect competitive market, affecting the price system (e.g. see Klosterman 1985; Balchin et al. 1995; Harvey and Jowsey 2004).

It can be argued that damaging the price system, through granting land, can motivate landowners to withhold land, especially as it often comes without bidding, effort or even cost, which can help the potential monopolist bear long-term waiting. The study findings support previous research that speculating on land is associated with making money (e.g. see Evans 2004; Fatta 2014), explaining some actions that can be parallels

with other planning systems such as long development time (e.g. see Markusen and Scheffman 1978; Bentley 2017). However, one distinct finding in this study, as shown in Figure 27, is that government intervention can be the key cause that enhanced the idea of making money investing in white land.

Figure 27 simultaneously reveals an interesting point, where there are some connections between the sociocultural factor and the government intervention from one side, and the sociocultural factor and making money from another. These connections are in harmony with the literature, where rules and regulations can influence the sociocultural aspect (as inputs) which finally can affect the practices of individuals (e.g. see Geertz 1973; Hofstede 2001; Hofstede et al. 2010; Han and Northoff 2008; Ordóñez and Marconi 2012; Deresky 2014; Najm 2015). Some examples from the data explain how government intervention played a role in shaping an economic culture of making money through land (see Section 5.2.1.2), which has not been discussed by the previous studies.

The very common Saudi proverb that land does not 'eat nor drink' might not be common in other contexts. The nature of the government rules and regulations has encouraged a culture of withholding land without any costly consequences, such as taxes. This implies, based on the study findings, that the absence of a taxation system on land can boost overconfidence in the market. However, this overconfidence completely differs from the literature review. While the literature reflects the overconfidence in the market to one's ability to make transactions even with imperfect information (see Mullainathan and Thaler 2000), the study exposed that overconfidence can encourage monopolistic and speculative behaviours owing to the expected promising future.

It is true there is some evidence that land value taxation can combat monopolistic and speculative behaviours in various urban contexts (e.g. see Abrams 1964; Dwyer 2014; Amirtahmasebi et al. 2016). Nevertheless, such a tool would not succeed if the landowners still found an opportunity to withhold land. For instance, the study indicated in Section 5.2.3 that the rate of the White Land Fees, at 2.5%, is seen as too low in Riyadh compared with the annual rate of increase in the price of land. This suggests that the 2.5% may fail when it is applied nationally as a rigid indicator (centralisation),

where some urban contexts can thrive faster than others with an annual increase in land price that can weaken the effectiveness of this rate. Thus, land economics studies are likely to help in considering the trade-off between the appropriate tax rate and other aspects, such as the rate of annual inflation, which is often the local government's role (for more on local governments in land value taxation, see Amirtahmasebi et al. 2016).

Figure 27: The potential connections between the government intervention and opportunities to withhold land
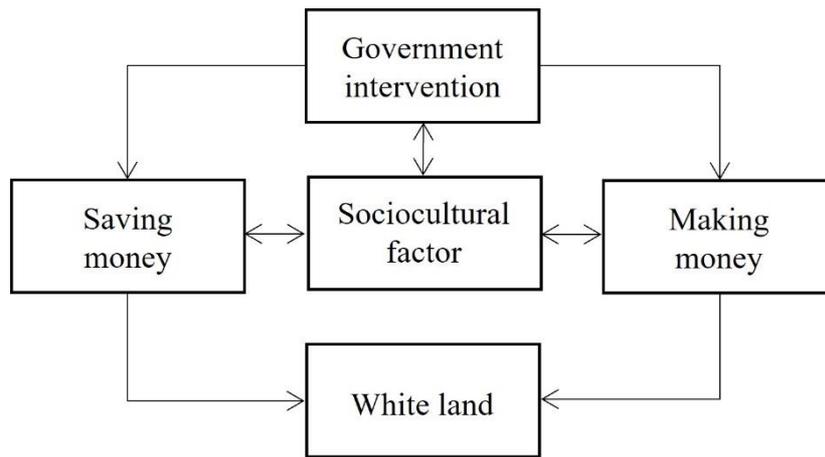
Figure 27 also depicts that the government intervention has created an opportunity at the individual level by encouraging people to withhold land to save money. The dominant self-construction style, attributed to the LGP (see Section 6.2.1), entails that the decision of building is taken individually. This is disparate from the common building style throughout the world, which depends on major developers (e.g. see Kohlhepp 2012; Cheshire et al 2014; Bentley 2017). The study found that a self-construction style can give a great opportunity to withhold land as an ownership of option, without any pressure to build or sell (e.g. no taxes). The term 'ownership of option' is used in the literature to differentiate uncertainty from speculation (e.g. Ohls and Pines 1975; Titman 1985; Neutze 1987), where the latter refers only to making money through selling while the former includes all kind of options (sale, development, use, etc.) (e.g. see Evans 2004). Saving money is used here as comparable to ownership of option (see Section 5.2.1.3).

However, as Figure 27 illustrates, one distinct point related to saving money through withholding land (ownership of option) in this study is that it includes two elements that are strongly associated with the sociocultural factor, which has not previously been covered by the relevant literature. The findings add *Zakat* as a possible element that motivates one to withhold land as an ownership of option (saving money). This is because not making land available in the market, to make money, can excuse one from paying the *Zakat*, even if the selling intention comes later. This suggests that this Islamic concept can be misused by some landowners who choose to be uncertain about what to do with their land (i.e. ownership of option) in order to be excused from paying the *Zakat* (see Section 5.2.1.3), but this behaviour would be difficult if the government did not make opportunity available and easy for the potential landowners.

Regarding social ties, likewise, it was found they can play a major role in withholding many residential plots in ways that totally diverge from the process of bidding for land in the previous literature. The key scholars of urban location theory have illustrated the elements that can affect demand and competing on land, such as the maximum accessibility to all parts of the city (Haig 1927, cited in Wendt 1957), journey to work (Wingo 1961, cited in Ayeni 2017), the trade-off between transport cost and land rent (Alonso 1964, cited in Wrigley and Wyatt 2001), financial level (Muth 1967, cited in Wilson and Schulz 1978), and number of children and age (Harvey and Jowsey 2004). Studies assume that any potential demand is often to satisfy a present need based on a trade-off process (see Section 2.3). However, the findings of this study went beyond the above elements and showed an important contribution, that the demand on land is not necessarily to meet a present need. Rather, the demand can be to satisfy a future non-monetary matter, particularly the social ties.

In cultures that prioritise family ties, demand on land is sometimes to save it for future generations (see Section 7.3.1). The feature of immobility of land (see Doebele 1987) motivates securing it in advance. This fixity in location can increase preference for the individuals (usually parents) for buying the plot(s) next to them, so the plot will be available when needed in the future, i.e. when their children become independent. Therefore, the seemingly virtuous position of providing subsequent generations with land and property to build a future home is seen by some parents as an opportunity, and

a justification to withhold land, especially as buying it earlier tends to be cheaper. Interestingly, these social ties are derived traditionally when the extended family type was the prevailing culture (RCRC 2015), implying the nuclear family type now prevails but with a great preference for living next to each other, which can also be counter to the idea of the LGP (for more details about the LGP's effects, see the previous section).

It can be argued that the non-market factor (i.e. social ties here) differs from the other market factors that depend on a trade-off between objects within which land rent is key (i.e. location theory). One important difference is that social ties not only affect the process of demand (as is the case with the location theory elements), but also the process of supply by not bringing land to the market. In other words, individuals who compete for land based on factors such as journey to work, income, number of children and so on, often compete on location in general, perhaps without specifying particular land. With the factor of family ties, however, individuals compete on (a) particular plot(s), otherwise they would search for different locations with plots next to each other.

Social attachment to the site is incompatible with the argument that attributes it to cultural affiliation or the love of land (e.g. see Kaiser and Weiss 1970; Bardhan 2011). Instead, attachment to the site is because of social surroundings. It is not that those residents love the land, but love the social structure there. That is why the data gave evidence that families can be mobile to follow their type of people (see Section 7.3.1). When there is one direction of the city growth, for example towards the north in Riyadh, there is a strong possibility that the richer people can bid for these sites, leading to social exclusion. This can be partly why urban-rural fringe sites are more expensive than that of in the city centre; each piece of land is obtained by the highest bidder (Wheaton 1977).

Therefore, the priority of family ties can push the demand to extra land subdivisions, which can increase white land, because many of the inner plots are individually owned for future generations. However, and again, any extra land subdivisions can be subject to the opportunity of making/saving money through withholding land when the government procedures do not deter this behaviour (this can interpret why the area designated for development from 1976 to 1987 climbed sharply by 1000% in Riyadh

while the population at the same time only increased by 100% (Al-Oteibi et al. 1993)). This also suggests that the methods discussed in the previous section to address social exclusion (i.e. providing different sizes of plots, intensifying areas vertically, subdividing land economically, and minimising side-yard setbacks) can be more important in contexts that have only one direction of urban growth. Otherwise, the vast majority of areas would be consumed only by the high-income group.

It can be argued that the urban contexts whose people appreciate the two sociocultural elements discussed here (*Zakat* and social ties) can take advantage from any government decisions that enable or encourage them to keep land away from development. Thus, it is advisable that any government intervention evaluates the projected individual behaviours stemming from sociocultural context and government decisions are designed on that basis.

In conclusion, one should note that this chapter covered and discussed the empirical findings taking the suggested theoretical framework into consideration. The theoretical framework emphasises the idea of not using one holistic theory because the issue of white land tends to involve complex issues. This is one reason why the literature covered different, but important, issues related to urban land development, including market forces (supply and demand), features of land markets, the role of actors and their influences on land market, especially landowners and planning actors, and issues related to market and planning failure. Having discussed the findings, it was found that the sociocultural, political and economic factors, which have been emphasised in the theoretical framework in Section 2.2.1, produce non-market factors that can play a major role in the existence of white land, whether through direct or non-direct impacts.

While this chapter has discussed the study findings and answered the research question under the three main study objectives (Sections 8.2 and 8.3), the following chapter will summarise the final conclusions, including the contribution to knowledge, ideas for shaping recommendations, directions for further research, and limitations and difficulties.

CHAPTER 9 :   CONCLUSION

The aim of this study is to contribute to knowledge by linking different literature to explore and explain the causes of the emergence and continuing existence of white land. To fulfil this aim, a theoretical framework was developed that centres around the significance of considering the local planning culture. This framework includes different bodies of literature, specifically location theory, features of and actors in land market, and market and planning failure with an emphasis on the role of government intervention (see Chapter 2). The study was carried out following an interpretive paradigm - conducting a qualitative study of documentation and 40 semi-structured interviews (see Chapter 3). Riyadh was selected as a case study, to explore the phenomenon of white land through documenting and analysing land policies at the local and national level (see Chapter 4). The researcher then analysed the data in three different chapters (i.e. Chapter 5, 6 and 7) covering the relevant economic, political (i.e. the government intervention through rules and regulations) and some interpretive positions.

From the start this study depicts the sociocultural factor as an overarching theme across the three data analysis chapters, where the other influences are associated with it (see Section 2.2). As only an example, the empirical findings clearly revealed that the impact of the government intervention is vital in this study, and has a major hand in deciding which sociocultural elements and norms should prevail in the society, and subsequently such intervention can design the institutions politically (e.g. March and Olsen 1983; North 1990; Lowndes 2001; Lowndes 2005; Yolles 2019). The government, for instance, substituted the *Hujjat Istihkam* with the LGP, where both stem from religious and historical evidence, but the government intervention has made the latter prevail in the local culture (see Section 4.2.2).

The preceding chapter (discussion of the study findings) answered the research question through considering the objectives of the study. It can be concluded from the discussion chapter that: the existence of a large proportion of white land (the research question) centres around four main causes:

- Causes related to introducing some planning tools / models without re-elaborating nor re-politicising; this has resulted in some issues in respect of defining the UGB, which was not seen as an ideal example due to the different way of dealing with the land market and urban development in the context of Riyadh.

- Causes related to the governance shape, where the centralised system can involve various aspects that can lead to a failure to develop white land (e.g. too much discretion, ambiguity of rules and regulations, conflict of interest, a power struggle, lack of market organisation and diminishing trust).

- Issues related to infrastructure responsibility and density matters are also other causes, including some economic and funding issues (e.g. issues related to the financial capability of both the government and the user, where increasing the dependance on oil returns can put the development process at the risk of external factors implications (i.e. oil price volatility which is out of the nation's control).

- Finally, some potential opportunities that landowners may gain from withholding land as an ownership of option, for example opportunities related to family ties, *Zakat*, and making money.

Having explored and discussed the causes behind white land in the previous chapter and summarised them above, the following section will further outline and explain the contribution to knowledge.

9.1 The contribution to knowledge

This study developed a theoretical framework using different bodies of literature related to land supply, demand, control and management, with emphasis on the impacts of culture on the built environment, and the aim of exploring and explaining the potential causes of the emergence and continuing existence of white land. The use of this framework is a key distinction that differentiates this study from the wider literature, and has led to a key theoretical contribution, empirical (context) contribution, and methodological contribution.

Theoretical contribution

This study has filled an important gap by analysing and giving evidence that some of the models we use to understand planning and development can fail to take into consideration significant sociocultural features and institutions that shape actor's views, attitudes and behaviours. In fact, the theoretical contributions can be grouped under the umbrella of 'non-market factors'.

In detail, while previous studies have mostly attributed issues of undeveloped land to market-based considerations (location theory concepts and the logic behind how the UGB is defined) (e.g. see Wendt 1957; Wheaton 1977; Wilson and Schulz 1978; Nelson and Moore 1993; Kivell 2002; Harvey and Jowsey 2004; Kennedy 2009; Cheshire et al. 2014; Kabba and Li 2011; Ayeni 2017), this study contributes to knowledge by exploring some non-market factors, by deeply engaging with an examination process in a distinct urban context (i.e. Riyadh) that imported some planning models (i.e. the UGB) and applied them within a completely different culture. In other words, while the existence of undeveloped land in the literature is sometimes attributed to market failure (e.g. Markusen and Scheffman 1978; Mills 1981; Klosterman 1985; Titman 1985; Neutze 1987; Evans 1999; Enns 2002; Evans 2004), this study has gone beyond the failure of the market, to attribute the phenomenon of white land to established models of behaviours for market actors failing to effectively describe how actors in a different culture tend to behave.

To illustrate, although the original idea held by those behind introducing the UGB in Riyadh was similar to the initial Western contexts (i.e. to control unfettered growth) (e.g. Brueckner 2000; Pendall et al. 2002; Rowe 2012; Westerink et al. 2013; Ewing et al. 2014), the study findings show disparate outcomes, where the way the UGB was introduced has given rise to white land and urban sprawl. The fundamental reason for this, again, is related to the lack of links and insufficient consideration in the process of reflecting the UGB in a different built environment; the original idea of the UGB is derived from contexts where market-based considerations are deemed to be primary (see Sections 2.3 and 2.6.1.1) and was then applied in a context where the market is viewed as secondary, an underlying novelty in this study because this process tends to

involve various non-market behaviours (which themselves can contribute to further white land).

One of the most important non-market elements, explored in this study, is the extensive power of state that orients the market in isolation from market-based considerations. Indeed, one major finding here is that the intervention in allocating the market through granting land before introducing the UGB can add much more influence of non-market factors on the process of defining the UGB (see Section 6.3.1).

As the UGB was an imported tool (originally from the USA, e.g. see Nelson and Moore 1993; He et al. 2018) that the public is not familiar with, the study found that too much discretion is practiced by a group of actors (i.e. policymakers) in anticipating how another group of actors (i.e. landowners) would react and behave towards the UGB. Although such anticipations stem from the same culture, the study gave evidence of how the reaction of landowners is not correctly anticipated simply by the judging their behaviours by those who live in the same culture (i.e. policymakers). This is because the problem is about the existence of 'rigid' imported models from different cultures, which are highly likely to result in conflicting views in how to respond towards them by different groups of actors from the same culture.

A similar significant contribution behind the phenomenon of white land is rooted in governance. Governance shape can be the keystone. Dissimilar to decentralisation as a system of governance in other contexts (e.g. Halushchak and Halushchak 2015), the study found that the model of a centralised system can be an underlying cause of failure to develop, where centralisation can further empower the intervention process, and consequently dominate the performance of the market by non-market factors (see Sections 6.4 and 7.2). This is not simply to argue that the intervention through a centralised system is the cause of not developing white land in itself (e.g. compare with Heng 2016). Instead, it is deeply about the implications that are associated with the shape of governance. This is to argue, inferred from the study findings in Section 7.2.1, that the existence of a high level of government intervention through intensive centralisation tends to entail too much discretion.

Although discretion can sometimes be positive and needed when dealing with the public

interest in Islam (e.g. see Hussein 1999; Platteau 2008), the study has contributed extensively to identifying underlying non-market aspects as a result of this discretion (or maybe as a result of misusing discretion), including conflict of interest, a power struggle, trust matters, possible corruption, and *Wasta,* where all can negatively contribute not only to white land but also to a lack of market organisation (see Sections 7.2.1, 7.2.2, 7.2.3 and 7.2.4).

The study also offers different insights to the aspects that the literature attributes to market failure (e.g. monopoly and uncertainty) (e.g. Coase 1972; Mills 1981; Klosterman 1985; Titman 1985; Neutze 1987; Evans 1999; Enns 2002; Kim 2011; Bentley 2017). The study provides evidence that monopoly and uncertainty are also attributed to the above non-market factors stemming from the way planning decisions work out, especially the role of discretion in dealing with the UGB nationally, which can obfuscate rules and regulations ending with landowners preferring to withhold their land (see Section 7.2.1). Moreover, one can deduce from the study findings that dealing with the market at the centralised level is more likely to lead to generalising rules and regulations in a way that can negatively affect land economics. For example, the study gave evidence that defining densities have resulted in both unaffordability, and consequently white land, where locations and cities are dissimilar in terms of land productivity and, thus, should not be treated the same (see Section 6.3.2).

Another similar contribution is related to the culture of *rentier* state, which means dealing with land supply and demand is greatly linked with government directions rather than market forces. The study contributes to knowledge here by demonstrating how both the existence of free-interest loans has had a major impact in the process of land supply and demand, and the issue of infrastructure responsibility was a serious challenge because of the strategy of granting land in the light of absence of any types of taxes. Generally, the major issue with the culture of *rentier* state centres around three points, which have not been explored: first, it mainly relies on economic external factors (i.e. oil price volatility which is out of the nation's control), which can substantially affect funding free-interest loans and infrastructure (see Sections 5.2.2, 5.3.3). Second, it does not conform to the original concepts behind the UGB that consider market forces; it was inflexibly introduced, and as a result discretion had to be used too much

causing the main purpose of the UGB in Riyadh to diverge from its original idea (see Section 8.2).

While the above two points have noticeable influences on white land existence, the *rentier* state, by granting land and funding individuals also serves private purposes (the third point), where it has unintentionally created a culture of self-construction style. This culture plays a major role in increasing the percentage of white land, as explored in Section 6.2.1, because it gives people an ownership of option (e.g. compare with Evans 2004). Based on this ownership of option, this study explored other non-market purposes for withholding land, such as family ties and *Zakat* (see Sections 5.2.1.3 and 7.3.1). Indeed, one key contribution here is the fact that this study is applied in an urban context that does not separate between religion and state, while global studies tend to be applied in contexts with strict religion-state separation (this is one reason behind some non-market factors, such as *Zakat* and the adoption of a traditional approach (*Iqta*) of owning land in Islam).

In accordance with all the above non-market factors, it can be argued that the main reason behind the phenomenon of white land is not related to market failure, but to a failure in the urban management processes in terms of considering the imported planning models when they are applied in different contexts and cultures. This is not to argue against importing some planning models, but certainly not to argue for accepting them as they are. It is a call for innovating accepted models to re-centre them around an acknowledgement that practices are more diverse than they were when certain models were developed (e.g. all the above non-market factors should be taken into consideration when it comes to innovating suitable models for the Saudi context).

Empirical (context) contribution

Another critical contribution lies in the context of the study. This thesis has contributed significantly to enriching the data related to planning in Saudi Arabia, particularly the case study of Riyadh. Based on the key words used (see Section 2.2.1), little research has explored the causes behind the existence of white land, though it is a common phenomenon in the region. It is recommended in the planning field to investigate

alternative contexts due to the possibility to reveal distinct study outcomes, rather than mistakenly fitting the whole world into rigid models (e.g. Mazza 2002; Ostrom 2010). Therefore, the range of non-market factors explored in this study contributes to the context in two ways, 1) enriching the information about land development and planning arena by a deep engagement with the context (i.e. interpretive paradigm), and as a result 2) helping the foreign companies, which intend to conduct projects in the Saudi context, in understanding the nature and culture that can affect the built environment in the region.

Methodological contribution

Methodologically, to the best of the researcher's knowledge, most of the studies in this field use quantitative or sometimes mixed methods, while little qualitative research is conducted in this area, especially in terms of understanding and investigating why land remains undeveloped (for more details, see Section 2.5.2). The methodological contribution here is that this study applied an interpretive paradigm and purely qualitative examinations to understand the phenomena related to white land.

9.2 Ideas for shaping recommendations

Derived from the discussion of the study findings, some ideas for shaping possible recommendations can be suggested to achieve more effective administration of land, especially for the target of addressing the issues related to white land in cities. The recommendations are:

- Too much intervention in the process of allocating land can cause a failure in its development due to various reasons (e.g. further financial burdens, the role of intensive discretion and its negative consequences, Wasta, withholding land for future generations, etc.). Instead of intervening in allocating land, it can be strong advisable that government intervention should directly focus on land-use planning and the process of market organisation, in a way that matches with the

sociocultural institutions, with the intention of addressing market failure[61]. If there is a need to intervene in allocating land (e.g. through granting), then the process should, at least, be preceded by the task of land-use planning and market organisation processes to avoid the negative impacts that may stem from private interest.

- A major part of failure to develop land, based on the study findings, is caused by a system that is more centralised. Therefore, this governance system should be carefully evaluated, especially in large nations. The devolution of the processes of land administration is strongly recommended. This devolution should enable the local governments to act independently both financially and administratively to fulfil their imperatives, rather than the relevant centralised institution setting specific budget for specific activity to the local institution, with the option only of 'use it or lose it' (see Section 6.4). Devolving land administration tasks to the local governments is also advisable as it is more likely to respect the differences between regions, especially in terms of the land heterogeneity (e.g. productivity of lands are dissimilar, and hence rules and regulations related to density must respect this by making it vary from one area to another)[62].

- Similar to the above point, centralised government must combat any conflict of interest in land administration as it can damage urban planning and development (see Section 7.2.2). In order to address this issue, three related proposals can be suggested. First, enabling the local governments, which was listed in the

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[61] Although allocating land through granting is embedded in the culture (historical evidence), there is some practical evidence, which supports this recommendation, that this process of granting has been suspended in Riyadh (the decision was issued during conducting this thesis in 2020) (Royal Court 2020). This action of suspending does not seem counter to the culture, where maintaining the public interest by the ruler in Islam, as was discussed in Section 2.2, is also an accepted behaviour (e.g. the *Hujjat Istihkam* was substituted with the LGP, see Section 4.2.2).

[62] Some practical initiatives are trying to empower the local administration in planning issues. For instance, the Development of Provinces and Cities Law was issued in 2018 and in August 2019 the 'Riyadh Development Authority' was transformed into the 'Royal Commission for Riyadh City' (RCRC), with the stipulation that it is an interagency body, with a legal personality and financial and administrative independence, and that it reports directly to the Prime Minister (RCRC 2021b). Not only in Riyadh, but the local organisations for developing cities have also been established in different Saudi cities. Some strategies in these organisations explicitly emphasise the bottom-up approach (decentralisation) (e.g. see Alarabiya (2021) for example the Asir Strategy, which was launched in September 2021.

preceding point. Second, the existence of one main centralised body for land administration should be fulfilled. The reason is that the existence of parallel government institutions (i.e. different ministries) is considered an element that can have negative implications on the final product (i.e. developing land) due to the projected conflicting views. The final consideration may be to establish a national initiative to unite the goals of the government institutions, addressing any potential conflicting decisions oriented to these institutions.

- Increasing trust in the government institutions and in their discretionary decisions is vital. To achieve this, it is recommended to increase the level of transparency and citizen participation, and the same time combat corruption. All of which can be achieved through enabling the local governments and establishing an efficient system for accountability.

- Sometimes the problem of not developing land tracts comes from the individual level, where the end-user cannot afford to purchase a plot (see Section 5.3.1). To tackle this, there can be two suggestions. First, the concept of the *rentier* state should change in a way that does not run counter to the local culture; the study showed how it can be ineffective for the land market in general. Second, local governments are advised to establish some units for urban land economics studies and connect the powerful landowners (i.e. developers) with them. The key aim of this action is to study the average income of the individuals and then produce some economic techniques that assist in decreasing the plot cost accordingly. These techniques can include ideas for raising the density, such as minimising the width of the plot frontage, increasing the percentage of building coverage (i.e. modifying the yard setback requirements), and establishing different rules and regulations that aim to increase densities inside the city (see Section 6.3.2)[63].

- Governments should carefully consider the sociocultural elements that motivate their people's behaviours towards dealing with land, and hence design their rules

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[63] This point would not be achieved properly without enabling the local governments in land administration.

and regulations in a way that meets the public, not private, interest. As only an example, the societies that consider *Wasta* as an acceptable culture can find suitable a model that can be more specific and detailed, without enabling too much freedom in exercising discretion, in order to reduce its damaging impacts on land market. Another example, although providing subsequent generations with land is a seemingly virtuous position, it would not commonly happen if the government did not facilitate it; the government here is recommended to impose rule and regulations that encourage building rather than giving the opportunity for individuals to simply withhold land (e.g. individuals can make investment in their white land by turning it into a productive commodity, without conflicting with the aim of benefiting from it for future generations).

9.3   Directions for further research

Taking the discussion developed in this chapter into consideration, the following ideas are suggested for future research:

- Further research should be conducted with the objective of innovating some planning models that can combine some imported planning ideas with the existing features of the local culture, by carefully considering the non-market factors and using them as a key criterion in evaluating and adjusting any imported model. The aim of this further research should centre around addressing the failure of bringing land into development.

- It was argued in this study that the centralised system in land administration can be the keystone that led to a failure to develop many pieces of white land. Potential studies in the future can examine and explore the underlying reasons behind the preference for this model of governance. What may prevent the devolution process?

- The head of the RCRC announced in 2020 that they aspire to double the

population of Riyadh by 2030 (Alarabiya 2020). This would surely not be an easy task, especially for the strategy of urban planning. Therefore, it is suggested further studies focus on how to increase densities and consider whether the existing white land can have higher densities. This consideration ought to take urban land economics concepts into consideration and attempt to find a balance of what land density should be.

- According to Bryman (2016), qualitative research can set the ground for quantitative studies. Thus, some quantitative studies might emerge from this thesis and are advisable. As only an example, it was explained how the centralised system in land administration can have negative impacts not only on land development, but also on creating some interpretive positions that can ultimately affect the land development. Thus, some quantitative studies can be conducted by using the centralisation as an independent variable and interpretive positions as dependent variables (e.g. discretion, conflict of interest, power struggles, diminishing trust, and *Wasta*). Another example of a subject for further quantitative (and qualitative) studies, is the impact of White Land Fees on the process of developing white land as independent and dependent variables. This is worth considering as the introduction of White Land Fees is recent and studies should investigate its possible influence, focusing on the evaluation process of the centralised system and its workability in collecting fees.

- This study shows a linkage between the proliferation of white land and urban sprawl (e.g. see Section 9.1). Some evidence reveals that the shortage of public transport in some areas in the Gulf (e.g. Qatar) increases the dependency on the motor-car, resulting in higher travel distances (Wiedmann et al. 2019). Thus, there is a potential for future research to investigate the effects of the non-market factors, which can cause white land, on the processes of urbanisation and development in the region, especially in terms of increasing the level of traffic congestion, and more importantly developing mechanisms for managing

the sprawl in the Gulf (the findings of this study can be one mechanism for addressing urban sprawl).

- Although observation processes were not used as a method, it can be advisable for similar studies to apply this method, along with qualitative interviews, due to the expected fruitful results. The researcher found during the data collection that the observation method can function in this study owing to some important situations which occurred while waiting for interviewees in their secretaries' offices that can support the data (e.g. see Sections 7.2.1 and 7.2.2).

9.4   Limitations and difficulties

This study has some limitations despite the important insights. One significant limitation is that access to some groups of landowners was almost impossible, namely the high class of powerful landowners. This may produce a lack of valuable information. The researcher did his best to overcome this limitation by interviewing some less powerful landowners who have connections with those inaccessible landowners (for more details, see Section 3.9).

Another limitation is related to the dramatic changes that occurred during the conduct of the research, fundamentally connected with land policies and urban development in Riyadh (they were mentioned in different footnotes in the thesis). One important example of these changes is that a royal decree was issued in 2020 to suspend the municipal grants only in Riyadh (Royal Court 2020). The royal decree explains that the shortage of public land was the reason behind this decree. If the decree included the royal grants and was generalised nationally, it would perhaps imply that there is a belief that the concept of granting land would not be a sustainable strategy. This leads us to future investigations into whether there are alternative forms of intervention in the land market, studying their possible consequences. In general, the researcher was not able to cover this (and other) fast changes, and thus he included the relevant changes up to November 2018; when the researcher started the data collection (see Section 3.7).

Furthermore, collecting data in the Saudi context can be a difficult task due to the lack of relevant statistical information, the limited access to official documents, and the limited studies conducted in the same field in comparison with the studies in other nations (Yurdakul and Ozturkcan 2014; Niblock 2015). For example, the data about land prices in Riyadh before 2010 was not available or maintained accurately. To illustrate, the researcher contacted the head of the IT department in the MJ to find out that the information about land prices does not necessarily include only land, but sometimes covers houses, as the system is not smart enough to register the plot as a house when it is built. In a similar way, there is little data recording lands that overlap in ownership (e.g. number, area or location) (see Section 7.2.1).

Therefore, the researcher used some other information only to estimate the enormity of the problem of overlapping land. For instance, the MH issued 2800 bills of White Land Fees, 1200 of which are subject to an objection (see Section 5.2.3). This could indicate that almost 45% of white lands have issues that are out of the landowner's control, maybe the most important is the issue of overlapping. The difficulty of overcoming the lack of statistical information led the researcher to not only secure unpublished documents, but also to analyse and link them with other resources. For example, the researcher applied extra effort by analysing nine different resources to gather useful information about white land proportions and land prices (see Table 6 in Section 4.3). For security purposes, some of the official websites are closed for those outside Saudi Arabia, and thus the researcher had either to call somebody there to check if there is some relevant information or delay the process until he went back.

One final difficulty was Covid-19. In fact, Covid-19 had dramatic effects on the progress of the thesis. The Covid-19 impact statement, in accordance with the PhD office instructions, has been included in a separate document that is not incorporated in the thesis, but submitted separately. In brief, the statement explained how the Covid-19 pandemic had negative effects on the settling down process of the researcher and his family for about ten months, eight of which were spent in Saudi Arabia, where the study environment was not suitable for several reasons that are mentioned in the attached copy. Beside the financial burdens (e.g. the researcher had to secure accommodation in Saudi Arabia while he continued paying the rent for the accommodation in Cardiff, plus

the fact that a large part of the researcher's income was suspended), the researcher was uncertain when he and his family would come back to Cardiff and settle down because international flights in Saudi Arabia were suspended and the researcher had to apply for permission from the government, which was a difficult situation.

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APPENDIX A: Interview questions

Real estate agents:

1- A study conducted by RCRC (2010) shows that almost 50% from the area allocated for development in Riyadh up to 2015 is still white land. Do you think the existence of white land in this high proportion within the UGBs is a positive or negative matter, and why?
2- What outcome will the existence of white land mean?
3- How does the phenomenon of white land come about? (Those who create them, e.g. decisions from decisionmakers, real estate agents, landowners? If landowners, which type of landowners?)
4- In your opinion, what factors have contributed to the emergence of this phenomenon?
5- Aqar website shows there are 17,446 pieces of land available in the market, and a study conducted by RCRC shows that the number of white lands in only Urban Limit 2015 is 193,657. In your opinion, what are the main factors and reasons why landowners keep their lands away from both developing or selling?
6- To what extent do you think that the government land policies have contributed to the existence of white land?
   If any of the above has an impact on the proliferation of white land, does it affect because of the land policy itself, problems related to the implementation process, citizens who do not adapt with such policies or there are other reasons?
7- How can we address the phenomenon of white land? what do we need to overcome it?
8- Values of land in the north of Riyadh are higher than that of in the city centre. In your opinion, why is this the case? And does it have any influences on leaving some pieces of land as undeveloped?
9- A study conducted by RCRC shows that, with about 77% from the total area in that district, the percentage of white land in the Al-Shimal is the highest in terms of those areas located within the Urban Limit 2015 and 2030. Why is this the case in the Al-Shimal in particular?
10- The same study shows that, with about 6% from the total area in that district, the percentage of white land in Olya is the lowest in terms of those areas located within Urban Limit 2015. Why is this the case in the Olya in particular?
11- From your experience, what are the areas in Riyadh that are more preferred by landowners and those which are not preferred? And why?
12- In general, what makes land market active/idle in Riyadh? What is it affected by?
13- From your experience, could you explain whether you normally receive more requests for land (demand) or more offers from landowners (supply)? What are the main requirements from buyers? For how long does land usually take to be sold? And in case they take a long time, what are the reasons for that (buyer, seller, etc).
14- Finally, are there any other factors or reasons behind the growth of white land that we have not mentioned?

Landowners:

1- To what extent do you think there are white lands in this area? (The researcher added the district's name in which the land is located).
2- Do you think the existence of white land is a positive or negative matter, and why?
3- What outcome will the existence of white land mean?
4- In your opinion, what are the main factors and reasons why landowners do not sell or develop their lands?
5- How does the phenomenon of white land come about? (Those who create them, e.g. decisions from decisionmakers, real estate agents, landowners? If landowners, which type of landowners?)
6- To what extent do you think there are some land policies that have contributed to encouraging the landowner to neither develop nor sell the land?
7- What measures would address the issue of white land? and why?
8- If you have an option that you have to take; would you sell or develop your land? Why?
9- Are there any other factors or reasons behind making the landowners to withhold their lands, that we have not mentioned?
10- Finally, have you ever sold a piece of land? if yes, then what made you do so? And what are the main reasons to keep your current land? And what would encourage you to develop it or to sell it?

Questions for the MJ's participants:

1- What is the mechanism of extracting a title of ownership?
2- Why are there lands belong to individuals who do not have a title of ownership?
3- What is the mechanism of legalising the ownership for those lands belonging to people without a title of ownership?
4- A decision by the MJ last year mentioned that eight forged titles of ownership, with a total area of 352 million square metre, have been suspended. Why does this, and other similar situations, happen, and how?
5- In which situations does the MJ seek to cancel ownership titles?
6- What is the mechanism of the cancelation of ownership titles (in case of fraud)?
7- To what extent do you think that problems related to ownership titles have an impact on keeping land idle without development or sale?
8- Would you like to add anything else?

Decision makers:

1- A study conducted by RCRC (2010) shows that almost 50% from the area allocated for development in Riyadh up to 2015 is still white land. Do you think the existence of white land in this high proportion within the UGBs is a positive or negative matter, and why?

2- What outcome will the existence of white land mean?

3- How does the phenomenon of white land come about? (Those who create them, e.g. decisions from decisionmakers, real estate agents, landowners? If landowners, which type of landowners?)

4- In your opinion, what factors have contributed to the emergence of this phenomenon?

5- Aqar website shows there are 17,446 pieces of land available in the market, and a study conducted by RDA shows that the number of white lands in only Urban Limit 2015 is 193,657. In your opinion, what are the main factors and reasons why landowners keep their lands away from both developing or selling?

6- To what extent do you think that the rules and regulations in Saudi Arabia, generally, and city ordinances in Riyadh, in particular, have contributed to the existence of white land?

7- If any of the above has an impact on the proliferation of white land, does it affect because of the land policy itself, problems related to the implementation process, citizens who do not adapt with such policies or there are other reasons?

8- Could you explain whether there are any national or local policies that aim to address the phenomenon of white land?

9- What instruments, from your view, could be used to tackle the growth of white land and on the other hand promote the sale or development of land?

10- A study conducted by RCRC shows that, with about 77% from the total area in that district, the percentage of white land in Al-Shimal is the highest in terms of those areas located within the Urban Limit 2015 and 2030. Why is this the case in the Al-Shimal in particular?

11- The same study shows that, with about 6% from the total area in that district, the percentage of white land in Olya is the lowest in terms of those areas located within Urban Limit 2015. Why is this the case in the Olya in particular?

12- Finally, are there any other factors or reasons behind the growth of white land that we have not mentioned?

13- Would you like to add anything else?

Questions for the REDF's participants:

1- The system of funding was linked with the fact that the beneficiary must have owned a plot in the past (often grants), the MMRA has stopped granting land to the beneficiaries, so how does the REDF work now?

2- What is the nature of the relationship between the MH and the REDF in terms of dealing with the beneficiaries?

3- Why did the REDF lend to the beneficiaries in the past, and now it transfers them to the banks and pays the bank interest on their behalf?

4- Why does the Real Estate Development Fund transfer the bank interest to the beneficiaries rather than to the banks themselves?

5- Would you like to add anything else?

# APPENDIX B: A traditional house in Riyadh

Source: Alzamil, 2014, P.82.

APPENDIX C: Riyadh before the 1950s



Source: RCRC, 2016, p.9.
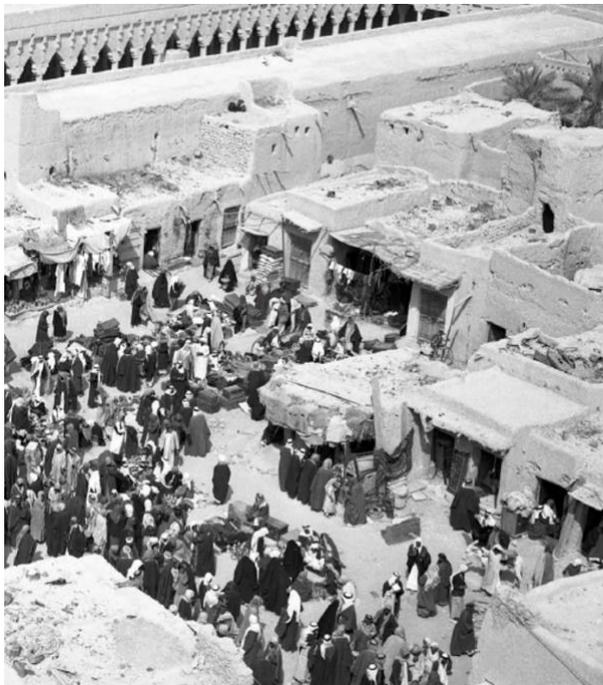
Source: RCRC, 2016, p.51.

APPENDIX D: The first master plan (Doxiadis)
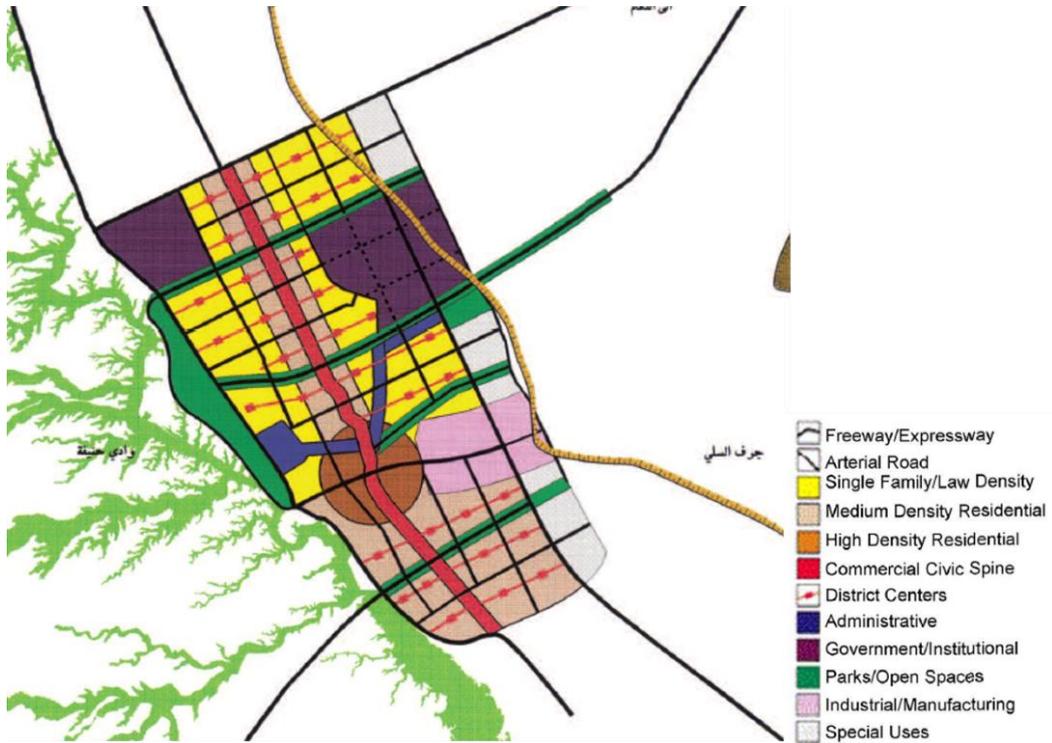
Source: Taken and adapted from RCRC, 2016; Al-Hathloul, 2017, p.105.

APPENDIX E: The second master plan (SCET International)

Legend:
- Urban Limits
- Free / Expressway
- Arterial Roads
- Developed Urban Area 1991
- Single Family / Law Density
- Medium / High Density
- Redeveloped City Center
- Commercial / Civic Spine
- Commercial Streets
- Commercial Centers
- Government / Institutional
- Parks / Open Spaces
- Industrial / Manufacturing
- Airport

Source: Taken and adapted from RCRC, 2016; Al-Hathloul, 2017, p.108.