



# THE LAND BEFORE LINES

SOCIAL UNREST AND MODERN LAND MANAGEMENT IN FORMER TRIBAL TERRITORIES

RESEARCH PROJECT ON LAND GOVERNANCE IN THE ARAB REGION

Hamda Al Hajri

## **THE LAND BEFORE LINES: SOCIAL UNREST AND MODERN LAND MANAGEMENT IN FORMER TRIBAL TERRITORIES**

Copyright © United Nations Human Settlements Programme (UN-Habitat), 2022

This research may be reproduced in whole or in part and in any form for educational or non-profit services without special permission from the copyright holder, provided acknowledgement of the source is made. No use of this publication may be made for resale or any other commercial purpose whatsoever without prior permission in writing from United Nations Human Settlements Programme.

United Nations Human Settlements Programme (UN-Habitat)  
PO Box 30030 GPO Nairobi 00100, Kenya  
Tel: +254 20 762 3120  
Fax: +254 20 762 3477  
**www.unhabitat.org**

### **DISCLAIMER**

The designations employed and the presentation of the material in this research paper do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning delimitation of its frontiers or boundaries, or regarding its economic system or degree of development. The analysis, conclusions and recommendations of this paper do not necessarily reflect the views of the United Nations Human Settlements Programme, the Governing Council of the United Nations Human Settlements Programme, or its Member States.

### **ACKNOWLEDGEMENTS**

**Task Manager:** Doaa El Sherif and Ombretta Tempra

**Author:** Hamda Al Hajri

**Reviewer:** Rafic Khouri

**Editing:** Nikola Stalevski

**Layout:** Content Khana for Marketing & PR Services

**Cover photo:** Arisa S. (2020) on Unsplash. Muscat, Oman.

**Sponsor:** Federal Ministry for Economic Cooperation and Development (BMZ)

### **ABOUT THIS PAPER**

The Research Innovation Fund - This paper was developed as part of the Research Innovation Fund of the Arab Land Initiative, addressing students and young land professionals from the Arab region interested in conducting research on land governance-related topics. The Arab Land Initiative, led by UN-Habitat and Global Land Tool Network (GLTN) with the financial support from the Federal Ministry of Economic Cooperation and Development of Germany (BMZ), launched the Research Innovation Fund in July 2020. The GLTN partner Urban Training and Studies Institute based in Cairo, Egypt managed the first edition of the Fund, which assessed over eighty research proposals and selected seventeen to be developed, with the support of a pool of senior reviewers from the Arab Land Initiative's network.

GLTN and the Arab Land Initiative - GLTN is a multi-sectoral alliance of international partners committed to increasing access to land and tenure security for all, with a focus on the poor, women and youth. The Network's partners include international rural and urban civil society organizations, research and training institutions, bilateral and multilateral organizations, and international professional bodies. In 2016, GLTN Partners, led by UN-Habitat and the World Bank, launched the Arab Land Initiative to promote equal access to land, peace, stability and economic growth in the Arab region through good land governance and transparent, efficient and affordable land administration systems. The Initiative aims at empowering land champions from the region by developing capacities, increasing collaboration and promote innovation, learning and sharing of best practices. It also supports the implementation of land gender-responsive and fit-for-purpose land tools and approaches at national and local level. The Research Innovation Fund is one of the streams of work of the Arab Land Initiative..

For more information, please consult the referenced documents, visit [www.gltn.net](http://www.gltn.net) or write to [unhabitat-gltn@un.org](mailto:unhabitat-gltn@un.org)

# TABLE OF CONTENTS

LIST OF FIGURES	4
LIST OF TABLES	4
ABBREVIATIONS	4
ABSTRACT	5
EXECUTIVE SUMMARY	6
CHAPTER ONE: INTRODUCTION TO THE RESEARCH TOPIC	8
1.1. Research Gap	8
1.1.1. Political, Economic, and Social Impacts	8
CHAPTER TWO: LITERATURE REVIEW	9
2.1. Pre-Oil GCC Settlements (1820–1930)	9
2.1.1. Islamic Land Practices	9
2.1.2. The History of Pre-Oil GCC Settlements	9
2.2. Early State Consolidation and the Discovery of Oil (1930–1970)	12
2.3. Tribes as Part of the State: The Modern Day	13
2.4. The Land and Conflict Nexus in the GCC	13
2.4.1. Borders in the Gulf States	14
2.4.2. Land Rights and Injustice	15
2.5. UN-Habitat Land Management Tools and the Current State of the GCC Region	16
CHAPTER THREE: RESEARCH METHODOLOGY	19
3.1. Public Survey (Quantitative)	19
3.2. In-Depth Interviews with Key Experts (Qualitative)	21
CHAPTER FOUR: LAND AND CONFLICT IN OMAN	23
4.1. Land and Security	23
4.2. The Land Allocation System and Potential for Internal Conflict	23
4.3. Strategic Borders and GCC Influence	24
4.4. Conclusion	25
CHAPTER FIVE: ADAPTIVE LAND MANAGEMENT TOOLS FOR OMAN	26
5.1. Background and the Current Status of the Land Allocation System	26
5.2. Tool #1: Land Tenure and Access to Land	26
5.3. Tool #2: Land Administration and Information	29
5.4. Tool #3: Land-Based Financing	30
5.5. Tool #4: Land Planning and Management	31
5.5.1. Implementation and Integration Obstacles	32
5.6. Tool #5: Land Policies and Legislation	33
5.6.1. Status of Omani Planning Law and Land Laws	33
5.7. Tool #6: Cross-Cutting Issues	33
5.8. Conclusion	34
REFERENCES	35



## LIST OF FIGURES

Figure I: A 1660 map of the Gulf region made by the Dutch. ....	11
Figure II: Age distribution of survey participants. ....	26
Figure III: How participants acquired their plot (a), Percentage of participants that own/rent (b). ....	27
Figure IV: Type of homes that participants own/rent. ....	28
Figure V: Level of agreement with personal land property taxes. ....	30
Figure VI: Level of agreement with statement. ....	31
Figure VII: Urban sprawl in Muscat City. ....	32



## LIST OF TABLES

Table I: Public survey sections .....	20
Table II: Public survey analysis method .....	20
Table III: In-depth interview sections .....	21
Table IV: In-depth interviews analysis method .....	22



## ABBREVIATIONS

<b>GCC</b>	Gulf Cooperation Council
<b>GIS</b>	geographic information system
<b>GLTN</b>	Global Land Tool Network
<b>MENA</b>	Middle East and North Africa
<b>ONSS</b>	Oman National Spatial Strategy
<b>UN</b>	United Nations





## ABSTRACT

Over the past decades, Western influences for expansion and control as well as the consolidation of the central government ended the pre-eminence of the tribal system. In an effort to centralize states and create boundaries after the discoveries of large oil reserves, the GCC states have effectively secured central state power over tribes. State consolidation was largely accomplished by establishing a rentier state and providing citizens with social welfare such as housing, land, healthcare, and education. These initiatives effectively unified and mixed tribes and promoted state loyalty. These welfare programmes continue to operate 50 years later, proving that the rentier state system still plays a large role in society. GCC countries such as Oman and Saudi Arabia have thus far remained relatively stable; however, due to their geo-political location and long histories of conflict, they are not immune to the conflicts in the region. For example, in countries such as Syria and Yemen where the central government was weakened, the power vacuum attracted existing tribal elites to try to seize power, leading to war and deep cleavages in society (Rabi, 2016).

The initial centralization of the GCC states depended on tribal support and land acquisition for border demarcation around areas of tribal loyalty. Land borders were foreign to eastern rulers, and disputes over historical rights to territories caused divisions and tension. Some borders continued to be disputed as late as 2008 (Rabi, 2016). After the ruling families established their power base with Western backing, the central government began to disperse oil revenues and distribute land. In Oman, for example, land was granted to citizens by a land allocation system established in the 1980s (Royal Decree No. 81/1984). Proper urban planning and land management were not adequately considered in

the effort to quickly build modern infrastructure while unifying and settling tribes. The influx of substantial oil wealth caused unprecedented rates of urbanization, with random allocation of land to citizens via the social welfare system. The results are visible today in enormous urban sprawl, urban fringe, mass land consumption, and highly unsustainable energy usage.

The paternalistic nature of the rentier state puts pressure on the government to provide all major services and infrastructure. With rapid population growth and rising levels of urbanization, central governments have been unable to match the pace required to provide adequate services across cities and rural areas. As citizens wait on long lists to receive land and infrastructure, internal tensions are rising further and increasing pressures on the government to deliver. In light of the ongoing renewable energy transition, the need for economic diversification and sustainable urban and rural planning are evident. In light of these realities, conflict and land management in the GCC region follows a similar path. Since the state as the “father giving to his children” can no longer continue as before, social welfare such as land distribution and food and service subsidies will decrease. With the introduction of taxation, the GCC states will have to tread carefully in uncharted waters. state government will have to become more transparent, and monetary incentives for citizens will no longer be a viable prospect. This study identifies potential social and political challenges as well as culturally suitable solutions to facilitate prosperous transitions. If adaptive solutions and implementation methods in land governance and management are investigated and developed for the GCC region, these societies can grow and evolve peacefully along with the reforms necessary for ensuring sustainable urbanization and land management.





## EXECUTIVE SUMMARY

### Background

Lack of proper land governance and land management practices in the Gulf region are predominantly a result of rapid urbanization and unprecedented modernization after the sudden influx of oil wealth in the late 1960s and early 1970s. Once a land ruled and etched along the lines of birthplace, profession and tribe, the people of the Gulf Cooperation Council (GCC) territories knew no formal or national boundaries between them. Land was viewed as a sacred right and was managed informally by the tribe that had the justified birth or inheritance rights to a certain territory. Land itself, though viewed strongly as a right, was not a main area of conflict, because “tribes were more concerned with ruling over people than territories” and also making sure that they had the resources they needed to survive (Rabi, 2011).

Once oil was discovered, Western economic interest and negotiations with ruling tribal families cemented their involvement in the Gulf region. Due to the lack of borders, tribal conflicts, and fluctuating legitimacies of tribal ruling families, the British began to map and mark the informal land lines between tribes, their loyalties, and their affiliations. Once the tribes were mapped, the British were able to give formal lands and recognition to the ruling tribal families through negotiations, military power, and financial backing. In the end, the British effectively put an end to tribal wars and conflicts, demarcated official international borders, and consolidated the various tribal conglomerations into six separate states, known today as Oman, UAE, Qatar, Kuwait, Saudi Arabia, and Bahrain. Each state is ruled by a distinctive tribal family, which has remained in power and legitimized since their initial recognition.

### Purpose of the Research

The influx of huge oil wealth caused unprecedented rates of urbanization and modernization. For example, before the discovery of oil, the Sultanate of Oman had only 10 km of paved road; by 1985 it had 3,200 km (Riedel, 2020). During the effort to centralize and unify the state, informal tribal land practices were forced into a centralized system, and land was allocated to citizens randomly via a social welfare system. The results are today’s urban sprawl, urban fringe, mass land consumption, and unsustainable energy usage. With rapid population growth and rising levels of urbanization, the central government has been unable to match the pace required to provide adequate services across cities and rural areas. As citizens wait on long lists to receive land and infrastructure access, internal tensions are rising and more demands are being placed on the government. As oil prices drop amid the current focus

on renewable energy, economic diversification and sustainable urban and rural planning are needed. In light of these realities, conflict and land management in the GCC region runs through a similar vein. Since the state can no longer continue to operate as it has in the past, social welfare such as land distribution, food and service subsidies will decrease. GCC states will have to very carefully manage the introduction of taxation. Government transparency will have to increase, and monetary incentives for citizens will no longer be a viable prospect. In the context of wide-reaching transitions, the study seeks to identify potential social and political challenges along with culturally suitable solutions. If adaptive solutions and implementation methods for land governance and management are investigated and developed specifically for the GCC region, these societies will be more adept to grow and evolve peacefully along with the reforms necessary for sustainable urbanization and land management.

### Research Objective

This study used the Sultanate of Oman as a case study for an in-depth analysis and evaluation of current land management practices, thereby uncovering the relationship between land and internal and external conflict. In order to effectively create innovative land management tools for the region while mitigating potential conflicts, the study pursues a comprehensive approach reviewing the historical, social, and political facets that surround land management, governance, and conflict in Oman. The social and economic impacts of improper land management and governance, combined with the traditional, informal tribal land practices, could not only create internal unrest among citizens but also cause or fuel conflict along Oman’s strategic borders in the Gulf region.

### Research Methodology

This research was conducted using mainly social science research methods, utilizing a multi-paradigmatic approach of both functionalism and interpretivism, in order to create a more holistic understanding of the social phenomena of modern-day tribalism in the Gulf and the nature of its relation to land management and conflict. The data includes quantitative, qualitative, and mixed-method research, collected through public surveys, in-depth interviews with key stakeholders, and numerical and statistical data analysis on the status of land management practices in Oman.

### Findings and Recommendations

The findings highlight the connection between Oman’s



historical tribal background, modern land management practices, and conflict. For example, the study results show that the usage of tribal ‘wasta’ (connections) in governance has resulted in various instances of corruption in the land management and administration system. Through the utilization of ‘wasta’, social status, and loyalty-balancing practices, large sections of key land areas in Oman have been distributed for free, withheld from the market, and left undeveloped and unutilized. Land practices that function outside of the bureaucratic system have led to other issues such as granting land deeds to children, distribution of oversized plots, illegal increase in sizes of allocated land plots, and social elites keeping “white land” off the market. The lack of a formal planning law and sufficient oversight in land governance also play a major role in the continuation of corrupt land practices, poor land management and administration, and the weak capacity to implement sustainable planning initiatives, such as the Oman National Spatial Strategy (ONSS). The results of this study show that the sociopolitical relationship between tribalism and land management and administration practices is a key factor to be analysed when developing innovative land management tools. The combination of formal and informal practices in land governance not only fuels improper land management but also internal conflict and disputes. This study reveals that the lack of transparency in the land system and inefficient administration have forced many citizens to participate in corrupt practices to gain lands or stoked disputes.

In the public survey conducted in late 2020, 70 per cent of respondents claimed that the main issues involving land are the faults of incompetence in the Ministry of Housing and Urban Planning and “greedy and corrupt practices”. It was also found that economic aspects play a major role in the relationship between land and potential conflict. With the rising need to diversify the economy and lower its oil revenue dependency, social welfare and subsidies are slowly beginning to decrease and unemployment is rising. The full provision of infrastructure, housing, lands and social welfare to citizens by the state is no longer sustainable. The paradigm shift away from pacifying conflicts with welfare incentives may create social unrest when it comes to reform of the land allocation system and the implementation of sustainable land management tools. In addition, if the population is not satisfied with the changes, border conflicts in strategic areas among tribes who have strong ties across more than one border are a potential threat. Thus, amid the new economic pressures and new leadership in place, the need for transparency in governance is pertinent for the implementation of sustainable land management tools, future development, and safeguarding internal peace and stability.

In light of the socioeconomic situation and recent

political changes in Oman, this study suggests that the creation of adaptive land management tools needs to consider the historical background and sociopolitical realities, in order to create land management tools that are culturally suitable, socially accepted, and implementable on the ground. A planning law based on the sustainable goals and vision of the ONSS urgently needs to be put in place, to clearly and legally enforce proper land management, administration and planning practices. The establishment of a proper planning law will hold land administration practices accountable before the law and will guide future projects and development under a sustainable and authentic framework. The land allocation system in Oman (Royal Decree No. 81/1984 and Royal Decree No. 125/2008) needs to be urgently reformed, due to its contribution to increasing urban sprawl, mass land consumption, and unsustainability. Because land is viewed by Omani citizens as a primary asset of wealth and as a sociopolitical right, a reform of this system will need to carefully study the various potential economic and social impacts on society. It will also need to consider the changing society and equality for all. Due to lack of transparency in land governance and administration in the past, changing – or even dissolving – the land allocation system may trigger social disapproval and unrest, especially if it is seen as unequal or unfair. Thus, this aspect of land administration needs to be studied and reformed in light of specific and realistic social needs.

Land-based financing initiatives, such as land taxation, are also required to reverse the impacts of white land and to promote land development; however, the results of this study highlight the importance of properly evaluating the financial impact on citizens considering the economic situation. It is recommended to introduce taxation first for large landowners and owners of undeveloped lands, as a demonstrated reprimand of those who may have gained land wealth outside of the bureaucratic process, rectifying the injustice of former land practices. Such taxation will also effectively incentivize further development and decrease urban sprawl. Taxation in any form is a new concept in Oman and needs to deliver growing economic prosperity and enhanced infrastructure and public services. Its successful introduction would help secure social trust in future land practices and increase transparency and accountability in governance and tax revenue expenditures.

Finally, cross-cutting issues such as women and youth need to be handled with consideration and care. Innovative land management tools should address the existing social reality and their potential economic impacts on women and on the growing population of unemployed youth. Due to the socioeconomic challenges in Oman, the consideration of these cross-cutting issues is highly important and recommended for a future in-depth study.

At the onset of rapid urbanization after the discovery of oil, land administration processes in Oman were quickly established and handed over completely to the predecessor of the Ministry of Housing and Urban Planning, without a cohesive planning framework. Moreover, the implementation of social welfare, land entitlement policies, such as the “lottery” land allocation system, in the midst of former autonomous tribal territories created a complex balancing act between social appeasement and consolidating loyalties to the central state. The land allocation system is still active in Oman, with drastic impacts on urban development and the societal makeup. According to a study of urbanization patterns in Oman, land allocation has created unsustainable urban sprawl, high energy consumption, and overconsumption of land and spatial resources (Nebel and von Richthofen, 2016). Heavy top-down governance, combined with weak transparency, inadequate planning structures and poor policy implementation, has led to massive misuse and overconsumption of land resources.

Also, the paternalistic nature of the rentier state, with the government acting as a “father distributing to his children”, puts heavy pressure on the government to provide all major services and infrastructure, which is both unsustainable and expensive. The Ministry of Housing and Urban Planning, for example, handles all land requests, conducts all zoning for housing and commercial plots, and has to ensure that each plot has proper facilities such as roads and electricity (Al-Shueili, 2015). Currently, 64 per cent of the population is below the age of 29 (eCensus, 2020), so there is a growing number of land requests, which is expected to continue to climb. Due to the high demand, land is being allocated far away from economic centres, further straining the provision of services. Also, due to the lack of sufficient technology, the drawing and zoning of residential areas by surveyors are sometimes inaccurate and not properly checked before being allocated. With continuous population growth and increasing urbanization, citizens wait on long lists to receive land and tensions, as well as the expectations placed on the government, are rising.

Thus, the social impacts of improper land management and administration could potentially lead to social distrust, unrest and conflict. If land continues to be poorly managed, underdeveloped and distributed without planning, Oman’s peace and stability may be at risk.

## 1.1. Research Gap

### 1.1.1. Political, Economic, and Social Impacts

Land governance, administration, and management practices and policies in the Sultanate of Oman are in need of significant revision. Since the land allocation system was established, Oman has continued to struggle with land governance and management. As land requests started to pile up, the distribution of land became increasingly random and plots were allocated sometimes far away from developed areas without any planning guidelines. Moreover, the lack of proper administration and policy oversight, the earmarking of certain classes of lands for those with high social status, land acquisition outside of the administrative process, and rampant nepotism in land allocation pose serious challenges.

This situation has resulted in urban sprawl, overconsumption of land, “white land” (land that is withheld from the market and usually granted to elites) and a sense of entitlement. Even though the lottery system originally intended to ensure equal opportunities for men and women to own a plot, a study of land allocation and clan formation in modern residential developments in Oman concludes that “unless the government applies both incentives for land development and taxation for land speculation, the system cannot be said to be ‘fair’ nor ‘efficient’” (Heim et al., 2018, p. 3). As Oman continues to urbanize at a high speed, it is urgent that the land administration system undergoes a major reform. The risks of internal social impacts, land conflicts, and lack of sufficient policy oversight and implementation continue to threaten the future of the country’s sustainable land management and modernization.

## 2.1. Pre-Oil GCC Settlements (1820–1930)

A well-rounded look into the unique aspects of pre-oil GCC settlements and how they functioned helps generate a deeper understanding of the origins of Arabian land management, sociopolitical organizational patterns and societal structures. This not-so-distant historical data is highly relevant for the study of urban planning and land management on the Arabian Peninsula today. It grounds the endeavour in roots that grow upward in a sustainable and legitimate manner, while identifying and pruning the branches that hinder and restrict the region's modernization and advancement.

### 2.1.1. Islamic Land Practices

Before taking a look into the pre-oil GCC settlements, it is important to understand the basic Islamic land system, first formalized by the Ottoman and Egyptian land codes in the late 18th century. Even though the GCC region was not fully formally organized in terms of a land system, Islam was seen as a complete way of life by Muslims, and Islamic sharia law outlined how land was to be administered, used, and managed. The Islamic land system was implemented in the Gulf region mainly in areas that were settled by the '*hadar*' (settled people), extended to the Bedu (nomadic people) through rules for communal grazing lands and water sources. While Gulf cities are becoming more pluralistic and secular, the deep historical, social, and cultural roots in Islamic land practices raise the need for modern land administration policies and management tools to be formulated against the backdrop of a majority Islamic society. Sharia law, although seen as outdated, gives room for continual evolution, and Islamic land practices and policies may provide a foundation for land management tools that can address the needs of the region better than Western land systems. As accentuated in the UN-Habitat publication *Land, Law and Islam*, "the lack of engagement with the internal Islamic dialogue risks creating land systems that are bereft of authenticity and legitimacy and thereby of effectiveness and durability" (Sait and Lim, 2006, p. 2). Today, this can be seen clearly in the Gulf region as the import of modern, Westernized land systems has resulted in informal practices and processes that "lead to unattended dualisms that undermine the prospect of integrated and unifying land policies" (Ibid., p. 2).

One unique aspect of the Islamic land system is the concept of dual ownership between the individual and God. All land is seen to be owned solely by God

and entrusted to its human owner. As summarized by Abdul-Rauf (quoted in Sait and Lim, 2006, p. 1), the right to own and utilize land in Islam is viewed as a sacred right, and "human ownership is tempered by the understanding that everything, in the last analysis, belongs to God... what appears to be ownership is in fact a matter of trusteeship." Hence, anyone who owns or uses land is granted the privilege of being a temporary owner by God, so long as they use the resource productively. Viewing land in this sacred way has significant impacts as it conveys landownership as something to be held with strict stipulations. For example, Islamic law makes explicitly clear that land entrusted to people by God should be put to use, is not to be used or gained in a corrupt way, and should not be held by greed or dealt with unjustly as a means to take away others' rights or access to it (Qur'an 2:188). There are four types of land in sharia law: "the first one is the '*Waqf*' as land held for endowment; '*Mulk*', or private ownership lands; '*Miri*' the state-controlled land which carries '*Tassruf*' or the government rights to use the land; and the '*Musha*', or communal lands" (Al-Ossmi and Ahmed, 2017, p. 382). These four categories of land are still partially retained in today's Gulf societies, with '*waqf*' land as the most protected, as part of the government system. For example, in Oman, the '*bayt al-mal*' (the treasury) considers '*waqf*' land as an entirely independent financial entity, separate from the Ministry of Finance, as it is maintained solely by the Ministry of Awqaf and Religious Affairs.

The land governance and administration in the Gulf is marked by mixed and blurred lines between Islamic land practices and the Western land administration model. The capitalist influence of the Western land system along with the huge influx of oil wealth has caused land in the Gulf region to be viewed today as an asset of individual wealth rather than belonging to the community. With rapid urbanization, large tracts of land were distributed without proper planning strategies, policies and oversight. The outcome has been land grabbing, land hoarding, and large plots of undeveloped, exploited and unused land across the region.

### 2.1.2. The History of Pre-Oil GCC Settlements

The available literature on pre-oil GCC settlements is extensive and mostly compiled by British colonialists and foreign oil explorers who were deeply involved in the region. The pre-oil Gulf region is mainly described as a collection of small city states called sheikhdoms. Each sheikhdom was ruled by shifting

dominating families, and power over tribes and tribal territories was fluid and maintained mainly through tribal confederation networks and alliances. When the British became involved in the region due to trade and anti-piracy interests in Indian subcontinent, they began to appoint ruling sheikhs according to the existing traditional tribal framework to establish formal communication and leadership in the region. These early sheikhdoms, in what are now the UAE, Bahrain, Kuwait and Qatar, signed treaties with the British in response to British accusations of piracy affecting their trading routes. The first treaty was the General Maritime Treaty of 1820, followed by the Perpetual Maritime Agreement of 1853. In 1890, Britain formalized the agreement with the sheikhs, to secure and monopolize access to the Indian subcontinent. The agreement stated that Britain would protect them from any external aggression in return for their undivided loyalty to Britain. The Gulf sheikhdoms were to have no dealings with any other powers apart from Britain (Wambugu, 2019). These treaties created what were called the Trucial States. Uniquely, Britain did not receive full sovereignty over the Gulf but rather the authority to regulate and conduct their external affairs of these states (Rabi, 2006). Although the Muscat coastal area of Oman was considered Trucial Oman, the state's relationship with the British was unique. The two main ruling families at the time, the Qawasim and the Al-Busaid, were arch-rivals. When Britain signed an agreement in 1798 with the Al-Busaid family to keep the French out, the Qawasim were eventually weakened. From this point forward, the Al-Busaid family worked closely with the British, needing military and financial support to maintain power in the Muscat coastal area and peace in the interior Imamate of Oman (Rabi, 2006).

The early GCC settlements were divided into two main groups: the Bedu (nomads) and the '*hadar*' (settled people). The '*hadar*' were more diverse and economically focused, living in the coastal areas and working in pearl diving, fishing and overseas trade. The Bedu, on the other hand, were more homogeneous and migrated seasonally throughout the interior regions, freely crossing over the modern state borders. For example, the most powerful tribe in Qatar, the Al-Murrah, was still migrating into Saudi Arabia, UAE and Qatar as late as the 1950s (Rabi, 2016). Although the Bedu and the '*hadar*' are both settled today, the social division remains, for example, "some Qataris, maintaining a sense of pride, will refuse to buy products in parts of Doha they consider '*hadar*'" (Fromherz, 2012, p. 36).

Despite the difference in lifestyle and group diversity, both the '*hadar*' and the Bedu followed tribal hierarchy and remained mainly autonomous. For tribes, the main concern was control over people not territories (Rabi, 2016). Each tribe had a leader called the '*rashid*' (head of the tribe) above the '*rashid*' was the '*sheikh*' and above the '*sheikh*' was the '*tamima*' (Rabi, 2011). Inside the tribal system, the members were given opportunities to share their opinions and were represented by their respective tribe's '*rashid*'. Because of the tribe's ability to mediate and negotiate based on people's needs and values, tribalism could be a constructive element in supporting democratic processes and in contributing to conflict resolution (Hertog, 2018). The tribe's strong mediation skills also proved helpful for the state government as it strove to gain loyalties from multiple tribes in the process of centralization.

The main '*sheikh*' was voted in by the leaders of the tribes, and if he was deemed unfit or lost authority, the tribe could vote to replace him or simply change tribal alliances falling under other dominant families or confederacies in the region. Customary law or '*urf*' was also implemented and hierarchically structured, and most disputes and justice issues were handled effectively within the tribes or by leading sheikhs. At that time, the tribal system was effective in part due to the extremely low populations in the Gulf region (e.g. only around 30,000 people lived in Qatar) (Rabi, 2016). While following a leadership system, in the pre-oil GCC states tribal allegiances were still fluid and did not permanently tie themselves to leaders, lands or territories. Instead, they notoriously shifted loyalties and locations based on the perceived economic or social benefits for the tribe.

Tribes were also accustomed to migration both for seasonal purposes as well as during hard economic times. In the interior Imamate of Oman, for example, there was no clear territorial definition and tribes were loosely united in confederations, without clear identities or political loyalties (Rabi, 2011). As shown below in Figure 1, due to lack of boundaries or clear loyalties, early maps of Trucial Oman drawn by the Dutch and the British were "constantly fluctuating with ill-defined borders, shifting allegiances and with little geographical knowledge of the interior" (Luscombe, 2012).

Thus, in the absence of formal boundaries, territorial distinctions between the early settlements and rights to tribal historical areas were known and agreed upon by all. Tribal territories were also flexible for nomads

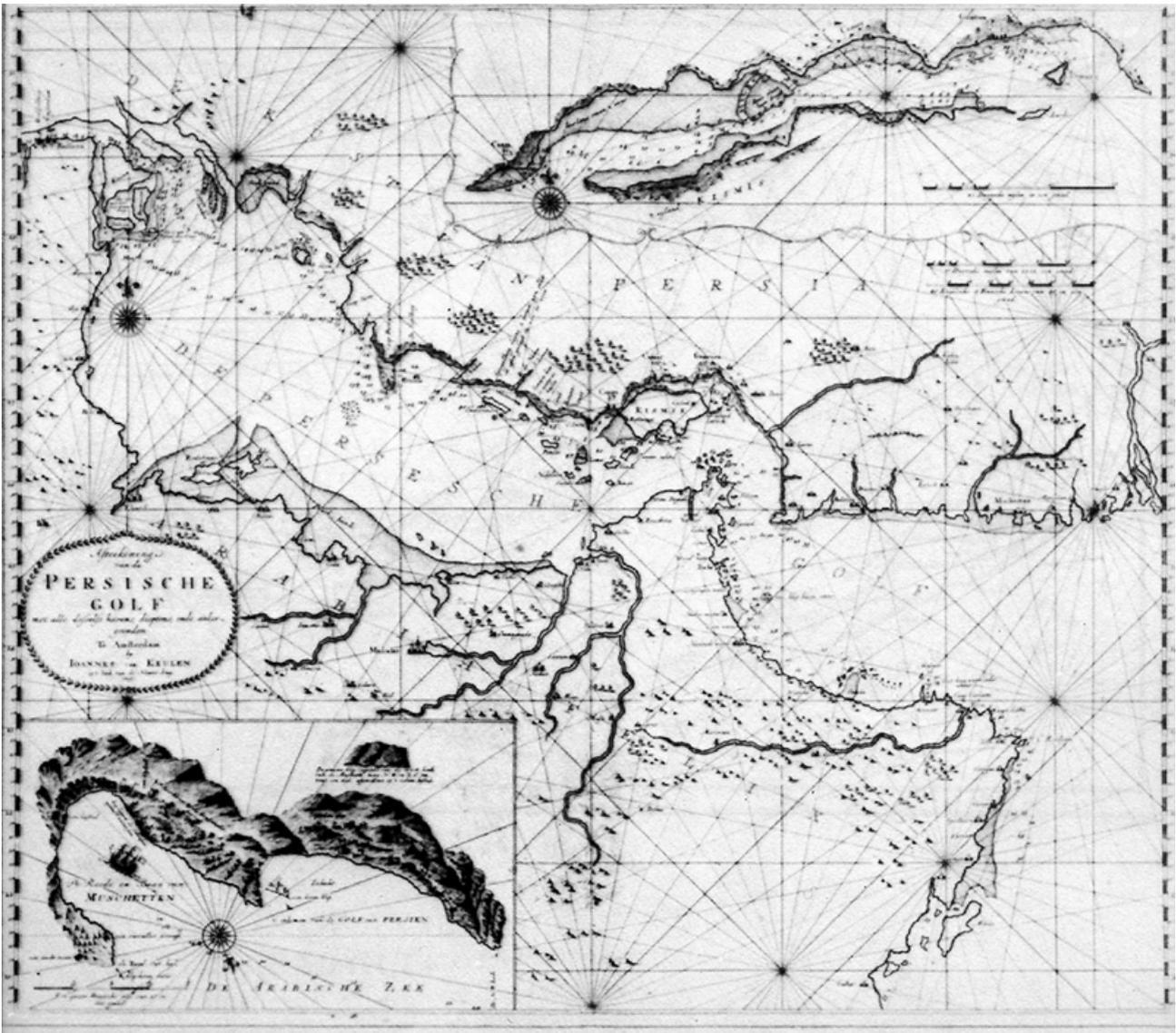


Figure 1: A 1660 map of the Gulf region made by the Dutch.

and tribal grazing lands for the Bedu were granted and recognized by the respective tribes. Rights to original territories were rarely disputed and tribes could always return to their original settlements if they chose without challenges, as their original ties to the land were respected and accepted. For example, a major tribe from the town of Zubarah in Qatar, the Naim, split into two factions in 1937 because of a loyalty disagreement between Qatar's emerging leader Al-Thani and Bahrain's leader Al-Khalifah. A fight broke out between Qatari and Bahraini forces over the right to Zubarah in modern day Qatar and the Al-Khalifah supporting faction of the Naim eventually migrated to Bahrain. They later migrated again to

Saudi Arabia and after World War II requested to move back to their original settlement in Qatar. The Emir granted them permission without challenges, even though they had left on bad terms. They were settled near the border on the tribe's original 'dira' land. The feud over Zubarah continued after these events and was not officially resolved until 2008, giving Qatar complete sovereignty (Rabi, 2016).

Although the British formalized protection agreements and established the ruling sheikhs, local tribes continued to view themselves as autonomous and consistently changed loyalties. This made attempts to consolidate power extremely difficult, especially

as the economy worsened just prior to the discovery of oil and tribes began to migrate from their original settlements in pursuit of livelihood. The constant shifting of locations, power struggles, and tribal rivalries and wars made the tribal system too fragile and fragmented to withstand the inevitable changes that were to come with the discovery of oil in the early 1930s and the rise of urbanization. It became apparent that despite being used for thousands of years, the tribal system was ill-equipped to manage these drastic economic and social changes.

## 2.2. Early State Consolidation and the Discovery of Oil (1930–1970)

When oil was discovered in the 1930s, the world was going through an economic crisis. Then came World War II and oil development was delayed further. As a result, some Gulf states did not export oil or receive revenues until the late 1960s. Shortly before discovering oil, the tribes in the Gulf struggled to survive as important industries such as pearling dropped dramatically. In Qatar, for example, many people left during this period called the “years of hunger” and looked for work in other places such as Bahrain and Saudi Arabia. Qatar’s population was almost halved by 1940, from 30,000 to 16,000 (Rabi, 2016). This economic crisis set the tribes in a position of need and gave the oil-interested West the upper hand in their ability to help the Gulf leaders to unify tribes in the region under a newly centralized “Western” state.

Before oil, Britain was not involved much in the commercial activities of the Trucial States in the Gulf. “As far as the British were concerned, as long as the lines of communication with India were secure, this area was of little strategic or commercial importance. They therefore left the rulers to themselves without any British Political Agent being appointed until the outbreak of the Second World War” (Luscombe, 2012). But after the discovery of oil, Britain’s interest in the Gulf increased substantially, renewing tribal rivalries, as Sheikhs tried to maximize land and territorial rights to secure more oil revenues.

The financial and military support of Britain allowed the dominant tribal families, such as the Al-Busaid in Oman and the Al-Thani in Qatar, to gain the ability to fully consolidate and establish their power as Sultan or Emir, even in highly tribalized territories such as the interior Imamate of Oman, which historically was politically separate from the Sultanate of Muscat. The dominant families at the time of oil discovery were

“in Kuwait the Al Sabah; in Bahrain the Al Khalifa; in Qatar the Al Thani; in the present-day UAE the Al Nuhayyan in Abu Dhabi, the Al Nuaimi in Ajman, the Al Sharqi in Al Fujayrah, the Al Maktum in Dubai, the Al Qasimi in Ras al Khaymah and Sharjah, and the Al Mualla in Umm al Qaywayn; and the Al Said in present-day Oman” (Metz, 1994, pp. 30-31).

When official state consolidation started to come into play, conflicts due to lack of defined borders and oil wealth distribution led Britain to begin working with the leaders and tribes to draw official borders between the Gulf states. Borders were drawn for each of the recognized leaders giving tribal alliances concrete landownership for the first time. In this way, each ruling family now formally owned tribal lands and Britain could command their loyalties. For a tribalized region, “the mandatory system and the corresponding Western model of the state with its clearly determined borders was foreign to Middle Eastern rulers, who were accustomed to a nomadic lifestyle and tribal raids” (Guzansky, 2016, p. 543). Britain worked in parallel with the Gulf states in the formal demarcation of land borders, but some of the borders were extremely vague, resulting in confusion and continuous disputes.

For example, in the late 1940s and early 1950s Saudi Arabia sought to influence tribes and factions in the Buraimi Oasis in northern Oman, where both it and Oman claimed tribal territorial rights to villages. The British had to interfere and helped claim back Buraimi on Oman’s behalf. Britain was a major player in the creation of the border lines as it could provide economic and military backing to the leaders and demarcated borders where they deemed appropriate. Many disputes arose over the creation of clear borders as some tribes retained their patterns of loyalty shifting and cross-border migration. Throughout this process, some Gulf leaders tried to entice tribes to join their side in order to increase their population and power. In some cases, tribes took advantage of state consolidation efforts and pledged loyalty to two separate leaders to receive double benefits (Rabi, 2016). Other issues also arose due to the deluge of oil wealth, which overwhelmed the formerly poor Gulf countries. Some sheikhs mismanaged and spent revenues unwisely, as seen in early Oman and Abu Dhabi. In these cases, Britain partnered with other family members in the royal line, helping them take over in coup d’états (Luscombe, 2012).

In terms of tribal integration into the state system, tribal leaders were initially coerced mostly through

promises of continued autonomy under the state they pledged loyalty to, along with economic and social benefits. This state appeasement of tribal authority benefitted both sides, as the tribe and the state built an interdependent relationship, ensuring relative peace and loyalty within the newly drawn borders.

Accommodating the various tribes was no easy task. The constant balancing act of tribal appeasement and state consolidation caused many of the early Gulf leaders to focus on internal tribal affairs very closely. Many state governments set up authorities for tribal affairs, as an attempt to include the social structure of the tribe into the state system and to solve disputes. By being included into the state, the tribe was slowly diminished but not erased. As the state gained more and more economic and military power, many tribal leaders were eventually formally incorporated and appointed to state positions as a propitiation tactic. In the UAE, for example, each Emirate was led by one of the influential tribal leaders (Rabi, 2016). The political titles and financial benefits gained by the tribal leaders and the new citizens pushed tribal institution to welcome state centralization, while at the same time, allowing state leaders to slowly diminish tribal authority and identification. Old systems and services that the tribe used to provide were now solely the domain of the state. The result is the “rentier states” of the Gulf: dependent on oil revenues from foreign entities, they distribute wealth to royal elites and to citizens through social benefits such as free healthcare, land, education, and housing (Hertog, 2018).

### 2.3. Tribes as Part of the State: The Modern Day

In today's Gulf states, tribal authority has been weakened in favour of central state authority and national identity. As a result, the tribe has lost all of its essential autonomous economic and political functions. Yet, the tribe continues to shape the social fabric of life in the Gulf. Even though tribal identity is disregarded by the state in most cases, the tribe remains alive in terms of marriages, social status privileges and family hierarchy. Tribal leaders still exist today but have limited power or influence over their respective tribes. The tribal institution now depends on the state for recognition or status: “In Oman and Saudi Arabia, they are on the payroll of the government, reflecting their dependence on state largess and recognition” (Hertog, 2018). Also, due to the historic tribal accommodation methods during the initial consolidation of the state, many tribal leaders

appointed to high governmental positions or given land and economic benefits remain among the elite today. The continued presence of tribal elites in Gulf society shows the major role that tribes play within state politics and society today, and this influence effectively trickles down to the broader public as they continue to view and base political positions based on tribal affiliation rather than capability (Al-Mukrashi, 2015).

There are various other ways to utilize tribalism informally to gain benefits outside of state law and regulations. “Tribal networks can influence hiring and interactions between the citizen and the state on a day-to-day level. While tribes are rarely allowed to act collectively, low-level, individual interactions with the state still can be inflected by tribal identity” (Hertog, 2018). For example, ‘wasta’ (واسطة) has become an informal system, operating outside of the state system, exercised through family name, social status or high-level connections. It can lead to blatant injustice and corruption in government entities and private sector dealings. ‘Wasta’ as used in tribal society has adapted and re-established itself and now is a crucial tool used by state leaders to gain tribal approval and build loyalty.

### 2.4. The Land and Conflict Nexus in the GCC

Conflict across the Arab world has marked past centuries and continues to plague the region today. Religious sectarian disputes, tribal factions, border and territorial ambiguity, lack of political transparency, and power struggles all play roles in these conflicts. Prior to the commercialization of oil, the Arab region was greatly susceptible to intra- and inter-tribal wars, tribal family dominance, Western influence, and attempted takeovers by empires such as the Ottomans and Persians. The fight for territorial expansion in the tribalized pre-oil era linked land acquisition directly with conflict and sometimes wars. The prevailing and hasty nature of post-oil state centralization did little to pacify strategic conflicts between Gulf states and internal tribal territorial rights. Disputes over tribal territories and historical grazing lands are still pertinent today, for instance, in Oman's Dhofar region (Al-Ma'ashani, 2017).

In recent years, although the GCC has maintained relative peace, the collapse and chaos of neighbouring countries, such as Iraq and Yemen, stimulated greater efforts to mitigate conflicts through the strong promotion of national identities and increased public appeasement. The paternalistic accommodation model

worked for the Gulf states in the past, but as the need for oil independence grows, the governments will no longer be able to maintain the same levels of financial and social service incentives. Oman's recent decrease of subsidies and the income tax initiative prove that the economic situation is worsening and public benefits will continue to be cut. The implementation of taxes could break the long-standing social contract in Oman, which is an absolute monarchy, and possibly lead to Omanis vocally demanding more representation in government (Sheline, 2020). In this case, the Gulf states face the massive challenge how to successfully and peacefully guide a transition of the government's and citizens' changing roles and responsibilities.

Currently, the relationship between land and conflict is defined by three themes – land borders, economic security, and injustice of land rights – that underpin the main underlying root causes of land disputes in the region. If these three main categories are studied in depth and culturally appropriate solutions are formed, the potential to lessen and avoid potentially devastating conflicts will increase immensely.

#### 2.4.1. Borders in the Gulf States

The initial drawing of borders between the Gulf states caused several internal feuds and conflicts between the ruling tribes as well as external conflicts (e.g. Iran and Iraq). Even after gaining independence and establishing official borders, the Gulf states continued to dispute territories and borders due to the tribal claims and vague border lines and tribal affiliations. Tribal alliances also played a big part in border disputes, especially for tribes with trans-national connections rooted in historical migration patterns.

Today, there are fewer border disputes and no border wars; however, as the region struggles to diversify from its oil dependency, many Gulf states seek to influence or infiltrate strategic economic locations across the region for their own national interests and geopolitical leverage. In recent years, the Sohar Port in Oman was a competitive move by the country to increase industrialization and economic diversification. Sohar Port's strategic location outside of the conflict area of the Strait of Hormuz gives Oman an economic advantage, which has the potential to challenge Dubai's Jebel Ali Port, the largest in the area. Also, the 2017 dispute between Saudi Arabia and Qatar shows the mutual dependence of the Gulf states for imports across land and sea borders. In 2017, Saudi Arabia, Bahrain, UAE, and Egypt imposed a blockade

on Qatar's air, land and sea borders. This political and sectarian dispute, with Saudi Arabia claiming Qatar supported Iran-backed Islamist groups, led to border blockades that had the potential to isolate Qatar and severely hurt their economy and food supply (Al Jazeera, 2020).

The relationship between Oman and the UAE has been mostly cordial, but recent differences over regional disputes such as Yemen and UAE interference in Oman, have intensified border patrols between the two nations. For example, in November 2018, Sultan Qaboos issued a royal decree banning non-Omani citizens from owning agricultural land and real estate properties in strategic border areas, including Musandam and Dhofar (except for the port city of Salalah), and heritage sites. "This action was reportedly taken to cope with the repeated purchase by Emirati nationals of properties within the Omani borders, especially in Musandam and Northern Oman" (Ardemagni, 2019). Various spying attempts on Oman by UAE intelligence have been discovered as recently as 2017 and 2019 Oman's strategic borders of Musandam (the peninsula next to Iran's coast) and Mahra (the most eastern governorate of Yemen) are grey areas and are highly sensitive and susceptible for infiltration across borders. If there is tension between UAE, Saudi Arabia and Oman, Iran will have space to increase their influence vis-a-vis tribes, as some tribal communities in Musandam have ties with Emirates and are Sunni or Shia, in contrast with the mainly Ibadhi Omanis (Ibid.).

Land governance and management in the Gulf region is directly correlated with economic security. After gaining massive oil wealth, the Gulf elites sought to consolidate their states, by developing a rentier social contract between elites and citizens, based on the exchange of political rights and freedoms for social welfare policies, low or no taxation, and free healthcare (UNDP, 2013). Land resources were a large part of the social welfare packages offered by the early Gulf governments. Since land was organized by tribes without official deeds or borders, land allocation was one of the first steps taken by the central governments in order to achieve equality and formally establish land rights and ownership. Land distribution did not end after the newly established states were consolidated. Land continued to be considered a social welfare right that should create equality for all, integrating and mixing tribes. For example, Oman established a formal land-allocation lottery system in 1984, granting a plot of land to every male citizen over the age of 21 (Royal Decree No. 81/1984). This system, which

remains in place to this day, was expanded in 2008 to include women over the age of 24 (Royal Decree No. 125/2008).

Similarly, housing was one of the main goals of the first master plan for Kuwait City. Drafted in 1950, it expanded outside of the old city walls with eight neighbourhood units accommodating 48,000 people. Kuwaitis were thus moved out of their traditional mud-house neighbourhoods into new villa neighbourhoods through land purchase programmes, government-subsidized loans, and housing welfare. By 1980, the Public Authority for Housing Welfare already had a backlog of 19,000 requests. Today, unrest is growing due to the rising property market and the housing crisis, as citizens demand their land rights. Currently, the wait to receive housing is up to eighteen years, a minimum wait of eleven years and “discontent is seen in articles in the local press and in protests such as that in 2012 by a group of citizens at the PAHW [Public Authority for Housing Welfare] demanding their housing right as Kuwaiti nationals” (Al-Shalfan, 2013).

Land distribution and poor implementation of land policies have resulted not only in urban sprawl and unsustainable land use but also in a sense of cultural and social entitlement to land. Citizens view landownership as one of the most important forms of personal economic security and most apply not only for their own free piece of land or housing but also buy extra lands in random locations for themselves, their children, parents, wives, and even extended family. The land allocation system in Oman and the other land distribution systems in the region have resulted in land grabbing among citizens and elites as well as underdevelopment, with land as an economic investment and personal asset security (Heim et al., 2018).

The random and unsupervised land distribution further shrinks the already low availability of land resources. Land and water resources in the Gulf are physically scarce due to the arid climate, average rainfall rarely exceeds 100 mm, and the scarcity of arable land, only 4.25 per cent (Al-Saidi and Saliba, 2019). Continuous mismanagement of the limited land and fresh-water resources has resulted in substantial levels of unsustainable land usage and high energy costs, due to lack of planning of infrastructure and poor implementation of environmental and agricultural policies. The Gulf states also continue to neglect the development of rural areas, including roads, clinics, affordable housing, and water supply networks, all of

which are critical for economic growth (UNDP, 2013).

Agriculture is the main economic activity of rural areas in the Gulf yet only contributes 0.08 per cent to GDP, while “over 70 percent of the region’s GDP is generated in areas with high to very high surface water stress, more than triple the global average” (World Bank, 2017, p. 1). Mismanagement and lack of implementation of water resource policies increase the massive energy use for water desalination. “Conservative estimations of electricity consumption for desalination in the case of the GCC countries range from 4–12 per cent of total electricity production, while higher estimates may rise to more than 20Per cent in UAE, 13Per cent in Qatar, 7Per cent in Saudi Arabia or around 8Per cent in Kuwait and Bahrain” (Al-Saidi and Saliba, 2019, p. 2).

The unsustainable land and water management practices are largely compensated by oil revenues, but as oil prices continue to decline, renewable energy grows in popularity, and urbanization increases rapidly, the ability of the Gulf states to sustain these practices is coming to an end. Mismanagement and corruption in the land system, due to lack of planning laws and administrative supervision, contribute not only to economic and environmental issues but to sociopolitical issues as well. Economic insecurities, such as land, food and water scarcity, are major factors that further stress city infrastructures and worsen conflict and civil war, as seen in neighbouring Syria (Sullivan, 2014).

As economic diversification intensifies and financial costs rise, the Gulf’s social welfare system will have to be reduced, with the introduction of taxes and a possible reform or dissolution of the land welfare system. The potential social effects have yet to be studied in depth and are highly important for preventing conflict and unrest in the Gulf region.

#### 2.4.2. Land Rights and Injustice

Land rights in the Gulf states after the centralization period sought to merge and reconcile the historic nature of tribal lands and territories with a Western landownership system. Tribal territories were granted official deeds for ownership, and land and housing were given out to citizens to encourage them to settle. Over the following decades, land rights and systems were formed to distribute land equally to both male and female nationals. While land rights were conceptualized as just, the land and housing allocation systems that the Gulf states implemented

have delivered the opposite. For example, in Oman the land lottery system is said to be fair and efficient, but as a recent study on land allocation and clan formation shows, “the lottery system fuels a shadow market of land speculation, excluding those with low income from home ownership, and plot development plateaus at a completion rate dependent on the level of governmental infrastructure provision” (Heim et al., 2018, p. 3). Thus, this “fair” system actually has resulted in injustices, as seen across other Gulf states such as Kuwait.

The roots of the economic and social injustice in land practices in the Gulf states lie in a shadow government working outside the rule of law. The political model established in the region feeds injustice as the political economy is characterized by a high level of political control through informal interactions between the regime and business elites (Sika, 2012). These informal modes of interactions between business elites and the government operate outside the power of state law, continually undermining the rule of law, both for elites and citizens, as business elites begin “developing their own clientelistic networks by embedding this system of informalities and weakening the rule of law” (Sika, 2012, p. 9). This “parallel” government shapes land rights and land access. In Oman, for example, white land, which is undeveloped land held off market to increase land prices, is often granted to tribal leaders (Heim et al., 2018).

When the Arab uprisings broke out in 2011, the protests in the wealthier Gulf states were much smaller and tempered by financial incentives and job opportunities. According to Hiltermann (2018), most protestors “were propelled not by the injustice or arbitrariness of their countries’ borders but by the nature of their governing arrangements; these had bred nepotism, cronyism and other forms of corruption, and increasingly failed to provide services and distribute the fruits of whatever growth took place.”

These cases can be seen on national and local levels as tribal ‘wasta’, and undermining the law remains an engrained part of politics and society itself. Due to the general wealth and wellbeing among Gulf citizens, most of these major instances of corruption do not trigger street protests or unrest in the region. But in light of the changing economic situation and dissatisfaction with government systems, such as the long waiting lists for land allocation, distrust in the state system and potential for conflict might increase.

## 2.5. UN-Habitat Land Management Tools and the Current State of the GCC Region

The United Nations (UN) defines sustainable land management as “the use of land resources, including soils, water, animals and plants, for the production of goods to meet changing human needs, while simultaneously ensuring the long-term productive potential of these resources and the maintenance of their environmental functions” (Sanz et al., 2017, p. 30). In order to achieve sustainable land management, specific land tools have been developed and applied around the globe, adapted to each region and climate. The Global Land Tool Network (GLTN) has outlined 6 main tools for the sustainable management of land:

- 1 - Land tenure and access to land,
- 2 - Land administration,
- 3 - Land-based financing,
- 4 - Land planning and management,
- 5 - Land policies and regulations,
- 6 - Cross-cutting issues.

These tools are quite broad and require further specification to be implemented in developing countries. GLTN is working to further adapt these tools based on in-depth research from the MENA region. The current land management practices across the GCC region are largely unsustainable, as systems and processes are not planned, maintained, and regulated efficiently. GCC states face very unique and extreme challenges in terms of land management, “such as desertification, biodiversity loss, pollution in marine and coastal areas, air pollution, and water scarcity and quality” (Raouf, 2008, p. 1). Yet, despite these challenges, many non-renewable freshwater reservoirs are being depleted for irrigation, and groundwater collection systems are non-existent or inefficient due to leakages from poorly made water networks. Also, as exemplified by the UAE, a relatively small country, resource management in the region is not efficient: “the UAE has the largest [ecological] footprint in the world, i.e., people in the UAE are placing the most stress per capita on the planet” (Ibid., p. 1).

Literature on the utilization of these basic land management tools in the Gulf is sparse and most research on land management and urbanization patterns in the Gulf has been conducted by UN-Habitat. There are some local initiatives (e.g., Saudi

Vision 2030) that promote sustainable environmental and land usage, but thus far, land management tools have been poorly administered and implemented. The Gulf states lag behind in sustainable land management, and the proper adaptation of these basic tools needs to be researched in depth, in order to adapt them to the local context and address its unique issues.

High levels of urbanization in the Gulf states are a key motivator for better land management and land usage policies. “Excessive urban expansion and declining density are wasteful in many respects, and they increase demand for mobility and energy consumption; contribute to environmental degradation; increase the cost of providing basic services, managing public space and infrastructure; reduce the economies of agglomeration and decrease urban productivity” (UN-Habitat, 2019, p. 23). Initiatives for land-based financing and land planning and management are in the works but advancing slowly. In 2015, Saudi Arabia announced a 2.5 per cent tax on white land in order to combat undeveloped urban land and to provide “beneficial effects for urban development and lead to more efficient use of land, compliant to zoning and urban planning designations” (Nadisah et al., 2019, p. 2).

Other cross-cutting issues such as gender-based inequality and the growing youth populations should be further studied empirically. Gender-based inequality in terms of landownership usually happens informally inside the family. Even though women have a legal right to land and inheritances by the state, these rights are sometimes taken away or distributed otherwise by the family. Alongside gender, the large share of young people in the Gulf states is another pressing issue. They account for nearly half of Oman’s population, which has a median age of 25.6 years (World Population Prospects, 2019). This growth creates demand for more-affordable housing and land markets, along with mixed-use and lower income residential options. As proper land management is essential for sustainable development, the issues of land governance and decentralization need to be dealt with first, before sustainable land management implementation can be pursued in the Gulf region.

“Land governance involves procedures, policies, processes and institutions by which land, property and other natural resources are managed. This includes decisions on access to land, land rights, land use, and land development” (IGI Global, 2020). In the GCC space, land governance and planning takes a fully top-

down approach, led and regulated by a centralized state. There is little to no bottom-up initiative, and planning processes and sustainable environmental factors are usually crowded out by economic and tribal interests. For example, in Saudi Arabia, new initiatives are taking place to deal with the topic of white land (Asharq Al-Awsat, 2021), along with suggestions for the full reform of the planning system. It has been criticized as too rigid, making planning strategies nearly impossible to implement. UN-Habitat published specific guidelines for the reform of the Saudi planning system, stating that it should comply with horizontal and vertical integration, transparency and responsiveness in decision-making and planning with key stakeholders, responsiveness to local needs, and a strong focus on implementation and goal-oriented outcomes, to name a few (Medeiros and Zwet, 2020).

Also, in terms of official planning law, Oman has outdated planning standards – last updated in 1991. This has led to informal methods of supervising land management and land distribution policies. The extreme centralization of land governance across the GCC leads to poor transparency and does not allow for accountability in the land market. Accordingly, due to lack of integration between ministries in policymaking, the sustainable land planning strategies that are elaborated usually remain theoretical due to the limited capacity to implement them (Medeiros and Zwet, 2020).

Studies of Oman’s and GCC states’ contemporary urban development and spatial planning strategies have become more prominent over the decades. Both Western and Eastern perspectives are covered, and specifically for Oman, the focus is on in-depth numerical, statistical and scientific data on various aspects of urbanization and spatial development over the last 45 years. The works highlight the impacts on four main categories (the environment, urban development patterns, land allocation and institutional reform), leaving gaps in the relationships between social, economic and political factors. This pattern can be seen across the Gulf, with a strong focus on technological breakthroughs in development projects and a general disregard of social, political and economic transformations. This weakness on the social and political side leads to ineffective implementation and unrealisable innovation (Molotch and Ponzini, 2019).

Recent detailed studies of urban development patterns, such as *Urban Oman* by Dr. Sonja Nebel and Aurel von Richthofen (2016), give information

and background on important urban trends: rural-to-urban migration, rural transformation case studies, environment and resource waste, and changing lifestyle patterns in Muscat. The authors explain the key directions for adaptation and include initiatives for major social, cultural and economic analysis. The sociocultural aspect and its influence on urbanization patterns in Oman is yet to be adequately researched and documented. In his PhD thesis, Al-

Shueili (2015) outlines important gaps in existing research and proposes several avenues for future studies of the Oman National Spatial Strategy and its progress and outcomes: quantitative analysis into the decision-making processes and gaps in strategy implementation; research on land use and plot distribution origins and comprehensive alternatives; and finally, tribal influence and its contribution to urban planning development.

This paper relies on social science research methods, utilizing a multi-paradigmatic approach of both functionalism and interpretivism, in order to create a holistic way to understand the social phenomenon of modern-day tribalism in Gulf society and its relation to land management and conflict. The data was collected through quantitative, qualitative, and mixed-method tools. A deeper look into the facets of tribal mentality and its role in the creation of a more sustainable and cohesive land management policy demands an analysis of tribal involvement in politics, policymaking and implementation. These insights can be gathered from a literature review of historical studies and data on tribal-political relationships and comparative research on its influential power today, along with public surveys on land conflict and land management and in-depth interviews.

### Research Question

To what extent does Oman's historical background of tribal land management and informal land boundaries affect land management and administration practices today? Within this context, how can innovative land management tools be formulated in a way that meets sustainable land management goals while reflecting Omani authenticity? What is the relationship between land and conflict, and how does it impact the ability to implement innovative land management tools and ensure sustainability and peace in Oman and the GCC area?

### Research Objective

The study aims to examine the complexities of

informal and formal land governance practices in the Sultanate of Oman and how they affect the status of land management and administration today. It also seeks to investigate the relationship between land and conflict in Oman, to better understand and interpret how land is viewed by the Omani people. These two important contributions of the research are meant to help assist the effective adaptation and implementation of sustainable land management tools in Oman and the greater GCC region.

## 3.1. Public Survey (Quantitative)

### Research Objective

The objective of this survey is to collect quantitative data through an electronic survey on landownership: age of owner, type of ownership, number of plots owned, location of plots owned and number of plots owned per household. Also, it will gather information on any land disputes or conflicts that have arisen due to landownership or property rights. The data gained from the survey will be compiled and analysed to understand how Omanis view, organize, and use land. Also, the relationships between landownership, land distribution and conflict will be assessed.

### Research Aim

The aim of the research is to compile a valid analysis of landownership in Oman and to explore the relationship between land and conflict.

### Survey Sections

Topic of section	Aim of section
<b>Background information: profile of respondent</b>	- Collect general sociodemographic information
<b>Landownership</b>	- Record their view of landownership and how they see the future in this regard
<b>Land conflicts</b>	- Understand their perception of land conflict
<b>Land management tools</b>	- Identify how they validate land management tools and the level of acceptance

Table I: Public survey sections.

### Research Method

An electronic survey will be sent out to Omani citizens (18 years and older) through social media platforms, and the target number of responses is at least 200.

This will be a cross-sectional study and will remain open for 2 weeks in order to reach the targeted number. The number 200 was chosen due to the limited time to gather survey results and the large target audience.

### Analysis Method

Step	Activity
<b>1</b>	- Compile the data in a database (Excel sheet)
<b>2</b>	- Produce charts of the responses
<b>3</b>	- Find the correlations between background information, landownership context, land conflicts issues and land management tools
<b>4</b>	- Produce a report to summarize the results
<b>5</b>	- Prepare a presentation of the conclusion from the survey results and present it to relevant experts for discussions (get deeper analysis from different expertise)
<b>6</b>	- Formulate questions for the expert interviews (key persons) and strengthen the link between both research tools

Table II: Public survey analysis method.

### 3.2. In-Depth Interviews with Key Experts (Qualitative)

#### Research Objective

The objective of the in-depth interviews is to collect qualitative data through recorded interviews on land governance in Oman on the following topics: the land allocation system, transparency in land distribution, corruption, the relationship between land and conflict (examples), and the influence of tribalism. The target audience are key policymakers, leaders and experts working in the fields of urban planning and land

governance in the Ministry of Housing and Urban Planning. The target number of interviewees is five. The questions will be linked to the analysis of the public survey responses.

#### Research Aim

The aim of the research is to compile more in-depth information on the land allocation system, to gain insight on the inner workings of the Ministry of Housing and Urban Planning and related entities, and to explore the connection between tribalism, corruption and land policy implementation.

#### In-Depth Interview Sections

Topic of section	Aim of section
<b>Background information: profile of respondent</b>	- Collect general sociodemographic information
<b>Opening questions: personal understanding</b>	- Establish in-depth understanding regarding interviewee
<b>Strategic questions: land allocation</b>	- Identify adaptive land management tools, transparency, public participation
<b>Strategic questions: tribalism and corruption</b>	- Understand the social influences and factors
<b>Sensitive questions: land and conflict risks</b>	- Understand the geo-political situation and its connection to the land and conflict relations in Oman and the region

Table III: In-depth interview sections.

### Research method

The interview questions will be designed to build

on the analysis of the public survey responses. The interview will be conducted one-on-one and professionally recorded.

### Analysis method

Step	Activity
1	- Record and produce a transcript of each interview
2	- Draft written summaries of each transcript
3	- Find and analyse the correlations between land policymaking, corruption, tribalism, implementation and conflicts
4	- Compare and contrast the interview results with the responses from the public survey and analyse similarities and differences
5	- Prepare a presentation of the conclusion from the survey results and present it to relevant experts for discussions (get deeper analysis from different expertise)

Table IV: In-depth interviews analysis method.

### 4.1. Land and Security

The tribal-social mosaic of life and community in Oman before state centralization and land allocation has largely dissolved, as many old neighbourhoods were abandoned for isolated villas. During the centralization process, lands were allocated to citizens to foster a sense of belonging. Survey participants largely concluded that they tend to see land as personal security and feel insecure when they do not have the right to land. An Omani political researcher commented in an interview that if you are from Sur and you do not have land in Sur, then you are not 'Suri'. He also stated that any discussion about not giving someone an automatic right to land, even if they do not develop it, is always fully opposed in *Majlis Al-Shura*. Landownership is viewed as a social safety net and provides an important sense of belonging as an Omani citizen, which is an indication that the land allocation system achieved its principal goals.

Nevertheless, it has also produced negative impacts. Without proper neighbourhood planning and random plot allocation, sometimes far away from family and work, today it is rare to see neighbours engaging with one another, especially in Muscat city, as the system has failed to create a cohesive society. In an in-depth interview with a sociopolitical researcher in Oman, he discussed the impacts of plot allocation on Omani identity and sense of community. He stated that over the last 50 years, Omanis have built two personalities, one in their tribal villages, where they come from, and one in Muscat. In the area where they originate, their sense of community, neighbourhood, and willingness to cooperate is high. But, in Muscat they become individualistic as if they do not belong there. We can see this clearly in the way that Omanis continue to return to their villages every weekend, and when they go back, the stereotypes that they have between each other in Muscat are continually reinforced.

The lack of social cohesion could play a potential role in creating conflict and social division through the subtle reinforcement of tribal difference. Due to the poor land administration, Omani citizens have continually demanded more transparency from the Ministry of Housing and Urban Planning (Heim et al., 2018). Since early 2020, under the new leadership of Sultan Haitham bin Tariq, many promising changes have been made in order to achieve more efficiency and accountability.

### 4.2. The Land Allocation System and Potential for Internal Conflict

The land allocation system in Oman guarantees an equal plot of land to every eligible Omani citizen. Because the system lacks proper oversight and transparency, there are many publicly known instances of people using 'wasta', nepotism and social status to gain high-class lands or larger plots. According to the short answer portion of the public survey, a majority stated that their land issues and conflicts have to do with inheritance disputes and nepotism. In terms of inheritance, share distribution often excludes women or favours older siblings. The distribution of shares does not guarantee everyone an equal opportunity to receive their right to a share, and because the family is in charge of this system, it is difficult for vulnerable groups to demand their right to inheritance. Even though this is one of the main issues in relation to internal land disputes, its ability to cause conflict is slim. Nevertheless, its potential effect on vulnerable groups in case of land allocation reform needs to be further studied.

Another major issue raised by respondents was corruption. The widespread awareness of corrupt practices in terms of land distribution and usage is causing growing frustration among citizens, especially those who are waiting years to receive their plot. In many cases, those with family members working inside the system can secure faster approvals of land requests. According to the interview with a political researcher, the director generals working in the system have the power to change lower-class plot allocations to higher-class areas, such as C and D, and ministers and government elites can approve A and B class lands. Both of these approval processes are usually done outside of the state-regulated system. The practice of 'wasta' in land allocation defeats the purpose of an "equal" lottery system and re-establishes informal tribal practices of loyalty-balancing and favours. Also, the undermining of land laws by those in authority sets an example for their subordinates, who in turn also begin to grant favours such as holding specific land for family members and friends, changing ownerships, giving more than one ownership, extending property boundaries, etc.

Beyond the realm of corruption, the Ministry of Housing and Urban Planning also struggles with competency issues. Many mistakes occur not necessarily due to corruption but rather the lack of proper technology for land registration. Many

respondents complained about plots being allocated to multiple owners, neighbour's property boundaries invading into their plot, and the slow process of land allocation and land compensation for government projects. According to the interview with a political analyst, these internal land issues only have the potential to cause conflict if citizens begin to face deeper financial problems, due to a slowing economy or increasing unemployment. Currently, Omanis have most of what they need, but in light of Oman's struggle to diversify its economy and create jobs in sufficient numbers, there is potential for internal conflict to arise if land issues and corrupt practices continue. One example is a recent occurrence in the Dhofar region where citizens protested the taking and distribution of tribal grazing lands that the pastoral peoples have used for thousands of years (Al-Ma'ashani, 2017). During the interview, he stated that the issue was not necessarily about grazing lands but about quality of life in the Dhofar area. If economic needs arise among people, any small conflict can spark a flame.

### 4.3. Strategic Borders and GCC Influence

According to the in-depth interviews and public survey, the potential for conflict due to border issues is not likely as the borders have been clearly demarcated. But, according to the Omani political researcher, Musandam may be an exception. Musandam Governorate is the main area of potential conflict in Oman because many residents have connections and live across two borders. In some cases, they changed nationalities and own lands on both sides of the border, and, as he emphasized, "if the law does not allow for foreign ownership or ownership in sensitive areas for non-Omanis, then you are infringing upon the right of another country's citizen." This situation puts an obligation on the state to protect human rights in landownership and may cause a conflict between the two countries.

As recently as 2007, there are also cases of huge tribes deciding to move to the UAE and naturalize and then returning to Oman to claim their lands. As for the Dhofar region and the Mahra border, the Omani political researcher stated that conflict could arise most likely from the strong tribal nature of society there and the close proximity to Yemen. He stated that "people there have not yet decided to what extent they want to be Omanis or to be a member of a tribe...they want the best of both worlds." He gave an example of the tribal community in Jebel Akhdar, where they do not legally allow ownership of land by Omanis from

different areas. The people from Jebel Akhdar claim that their original land is unique to them but, at the same time, request and own other lands across the Sultanate. This shows the contradiction that exists in Oman between wanting to remain tribal but also to take part in national benefits. The Omani political researcher called this dualistic reality among Omanis a "kind of schizophrenia", which has yet to be solved as even some laws contribute and encourage it.

Regarding influence or infiltration into Oman by other Gulf states, Oman's borders are clearly demarcated so the threat for conflict is low. Land "expansion" by Gulf states into Oman would be by lawful means, such as investments or concession areas. But during the interview with the Omani political researcher, he also stated that influential people and elites from across the Gulf are given lands in Oman for free, as a way to secure foreign loyalties and increase influence. The same practice is also reciprocated by the Gulf states, who give influential Omanis with ties to the Sultan free lands as a way to gain political influence. This practice is done somewhat openly and can be seen as another form of normalization of deviance. Thus, even though Oman's borders are formally demarcated, instances of informal land acquisition by elites and loyalty-securing practices in strategic border areas could potentially cause conflicts between Oman and other countries in the region.

### 4.4. Conclusion

While reforms and changes in land governance and management in the Sultanate of Oman are beginning to head in the right direction, much uncertainty regarding their effectiveness and implementation remains, due to various social, political and economic factors. The view of land as a social right to wealth, tied to a strong sociopolitical sense of national belonging, creates powerful barriers against the reform of land practices. Also, the informal functioning of neo-tribalism and nepotism within the land system threatens the proper implementation of sustainable land practices. In order to overcome these various obstacles, land governance and management practices must be strategically decentralized and integrate public participation and awareness.

With rising levels of public tensions and greater demands on the government, it is imperative that planning and land practices promote transparency and establish trust by engaging local entities and citizens in both decision- and policymaking processes. Through the empowerment of local

communities, the likelihood of land governance and management policies being implemented in the future will increase, while reducing corruption and informal practices. This important shift towards public participation will also give long-standing and unsustainable policies, such as the land allocation system, the opportunity for substantive

reforms or replacement with broad public approval and acceptance. With greater transparency, accountability, public participation and awareness in land planning, Oman has the potential to advance sustainable urbanization and development, while maintaining internal peace, stability and cohesion over the long term.



## 5.1. Background and the Current Status of the Land Allocation System

The first land administration entity in Oman was the Ministry of Land Affairs, established in 1972 under Sultan Qaboos bin Said and later renamed as the Ministry of Housing in 1986. In order to regulate housing for the growing population, “the Omani government installed a land-allocation process by lottery in the 1980s granting every Omani citizen, first male and since 2003 female, the right to enter this lottery and eventually receive a plot” (Heim et al., 2018, p. 2). The land lottery system was officially established in 1984 for Omani males over the age of 21 (Royal Decree No. 81/1984) and later updated in 2008 to include females over the age of 24 (Royal Decree No. 125/2008). Every male and female Omani citizen who meets the age requirement has the right to a 600 m<sup>2</sup> plot for free, and the Ministry of Housing was given the sole responsibility to respond to land applications and to implement distribution.

In January 2021, the Ministry of Housing and Urban Planning (renamed in 2020) held their first ever press conference on the status and goals for land allocation. In the conference, the Ministry revealed the aims to issue a housing law by October 2021 and an urban planning law by December 2021. In addition, it also revealed data on the status of land development and

distribution, showing that 40 per cent of land owned in Muscat is not developed, and only 19 per cent of landowners in the city have actually developed their plots. The development percentage outside of Muscat is even lower (e.g., in Dhofar it is only 7 per cent). In terms of land distribution, the Ministry stated that 91 per cent of Omani households own one or more housing units, and, in the last ten years, 343,692 plots were distributed, of which 78 per cent to women. In terms of plot distribution requests, they number 447,612 as of December 2020, and under a new royal directive, the Ministry plans to distribute 23,000 plots in 2021 (Nasseri, 2021).

## 5.2. Tool #1: Land Tenure and Access to Land

Land tenure and access to land is crucially important for life and livelihoods, and is high compared to other countries. Homelessness is virtually non-existent among Omani citizens. The high level of security is mainly due to the land allocation system and inheritance processes that guarantee Omani citizens access to and ownership of land. A survey of 233 citizens (62 per cent residing in the capital city of Muscat) was conducted in November 2020, in order to compile quantitative and qualitative data on land access, land tenure, home ownership and potential/current land conflicts. The majority of respondents were between 30 and 40 years old (see Figure II).

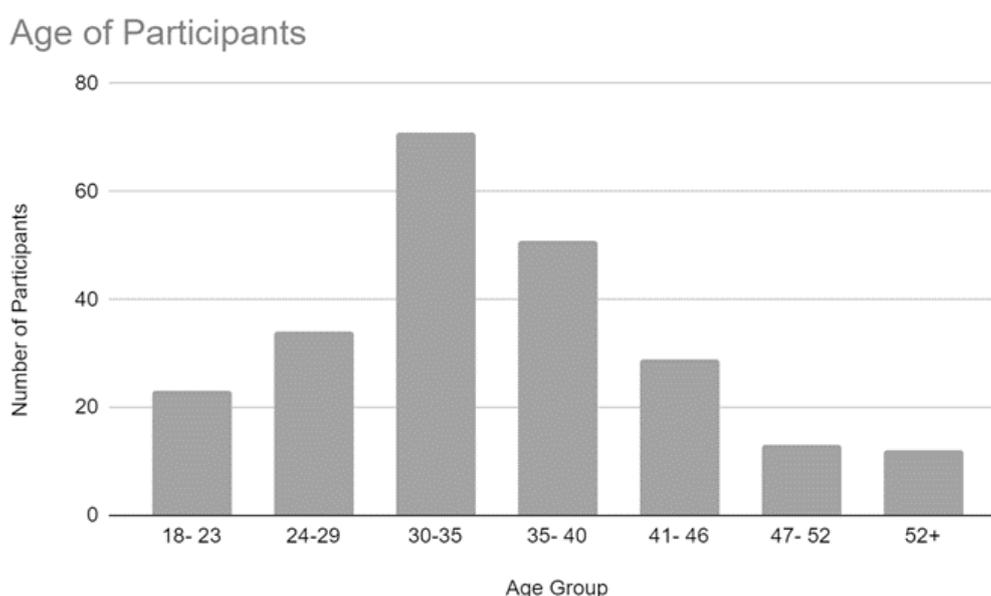
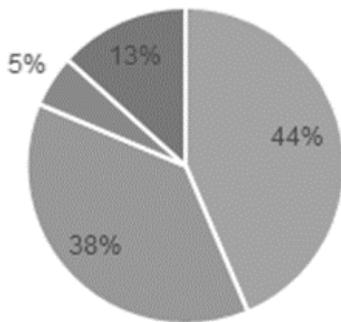


Figure II: Age distribution of survey participants.

The quantitative data gives further insights into the levels of land and home ownership. After compiling the data, it is clear that individual land purchases and land allocations account for most landownership in Oman. For example, Figure III shows that 44 per cent

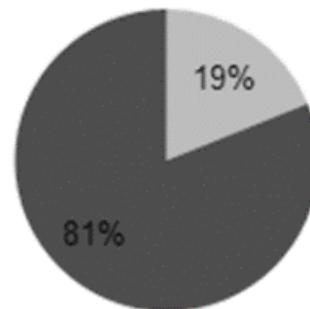
of participants purchased their land plots and 38 per cent were granted their plots by the government. The survey confirmed low rates of renting; ownerships of villas and apartments was 81 per cent, while renters were only 19 per cent.

### Count of If you own Plots, how were they purchased?



■ Bought ■ Granted ■ Inherited/Inherited shares ■ Other

### Are You Renting your House/Apartment?



■ Yes ■ No

Figure III: How participants acquired their plot (a)

Percentage of participants that own/rent (b).

The data shows that ownership of property is much more common, even among young, working-class citizens (the biggest age cohort in the survey was 30- to 35-year-olds). Most apartment renters plan to move into a villa on either purchased, inherited or government-allocated land. Omanis prefer not to live in flats for long periods of time due to cultural reasons and the typically large households (5 to 8 members) (NCSI, 2020). Culturally, living in an apartment as a family is seen as a sign of economic hardship or low social status, so most Omanis use apartments only as temporary housing when necessary (Al-Muttawa, 2016). The survey results corroborated these findings, with most respondents (83 per cent) reporting to live in villas or townhouses, while only 16 per cent in an apartment (see Figure IV). The reported apartment dweller rate is particularly low since most participants reside in Muscat.

Going even further, the Ministry of Housing and Urban Planning recently released that 91 per cent of Omanis own their homes (Nasseri, 2021). The land allocation policy is the main driver in the high levels of access and ownership; however, the rising demand for land plots and the pressure on the Ministry to provide infrastructure and services is creating potential issues in the actual accessibility of land. As mentioned above, many Omanis, after applying for a land plot, have to wait up to ten years to receive it, and when they do, the land is sometimes allocated far away from their work and lacks sufficient public services. As confirmed in the public survey’s short answer responses about land allocation, many citizens complained about the long waiting times to receive their plot, its location, and the lack of the infrastructure necessary to live on or develop the plot.

### Housing Typology

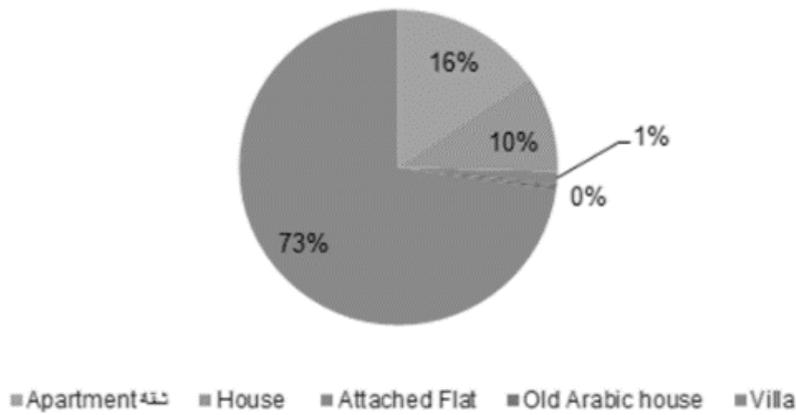


Figure IV: Type of homes that participants own/rent.

Another growing issue concerns the number of plots allocated to individuals who cannot develop them. The allocation of a 600 m<sup>2</sup> plot is a right for all citizens over the age of 21 (male) and 24 (female), irrespective of their ability to actually develop the land, which is not taken into account. Subsidized loans for housing construction are available but only for certain income levels; thus, they should be seen as a social service and not as a social right like land allocation. The pressure on the Ministry of Housing and Urban Planning to meet the demand for land allocation and provision of services, along with the rising costs of housing and economic challenges, suggests that even though access to land is provided, it does not automatically fulfil its aim of economic betterment. If Oman is to improve access to land and land tenure, the land allocation system needs to be reformed and updated in a way that meets modern-day housing needs, especially regarding location and socioeconomic status. For example, those who cannot develop their land allocation should have an affordable housing alternative or subsidized loans for an apartment instead of receiving a plot of land. Such alternatives can help Omanis arrange affordable living solutions close to their families, work and obligations, thereby enabling them to thrive economically. In terms of land management, it will lessen the number of undeveloped plots and further densify unused areas such as apartment buildings and split villas. Densification of economic centres will also create more social cohesion and mixed-use initiatives, as well as deliver an economic impetus, as landlords and building owners secure more tenants, and incentivize the government to keep up provision of services in a cost-efficient manner.

### 5.3. Tool #2: Land Administration and Information

The land administration and information system in Oman needs technological enhancement and improved oversight. Land information is incomplete and sometimes inaccurately documented, and the software is outdated and ill-equipped for data of this quantity and complexity. AutoCAD is the main software used to compile data in the Ministry, which is insufficient as it does not show complex geographical data and does not allow for proper analysis. Also, land data in AutoCAD is not accessible to other entities; thus, data is not integrated on one platform but is documented separately by each Ministry in different ways. Due to lack of integration and insufficient software, land data documentation is

often incomplete and missing important components such as plot coordinates and size.

In terms of land administration, citizen requests for land registration can only be done by physically visiting the Ministry, their local Sanad offices (offices managed by the Ministry of Labour in order to streamline procedures), or by mail through the local postal service. This is not a well-regulated property registration system, and, since all land applications are done on paper, in many cases they are informally processed and left unattended for years. In the in-depth interview with the political researcher, he discussed his personal experiences with incompetence and lack of oversight and transparency in the land administration system. He received a plot in his hometown of Sur on a landfill site and when he asked the local Ministry of Housing and Urban Planning in the Ash Sharqiyah North Governorate if they had checked the plot before distributing it, they said they had not. In another instance, he formally received a plot of land and when he went to collect his '*malkiya*' (land deed), they told him that they had lost the paperwork. Many citizens face issues in the land administration process. As per the survey conducted for this study, around 20 per cent of responses about land issues were related to land administration: data inaccuracy, granting land in inappropriate or undevelopable areas, allocating the same plot to more than one person by mistake, and long waiting times for land compensation for government projects. Lack of proper land information documentation and land administration does not only affect citizens but also stakeholders and investors. Inaccurate land use data, lack of data integration and time-consuming approval procedures discourage investments in the country.

Another issue alongside technology and data collection is planning capacity. The Ministry currently has approximately 3,000 employees, mainly civil engineers and surveyors, and only 20 trained urban and regional planners. The lack of planning capacity greatly hinders the growth and improvement of land administration and information systems, as surveyors and civil engineers are not qualified or technically trained for the proper planning and distribution of lands. Before the Ministry of Housing was combined with urban planning, the Oman National Spatial Strategy created a GIS-based information system called the Oman Planning Information System (OPIS) for data capture, checking, cataloguing, processing and analysis of all spatial reference information. It was used extensively to support all stages of ONSS preparation, including

integration with the Oman National Transport Model. Expected to be fully ready by the end of 2021, it should provide information, scenario development capabilities and analysis for all planning activities in the Sultanate. The approved planning strategies and policies are available through OPIS, to allow stakeholders to easily find the applicable strategy and policy for a specific proposed development area or to identify areas for development based on the existing strategy and policy.

Even though OPIS holds a great level of importance in the national and regional planning of Oman, the Ministry of Housing and Urban Planning has not yet fully replaced AutoCAD with OPIS, due to lack of employee capacity and training programmes. For these benefits to become reality, OPIS should be implemented and Ministry employees should be properly trained in the usage of GIS software. Moreover, also relevant staff in other ministries should be trained and required to use the OPIS platform so that all the data is integrated, properly and completely inserted, checked and overseen by planners, and updated regularly. If OPIS is adequately implemented, all entities can easily access land information, greatly reducing instances of data loss, incomplete information, ownership mistakes and zoning conflicts.

### 5.4. Tool #3: Land-Based Financing

Land-based financing is an important source of income in many countries and urgently needed for the development of Omani cities. According to GLTN, “the potential contribution of land-based financing to the

development of sustainable and equitable cities and properly serviced communities is not often fully realized, particularly in many developing countries.” Oman has yet to implement or introduce any kind of land-based financing, and there are no laws or regulations for taxation of land or property ownership. The lack of a land management system and land taxes “further aggravates the situation and encourages land-grabbing and land-speculation” (Heim et al., 2018, p. 2). Moreover, the government takes sole responsibility to fund and provide basic public services and infrastructure to every plot, which is economically and environmentally unsustainable. Also, because of the high demand for plots, “the government allocates plots in regions further away from established economic centres” (Ibid., p. 2), thereby creating massive urban sprawl and slowing down the provision of public services. As shown in the public survey, many citizens complain about the lack of infrastructure and services around their plots and are unable to develop them or live on them.

The need for land-based financing is clear, but the concept of taxation in Oman is generally received negatively by citizens. During the interview, the political researcher stated that taxation of land and property will not be accepted by Omani citizens, mainly due to the rentier state model, whereby the government redistributes its oil wealth to the public by allocating land, not imposing any income or property taxes, and subsidizing basic needs such as petrol, water and electricity. During the interview, a land policy expert stated that in the Gulf one of the biggest wealth assets is land, and the concept of having to purchase lands as the only means of ownership is generally not accepted.

Do you agree with personal land property taxes? هل تؤيد تحصيل ضرائب على الأراضي؟  
234 responses

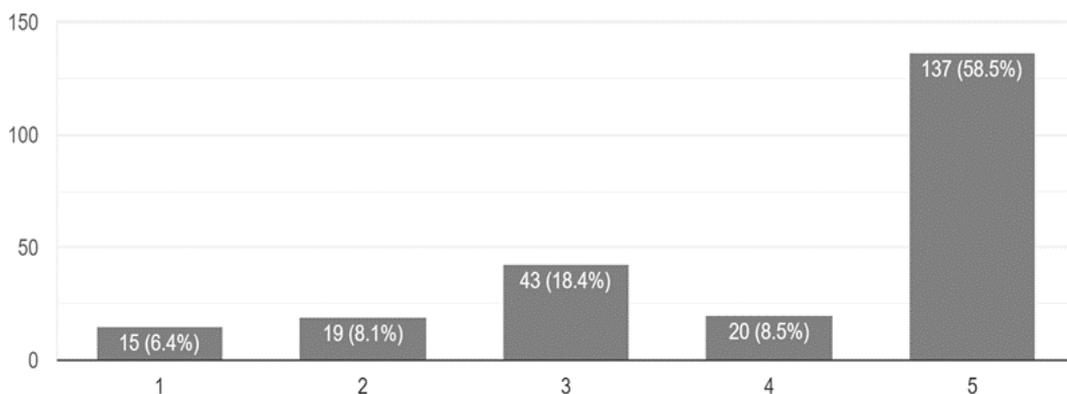


Figure V: Level of agreement with personal land property taxes. from strongly agree (1) to strongly disagree (5).

هل تعتقد بان الأراضي الغير مستغلة يجب أن تفرض عليها ضرائب؟  
 Do you think undeveloped/unused land should be taxed?  
 234 responses

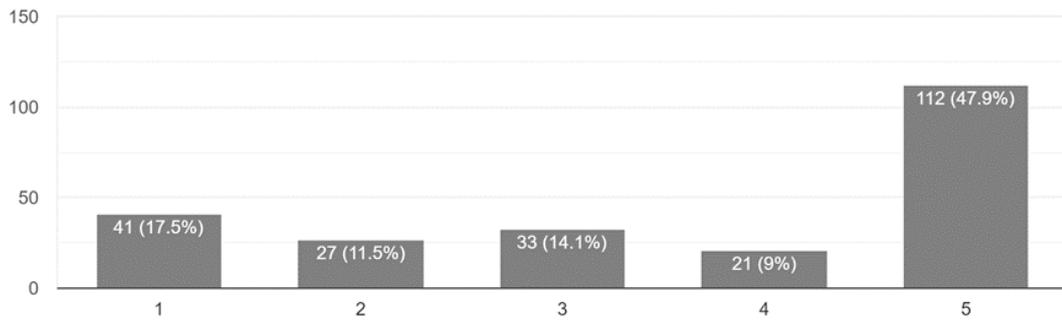


Figure VI: Level of agreement with statement. "Do you think undeveloped/unused land should be taxed?", from strongly agree (1) to strongly disagree (5).

Under the new leader, Sultan Haitham bin Tariq, small changes are slowly advancing the social acceptance of taxes. Water, electricity and petrol subsidies have been reduced and an income tax on wealthy citizens is set to be imposed in 2021 (Gonçalves, 2020). In the public survey, most participants were against property tax (58.5 per cent strongly disagree, see Figure V); however, when asked if they would like to see taxes being used to better public facilities and infrastructure most participants said "yes". This shows that citizens not be against the concept of taxation per se but are afraid of taxes being used for purposes that do not benefit them. Thus, land-based financing must be clearly regulated and bring immediate benefits to communities. If property taxes or any land taxes are imposed, it is important to ensure high level of transparency in how they are utilized for public infrastructure. Communication and positive results must also follow to ensure social acceptance. In the interview, the political researcher argued that property taxes should not be imposed because this would generate public resistance; rather, a tax should be placed on undeveloped land, similar to the white land initiative in Saudi Arabia. Still, almost half of survey respondents (47.9 per cent) were strongly against taxing undeveloped land (see Figure VI).

### 5.5. Tool #4: Land Planning and Management

Land planning and management in Oman is focused mainly on plot provision and land requests by individuals and entities, with a disregard for comprehensive planning principles. Any master plans

developed by foreign consultants are not binding but used only as a reference. The land allocation system hinders incentives to create and implement planning policies due to an extreme focus on case-by-case land requests and the high demand for plots. In 2004, the Cabinet decided to mandate data collection on land use. Later, Royal Decree No. 30/2012 created the Supreme Council for Planning and initiated Phase 1 and 2 of the Oman National Spatial Strategy. The 2012–2016 ONSS focused on collecting and analysing data relevant to the spatial requirements for developing a national spatial strategy. However, all phases of data collection from 2004 to 2014 failed to provide sufficient data and lacked proper management of the data collection process. In 2014, the ONSS was stopped in order to re-evaluate progress, replace the consultants, and hire new and qualified employees. In 2016, the ONSS was restarted as a part of the Supreme Council for Planning and was officially completed in August 2020 and formally endorsed by Sultan Haitham bin Tariq in March 2021.

The ONSS is the government's high-level strategic plan for shaping the future growth and development of the country up to 2040. It gives clarity to the importance of planning new infrastructure and associated development in a way that avoids competing priorities and maximizes benefits and opportunities. Oman seeks to cultivate its capital Muscat as an international attraction with higher levels of international trade, foreign investment and tourism. Oman also is focused on developing research and innovation capacity and achieving high-quality academic institutions as well as investing in existing and the creation of new employment locations, in order to reach the

envisioned growth in national development by 2040. According to the Ministry of Housing and Urban Planning (ONSS, 2020), the strategy

- Sets out how the country should spatially develop over the next two decades up to the year 2040;
- Identifies the new developments that will be required in key centres across the country, in terms of housing and economic activity, and the main areas in which this will be focused;
- Safeguards and enhances important natural and cultural assets, including sensitive marine resources;
- Supports the delivery of key infrastructure, such as transport networks and utilities; and
- Defines a new settlement structure that will become the basis for community facility provision, within defined urban growth limits to be identified for individual communities.

### 5.5.1. Implementation and Integration Obstacles

Even though the ONSS is finalised and endorsed, an integrated implementation of the strategy will face many challenges. One is the perspective of private and public investment in its implementation. The ONSS has provided a clear road map that includes a set of investment projects for the next 20 years (ca. OMR 8 billion), to be shared between the private and the public sector. Due to the Government's oil dependency and dropping oil prices, along with the Covid-19 pandemic, both sectors are struggling and this may impact ONSS implementation. Another issue is the lack of coordination and integration between ministries and government entities, which hinders information sharing and proper consultation. This, along with the absence of a shared land information system, causes ambiguity and land conflict across different entities. Further worsening the low levels of integration is the lack of a formal planning law to



Figure VII: Urban sprawl in Muscat City.  
Source: Author (July 2020).

guide planning practices. The lack of a planning law and enforced planning policies is highly detrimental to implementing the ONSS. Without a planning law, the procedures remain unclear and lack formal oversight. Another issue is the lack of planning capacity at both national and regional level. Currently, the national planning team is conducting workshops with local governments about ONSS, but the vast majority of personnel in the government housing and planning entities are surveyors who lack technical and planning knowledge. There is an urgent need for employee capacity-building programmes, both on national and regional level, for the ONSS to be properly implemented. Lastly, the land allocation policy and lack of public participation in planning is an ongoing threat to the effectiveness and durability of the ONSS and needs to be urgently reformed.

In 2021, the Ministry announced that only 23,000 plots will be distributed in 2021, compared to the average annual of 34,369 plots (Times of Oman, 2021). This is a positive change, but how the plots will be distributed remains vague. There is potential for a few public-private housing investment projects to be included in this plot distribution in the coming year, such as the recently completed affordable housing project in Barka. This project is privately funded and provides health and sports facilities along with 1,000 residential units (Kutty, 2018). This is a very new project and will be given as an option to those who have requested land. Social entitlement to land may cause citizens to choose land over housing assets, and top-down planning without public involvement can undermine ONSS implementation.

## 5.6. Tool #5: Land Policies and Legislation

### 5.6.1. Status of Omani Planning Law and Land Laws

Currently, the country follows a set of land laws first established in 1980 (Royal Decree No. 05/1980) and updated over the years. These laws focus on landownership and organize land requests and land usage, including witness-based land confirmation for claimed lands, land usufruct, the land allocation system and the right of government entities to own land. While the laws regulate land disputes and ownership, many challenges remain in terms of oversight and accountability. According to the interview with a political researcher, in many cases land is requested and approved outside of the administrative process. Also, these land requests are usually for A class land, and since it is granted

outside of the official process, the size of the plots is exaggerated and not according to land use requirements. Because of the lack of transparency and absence of oversight in land laws, there is a lot of room for informal allocation. In some cases, land was even allocated under the name of small children.

Government entities also have a legal right to own and develop lands for their specialized needs. But, because land policies and a comprehensive land law are lacking, government entities request millions of hectares without proper justification or feasibility studies, and the Ministry approves many of these requests. Many of these lands are kept undeveloped to achieve financial returns, while the investments are not in line with the area's zoning specialization and the use under which the land was granted. For example, the Ministry of Defence owned land in Jebel Akhdar and decided to utilize it for investment in a private resort. The resort is operating today and all the financial returns go to the Ministry of Defence. The land law permits such practice of private land investment by ministries, which can formally own land, and does not further stipulate how the land can be used. Such private investments by ministries that deviate from the prescribed land use and ownership of large tracks of undeveloped land pose a threat to sustainable land use and the implementation of planning strategies such as the ONSS.

Currently under the new leadership of the Ministry of Housing and Urban Planning and under the endorsement of the ONSS, land requests by ministries are scrutinized more closely, and requests not in line with the ONSS are being rejected. Also, the Ministry's Planning Team has been tasked with creating the first planning law for Oman, set to be completed by 2022. This is a positive step; however, due to the planners' low capacity and without a proper system to oversee the law's implementation, it is difficult to gauge the potential effectiveness of the law. In the words of the interviewed political researcher, "the law can be perfect and beautiful, but who will oversee it?" Without a clear monitoring and supervision structure, the law has potential to continue to be undermined for personal gain.

## 5.7. Tool #6: Cross-Cutting Issues

In Oman, the main cross-cutting issues in the reform of land administration and land management are women and youth. Currently, under the land allocation system, young adults (including women) are entitled to a 600 m<sup>2</sup> plot of land. For women this

possession of an asset provides a level of financial security, regardless if they are single or married. Recent statistics released in 2021 show that 78 per cent of the distributed land plots were given to women. The large number of land requests by women proves the importance of their need for financial assets. According to the in-depth interview with a land policy expert, women and poverty is one of the most important connections that must be examined before the reform or removal of the land allocation system. Youth in Oman (under the age of 30) are 70 per cent of the total population. This is a huge cross-cutting issue as land requests will continue to climb at high rates, and without affordable housing options, youth will struggle to gain housing or develop their land. These issues need to be confronted when working to create land policies for land management, and further studies should evaluate any negative consequences for these groups.

In 2018, an ONSS workshop in Muscat showed that a majority of people, including youth, are open to changing the land allocation policy to focus more on sustainability and design principles. According to a survey in the workshop, 63 per cent of the 300 participants agreed that instead of land allocation the government should enforce planning standards and integrate affordable housing. Thus, it seems that Omanis are open for social change as long as affordable housing options are made available. Another important requirement in the change or phaseout of the land allocation system is the direction of the economy. According to a land policy expert, the economy must improve along with any change in land allocation, in order to make sure that women and youth will have the financial resources and assets they need apart from landownership. If the economy declines, the removal of land allocation could severely impact vulnerable groups such as women and youth, possibly leading to poverty. These cross-cutting issues and their economic relationship to land allocation should be further studied.

## 5.8. Conclusion

Land management tools are an integral part of long-term, sustainable urban development in Oman. Compared to UN-Habitat standards, land management tools are currently understudied and underutilized, and some tools such as land-based financing have yet to be implemented. Due to lack of inter-ministerial integration in planning practices, combined with the absence of a planning law and comprehensive planning legislation, land in Oman is overconsumed, underdeveloped, and poorly administered and regulated. Even though the land allocation system was originally put in place to distribute and give access to land fairly among citizens, incompetency in administration practices, lack of technology, rising demands for land, and allocation outside of a planning framework have caused it to become unsustainable, creating high energy and infrastructure costs and extensive urban sprawl. Due to the sociopolitical factors in Oman, including nepotism in land practices and the strong sense of social entitlement to land, land management tools must be carefully adapted through a transparent and participatory decision-making process. Sensitive tools such as land-based financing should take into consideration the fluctuating state of the economy along with the issues of white land and undeveloped lands, in order to introduce and implement taxation fairly. The economic vulnerability of women and the rising numbers of youth in Oman also need to be taken into consideration in the adaptation of land tenure and access to land. Land allocation alternatives such as affordable housing and subsidized loans must be made equally available and accessible to youth, women and men. Finally, land planning, administration, policies and legislation need to undergo urgent and major reforms. Integration of planning practices between ministries and the formation and implementation of a proper planning law will allow for more accountability and oversight in land practices. Without proper land governance and policies and integrating the public in planning practices, land management tools will not be implemented, threatening the future of sustainable land practices in Oman.



## REFERENCES

- Al Jazeera (2020). How UAE tried to sabotage Qatar's economy amid the GCC crisis. *Banks News, Al Jazeera*, 24 December. Available at <https://www.aljazeera.com/economy/2020/12/24/how-uae-sabotage-qatar-economy-gcc-crisis>. Last accessed on 10 June 2022.
- Al-Ma'ashani, A. (2017). Rural housing: a boon or an ordeal?. *Al Roya*, 7 August. Retrieved from <https://alroya.om/p/193911>. Last accessed on 10 June 2022. (In Arabic)
- Al-Mukrashi, F. (2015, October 24). Omanis lament the role of tribalism in elections. *Gulf News*, 24 October. Available at <https://gulfnews.com/world/gulf/oman/omanis-lament-role-of-tribalism-in-elections-1.1605969>. Last accessed on 10 June 2022.
- Al-Muttawa, M. (2016). The Development Process for New Residential Neighbourhoods in the Sultanate of Oman. PhD dissertation, Heriot-Watt University, Edinburgh, United Kingdom. [https://www.ros.hw.ac.uk/bitstream/handle/10399/4102/Al-MuttawaM\\_1216\\_egis.pdf?sequence=1&isAllowed=y](https://www.ros.hw.ac.uk/bitstream/handle/10399/4102/Al-MuttawaM_1216_egis.pdf?sequence=1&isAllowed=y). Last accessed on 10 June 2022.
- Al-Ossmi, L. and Ahmed V. (2017). Land, property and user's rights according to Islamic-ottoman reforms in Iraq. *International Journal of Heritage Architecture*, vol. 1, issue 3, pp. 379–387. Available at <https://www.witpress.com/Secure/ejournals/papers/HA010311f.pdf>. Last accessed on 10 June 2022.
- Al-Saidi, M., and Saliba, S. (2019). Water, Energy and Food Supply Security in the Gulf Cooperation Council (GCC) Countries—A Risk Perspective. *Water*, vol. 11, issue 3. Available at <https://www.mdpi.com/2073-4441/11/3/455>. Last accessed on 10 June 2022.
- Al-Shalfan, S. (2013). The right to housing in Kuwait: An urban injustice in a socially just system. *Kuwait Programme on Development, Governance and Globalisation in the Gulf States*, London School of Economics and Political Science. Available at [http://eprints.lse.ac.uk/55012/1/\\_Libfile\\_repository\\_Content\\_Kuwait%20Programme\\_Alshalfan\\_2013.pdf](http://eprints.lse.ac.uk/55012/1/_Libfile_repository_Content_Kuwait%20Programme_Alshalfan_2013.pdf). Last accessed on 10 June 2022.
- Al-Shueili, K. (2015). Towards a Sustainable Urban Future in Oman: Problem & Process Analysis (Muscat as a Case Study). PhD Thesis, the Glasgow School of Art, University of Glasgow. Available at <https://core.ac.uk/download/pdf/74366371.pdf>. Last accessed on 10 June 2022.
- Ardemagni, E. (2019). Strategic Borderlands: The UAE-Oman Rivalry Benefits Tehran. *Italian Institute for International Political Studies (ISPI)*, 21 June. Available at <https://www.ispionline.it/en/pubblicazione/strategic-borderlands-uae-oman-rivalry-benefits-tehran-23347>. Last accessed on 10 June 2022.
- Asharq Al-Awsat (2021). Saudi White Land Tax Law amendments to Boost Development, Supply of Real Estate. *Asharq Al-Awsat*, 15 April. Available at <https://english.aawsat.com/home/article/2920706/saudi-white-land-tax-law-amendments-boost-development-supply-real-estate>. Last accessed on 10 June 2022.
- eCensus (2020). eCensus of Oman 2020. National Centre for Statistics & Information. Available at <https://portal.ecensus.gov.om/ecen-portal/>. Last accessed on 10 June 2022.
- GLTN. Land-Based Financing. *Global Land Tools Network*. Available at <https://gltm.net/land-based-financing>. Last accessed on 10 June 2022.
- Fromherz, J. (2012). *Qatar: A Modern History*. United Kingdom: B. Tauris & Co Ltd.
- Guzansky, Y. (2016). Lines Drawn in the Sand: Territorial Disputes and GCC Unity. *Middle East Journal*, vol. 70, no. 4, pp. 543–559. Available at <https://www.jstor.org/stable/26427458>. Last accessed on 10 June 2022.
- Heim, B. and others. (2018). Land-allocation and clan-formation in modern residential developments in Oman [Abstract]. *City, Territory and Architecture*, vol. 5, no. 8. Available at doi:10.1186/s40410-018-0084-6. Last accessed on 10 June 2022.

Hertog, S. (2018). The Political Decline and Social Rise of Tribal Identity in the GCC. The London School of Economics Blog, 25 July. Available at <https://blogs.lse.ac.uk/mec/2018/07/25/the-political-decline-and-social-rise-of-tribal-identity-in-the-gcc/>. Last accessed on 10 June 2022.

Hiltermann, J. (2018). The Middle East in Chaos: Of Orders and Borders. International Crisis Group, 25 May. Available at <https://www.crisisgroup.org/middle-east-north-africa/middle-east-chaos-orders-and-borders>. Last accessed on 10 June 2022.

IGI Global (2020). What is Land Governance? IGI Global. Available at <https://www.igi-global.com/dictionary/exploring-the-food-security-strategy-and-scarcity-arguments-in-land-grabbing-in-africa/44930>. Last accessed on 10 June 2022.

Kutty, S. (2018). Affordable housing project in Barka begins. Oman Observer, 22 October. Available at <https://www.omanobserver.om/affordable-housing-project-in-barka-begins/>. Last accessed on 10 June 2022.

Luscombe, S. (2012). Trucial Oman Protectorate. The British Empire, 10 June 2022. Available at <https://www.britishempire.co.uk/maproom/trucialoman.htm>. Last accessed on 10 June 2022.

Medeiros, E., and Zwet, A. (2020). Sustainable and Integrated Urban Planning and Governance in Metropolitan and Medium-Sized Cities. *Sustainability*, vol. 12, issue 15. Available at <https://doi.org/10.3390/su12155976>. Last accessed on 10 June 2022.

Metz, H. C. (1994). *Persian Gulf states: country studies*. Washington, D.C.: Federal Research Division, Library of Congress.

Molotch, H. L., and Ponzini, D. (2019). *The new Arab urban Gulf cities of wealth, ambition, and distress*. New York: New York University Press.

Nadisah, Z., Zaiton, A., and Awang, M.Z. (2019). White land Tax: Evidence in the Kingdom of Saudi Arabia. *Journal of Accounting and Auditing: Research & Practice*, vol. 2019. Available at [doi:10.5171/2019.218429](https://doi.org/10.5171/2019.218429). Last accessed on 10 June 2022.

Nasseri, Z. (2021). 72% of Muscat land applicants women. Oman Daily Observer, 26 January. Available at <https://www.omanobserver.om/article/4447/Main/72-of-muscat-land-applicants-women>. Last accessed on 10 June 2022.

NCSI (2020). The main indicators for household expenditure and income survey. National Centre for Statistics & Information. Available at [https://ncsi.gov.om/Elibrary/LibraryContentDoc/ben\\_household%20expenditure%20Eng\\_a552f3a0-9828-41d5-8854-273f1dac9c94.pdf](https://ncsi.gov.om/Elibrary/LibraryContentDoc/ben_household%20expenditure%20Eng_a552f3a0-9828-41d5-8854-273f1dac9c94.pdf). Last accessed on 10 June 2022.

Nebel, S., and von Richthofen, A.V. (2016). *Urban Oman: Trends and perspectives of urbanisation in Muscat Capital Area*. Zürich: LIT Verlag GmbH & Co. KG Wien.

ONSS (2020). *Oman National Spatial Strategy*. Ministry of Housing and Urban Planning. Available at [https://housing.gov.om/cmsapi/files/content/information\\_center/Features%20of%20the%20Urban%20Strategy%202040%20.pdf](https://housing.gov.om/cmsapi/files/content/information_center/Features%20of%20the%20Urban%20Strategy%202040%20.pdf). Last accessed on 10 June 2022.

Rabi, U. (2006). Britain's 'Special Position' in the Gulf: Its Origins, Dynamics and Legacy. *Middle Eastern Studies*, vol. 42, no. 3, pp. 351–364. Available at <http://www.jstor.org/stable/4284458>. Last accessed on 10 June 2022.

\_\_\_\_\_ (2011). *The emergence of states in a tribal society: Oman under Sa'id bin Taymur 1932-1970*. Brighton: Sussex Academic Press.

\_\_\_\_\_ (2016). *Tribes and states in a changing Middle East*. London: Hurst & Company.

Raouf, M. (2008). *Climate Change Threats, Opportunities, and the GCC Countries*. Available at [https://www.files.ethz.ch/isn/55953/No\\_12\\_Climate\\_Change\\_Threats\\_Opportunities\\_and\\_the\\_GCC\\_Countries.pdf](https://www.files.ethz.ch/isn/55953/No_12_Climate_Change_Threats_Opportunities_and_the_GCC_Countries.pdf). Last accessed on 10 June 2022.

Riedel, B. (2020). *Remembering Oman's Sultan Qaboos, a critical interlocutor for the US in the Middle East*. Brookings Institute. Available at <https://www.brookings.edu/blog/order-from-chaos/2020/01/11/remembering-omans-sultan-qaboos-a-critical-interlocutor-for-the-us-in-the-middle-east/>. Last accessed on 10 June 2022.

Oman, Royal Decree No. 05/1980. Available at <https://decree.om/1980/rd19800005/>. Last accessed on 10 June 2022.

\_\_\_\_\_ No. 81/1984. Available at <https://decree.om/1984/rd19840081/>. Last accessed on 10 June 2022.

\_\_\_\_\_ No. 125/2008. Available at <https://decree.om/2008/rd20080125/>. Last accessed on 10 June 2022.

\_\_\_\_\_ No. 30/2012. Available at <https://decree.om/2012/rd20120030/>. Last accessed on 10 June 2022.

Sait, S., and Lim, H. (2006). *Land, Law, and Islam*. UN-Habitat. Available at <https://unhabitat.org/sites/default/files/download-manager-files/Land%20Law%20and%20Islam.pdf>. Last accessed on 10 June 2022.

Sanz, J. M. and others. (2017). *Sustainable Land Management contribution to successful land-based climate change adaptation and mitigation. A Report of the Science-Policy Interface*. United Nations Convention to Combat Desertification (UNCCD), Bonn, Germany. Available at [https://www.unccd.int/sites/default/files/documents/2017-09/UNCCD\\_Report\\_SLM\\_web\\_v2.pdf](https://www.unccd.int/sites/default/files/documents/2017-09/UNCCD_Report_SLM_web_v2.pdf). Last accessed on 10 June 2022.

Sheline, A. (2020). *Will Oman's New Income Tax Be the Start of a Political Sea Change in the Gulf?* *World Politics Review*, 4 December. Available at <https://www.worldpoliticsreview.com/zarticles/29264/will-the-new-oman-income-tax-be-the-start-of-a-political-sea-change-in-the-gulf>. Last accessed on 10 June 2022.

Sika, N. (2012). *The Political Economy of Arab Uprisings*. European Institute of the Mediterranean. Available at [https://www.researchgate.net/publication/336738672\\_The\\_Political\\_Economy\\_of\\_Arab\\_Uprisings](https://www.researchgate.net/publication/336738672_The_Political_Economy_of_Arab_Uprisings). Last accessed on 10 June 2022.

Sullivan, M. (2014). *Hezbollah in Syria*. Middle East Security Report 19, Institute for the study of war. Available at [https://www.understandingwar.org/sites/default/files/Hezbollah\\_Sullivan\\_FINAL.pdf](https://www.understandingwar.org/sites/default/files/Hezbollah_Sullivan_FINAL.pdf). Last accessed on 10 June 2022.

Times of Oman (2021) *23,000 housing plots to be distributed*. Times of Oman, 26 April. Available at <https://timesofoman.com/article/100642-23000-housing-plots-to-be-distributed>. Last accessed on 10 June 2022.

UNDP (2013). *Arab Development Challenges Report 2011: Towards the Developmental State in the Arab Region*. United Nations Development Programme. Available at <https://www.undp.org/publications/arab-development-challenges-report-2011>. Last accessed on 10 June 2022.

UN-Habitat (2019). *Saudi Cities Report 2019*. Available at [https://unhabitat.org/sites/default/files/2020/05/saudi\\_city\\_report.english.pdf](https://unhabitat.org/sites/default/files/2020/05/saudi_city_report.english.pdf). Last accessed on 10 June 2022.

Wambugu, D. M. (2019). *What Are the Trucial States?* WorldAtlas. Available at <https://www.worldatlas.com/articles/what-are-the-trucial-states.html>. Last accessed on 10 June 2022.

World Bank (2017). *Beyond Scarcity: Water Security in the Middle East and North Africa*. MENA Development Series. World Bank, Washington, DC. License: Creative Commons Attribution CC BY 3.0 IGO. Available at <https://openknowledge.worldbank.org/handle/10986/27659>. Last accessed on 10 June 2022.