

## Article

# Urban Spatial Strategies of the Gulf Cooperation Council: A Comparative Analysis and Lessons Learned

Mohammad Arif <sup>1,\*</sup>  and Adel S. Aldosary <sup>2</sup> 

<sup>1</sup> Department of Geography, Visva-Bharati (A Central University), Santiniketan 731235, India

<sup>2</sup> Department of Architecture and City Design, College of Design and Built Environment, King Fahd University of Petroleum and Minerals, Dhahran 31261, Saudi Arabia; asdosary@kfupm.edu.sa

\* Correspondence: arifaligs@gmail.com

**Abstract:** Gulf Cooperation Council (GCC) members have experienced tremendous transformation in their smart cities in recent years. Every GCC nation has its own urban planning authority to manage urban growth and development since its independence from British rule. These planning agencies create strategies, plans, rules, and oversee the building process. The novelty of this research lies in its comprehensive analysis, cross-border comparisons, and the generation of insights that contribute to a deeper understanding of urban planning dynamics and strategies within the Gulf Cooperation Council. The objective of this article is to examine the national spatial strategies (NSS) and vision plans of GCC countries. This study discusses the existing methods, plans, and efforts to accomplish this goal while emphasizing prospective opportunities, problems, and difficulties. We used the SWOT method to evaluate the national vision plans of GCC countries. The analysis identifies successful outcomes that the GCC countries have already achieved in terms of their national spatial strategies. The weakness in the current strategies is oil dependency, which could be strengthened. Potential opportunities in the tourism sector need to be taken full advantage of, and potential threats, like regional tension, need to be managed to prevent the failure of the development of the existing urban system. The primary suggestion entails executing programs outlined by the respective line ministries and ensuring efficient management of urban spatial expansion by municipal authorities. However, the findings could serve as lessons for those at the helm of affairs in GCC countries to collaborate and achieve a comprehensive national strategic plan.

**Keywords:** GCC; SWOT; national spatial strategy; vision plan



**Citation:** Arif, M.; Aldosary, A.S. Urban Spatial Strategies of the Gulf Cooperation Council: A Comparative Analysis and Lessons Learned. *Sustainability* **2023**, *15*, 13344. <https://doi.org/10.3390/su151813344>

Academic Editors: Astrid Kemperman, Chiara Garau, Silvia Rossetti and Barbara Caselli

Received: 25 July 2023

Revised: 31 August 2023

Accepted: 4 September 2023

Published: 6 September 2023



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## 1. Introduction

The urban dwellers of the world numbered approximately 2500 million in 1990, and they will be 60 percent of the total population in the year 2030 [1]. Almost all countries, both developed and developing, continue to witness the process of urban development with its specialization of services, industrialization, multifarious modes of transportation linkages, and allied functions [2,3]. The pattern of urbanization has completely changed from the past. Many people are going to live in larger cities, and these larger cities are not only growing, but their inhabitants are spreading out over metropolitan regions, as the population size increases and densities decline [4]. Cities serve a dual purpose, functioning not only as hubs for production and population concentration but also as integral components of cross-border transactional systems. These systems involve the flow of people, finance, commodities, banking operations, markets, and trading networks across national boundaries. This is because urban centers are such important junction points [5,6]. Cities around the world experienced significant changes to their form, organization, and population after their respective industrial revolutions. Towns and cities are facing resource and capacity limitations as they grow swiftly and irrevocably [7,8].

### *Urban Spatial Strategy in European Union and ASEAN Countries*

Urban spatial strategy refers to a comprehensive plan that guides the physical development, land use, and spatial organization of a city or urban area [9]. Scholars often emphasize the importance of aligning spatial strategies with economic, social, and environmental goals to create sustainable and livable cities [10]. The literature on urban spatial strategy provides valuable insight into the concepts, approaches, and considerations essential for effective urban planning and development [11,12]. Scholars and researchers emphasize the multidimensional nature of urban spatial strategies, focusing on their integration with technology, sustainability, social equity, economic development, and governance [13–15]. Significant research works offer insight into the challenges, policies, and approaches to urban spatial strategy within European Union and ASEAN (Association of Southeast Asian Nations) countries [16,17]. The longstanding European tradition of employing strategic spatial plans across diverse territorial scales has been fortified by the pivotal policy framework of the European Union [18]. Research has explored the evolution of spatial planning policies in Europe, particularly within the context of the European Union and has also examined the concept of polycentricity in European spatial planning, focusing on the distribution of activities across multiple urban centers [19,20]. Some scholars have delved into the relationship between European spatial planning policies and regional economic development. They have discussed how spatial strategies can contribute to promoting economic growth, innovation, and competitiveness in different regions of the EU [21,22]. A significant study provided insight into urbanization trends, challenges, and urban planning practices in ASEAN countries. It explored issues such as urban growth, land use, housing, and infrastructure development [23]. Some scholars have discussed sustainable urban development and planning strategies in Asian cities, including ASEAN members. They explored the concepts of ecocities, green infrastructure, and the integration of environmental concerns into spatial planning [24]. Another important study presents a transnational perspective on urban governance, spatial changes, and social dynamics in Southeast Asian cities, including ASEAN countries [25]. Urban spatial strategy in ASEAN countries and the European Union (EU) involves addressing unique challenges and opportunities specific to each region. While there are similarities in urbanization trends and planning considerations, there are also distinct factors that shape spatial strategies in these two regions. The following table compares these strategies (Table 1).

The GCC has one of the highest rates of urbanization in the world, with 85% of the population living in cities now, and this figure is anticipated to climb to 90% by 2050 [26,27]. Since the discovery and commercialization of oil in the region in the early 1960s, the GCC (Gulf Cooperation Council) countries have witnessed remarkable urban transformations. Large population movements brought on by rural migration in search of employment sparked rapid urbanization in the 1960s [28,29]. Data show that the population has increased tremendously over the past 20 years (Figure 1). Initially, this unprecedented population growth has led to significant issues of haphazard and uneven development within the city. The Gulf Cooperation Council (GCC) nations are among the most urbanized in the world in terms of the percentage of the population living in cities, with Kuwait and Qatar having nearly 100% urban populations [30]. It is obvious that the nature of urbanization occurring in the Gulf area is exceedingly distinctive and remarkable. The GCC region is presently confronted with a myriad of risks and challenges, encompassing population growth, swift urbanization, substantial rural-to-urban migration, crowded cities, escalating employment needs, and concerns regarding security and governance, as well as shortages of energy, food, and water. [2,31]. To address these concerns, GCC nations have designed more or less comprehensive national spatial strategies (NSS) that integrated Western spatial planning ideas with local administrative and judicial traditions [32]. The oil wealth of Gulf Cooperation Council (GCC) countries, as well as the remittances of its expatriate employees, have played an important role in fueling urban growth in other Arab countries [33]. As a result, GCC urban strategy has concentrated on diversifying their industries and utilizing their oil resources to establish a knowledge economy, notably

in information and communication technology and finance. The dynamic nature of the development of GCC countries has encouraged experimentation with various models and the formulation of different strategies for multidimensional development [34,35]. The upshot of these experimentations has resulted in the documentation of different successful models and strategies, which has resulted in a paradigm shift in development [36].

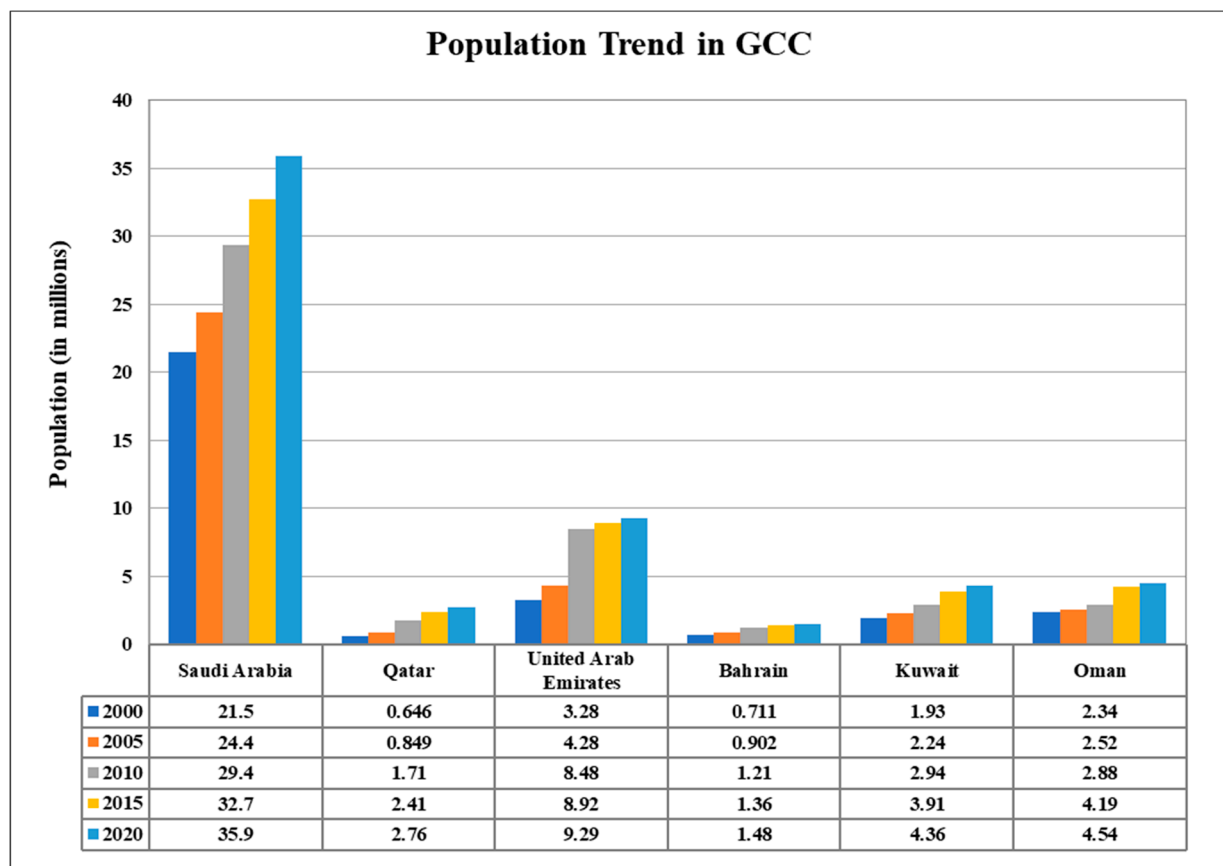
**Table 1.** Brief description of urban spatial strategies in ASEAN countries and the European Union.

Urban Spatial Strategy in ASEAN Countries	Urban Spatial Strategy in the European Union
<ul style="list-style-type: none"> <li>• <b>Rapid Urbanization:</b> ASEAN countries are experiencing rapid urbanization, with a significant proportion of their populations moving to urban areas. Urban spatial strategies focus on managing this growth while ensuring adequate infrastructure, housing, and services.</li> <li>• <b>Sustainability:</b> ASEAN countries are keen on promoting sustainable urban development. Spatial strategies integrate concepts of green infrastructure, compact cities, and low-carbon urban designs to mitigate environmental impacts.</li> <li>• <b>Inclusive Planning:</b> Because of the diversity of populations, urban spatial strategies emphasize inclusivity and social equity. Policies aim to provide affordable housing and improve access to services and better living conditions for all segments of society.</li> <li>• <b>Smart Cities:</b> Several ASEAN countries are adopting smart city initiatives. Urban spatial strategies incorporate technology to enhance urban services, mobility, and governance.</li> <li>• <b>Climate Resilience:</b> Many ASEAN countries are vulnerable to climate change and natural disasters. Urban spatial strategies integrate climate resilience measures, such as flood management and disaster preparedness.</li> <li>• <b>Cultural Heritage:</b> In older cities, balancing heritage preservation with urban development is crucial. Spatial strategies address the need for urban renewal while conserving historical and cultural assets.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Diverse Urban Contexts:</b> The EU encompasses a wide range of urban contexts, from historic cities to modern metropolises. Urban spatial strategies consider this diversity when addressing planning challenges.</li> <li>• <b>Sustainability and Compact Development:</b> EU policies emphasize sustainable urban development and compact cities. Urban spatial strategies promote mixed land uses, efficient transportation systems, and energy-efficient buildings.</li> <li>• <b>Transnational Cooperation:</b> European countries collaborate on cross-border urban planning and development. Spatial strategies integrate regional policies and promote sustainable urban–rural linkages.</li> <li>• <b>Cultural Identity:</b> Urban spatial strategies in the EU often focus on preserving and promoting cultural identity. They seek to balance global influences with the preservation of local traditions.</li> <li>• <b>Accessibility and Mobility:</b> EU cities emphasize accessibility and multimodal transportation. Spatial strategies prioritize walkability, cycling, and public transport to reduce congestion and pollution.</li> <li>• <b>Quality of Life:</b> European cities often prioritize quality of life factors, such as green spaces, public amenities, and social inclusion. Spatial strategies aim to create livable and vibrant urban environments.</li> <li>• <b>Heritage and Modernity:</b> Many EU cities blend historical heritage with modern development. Urban spatial strategies integrate adaptive reuse and heritage preservation in urban planning.</li> </ul>

A country's national vision functions as a guiding map for its envisioned future position. In the case of GCC countries, their national visions outline the desired economic, social, and environmental conditions at their realization date [28]. However, these aspirations hinge on the successful execution of the outlined plans. Consequently, a comparative assessment of the anticipated structure and functions across various sectors within these nations will illuminate exemplary approaches. The outcomes of this study could provide academic insight into the creation and execution of national visions. Specifically, it underscores the fundamental planning framework and necessary preparations essential for formulating and executing a prosperous mission. These discoveries not only inform practical applications but also drive further exploration into the growth and advancement of specific industries.

A successful national spatial strategy has become a tool for directing sustainable urban development by fostering a supporting and cooperative institutional framework that promotes horizontal and vertical coordination, enlisting the participation of stakeholders

from all levels of government [37,38]. Considering the fact an NSS may play a crucial role in influencing urbanization, it is important to evaluate to what extent current government policies regulate or influence urbanization. A strength, weakness, opportunity, and threat (SWOT) analysis of urban spatial strategy involves assessing the strengths, weaknesses, opportunities, and threats associated with a city's or region's approach to spatial planning and development [39]. This analysis helps in understanding the internal and external factors that can influence the effectiveness of the strategy. A SWOT analysis guides the development of strategic plans by identifying critical factors that influence urban development [40]. The major objective of this research aspires to comparative analysis of urban spatial strategy within the context of the development plans of Gulf Cooperation Council countries. This study accentuates the contrast and resemblance of the national visions through a comparative analysis to identify distinctive attributes. The purpose of this article is to examine the spatial strategies of Arab Gulf countries using the SWOT analysis technique. Conducting a SWOT analysis helps urban planners and policymakers make informed decisions, prioritize actions, and refine their urban spatial strategies to ensure they align with a city's goals and effectively address challenges and opportunities. The novelty of the research in reviewing national urban plans of the Gulf Cooperation Council (GCC) lies in its focus on comprehensively analyzing and assessing the urban planning strategies and initiatives of the GCC member states. This research endeavors to bring new insights and understanding to the field of urban planning and development within the context of the GCC. Our study was divided into three major chapters: (i) urban spatial strategy in the GCC region; (ii) comparative analysis of each country and the GCC using the SWOT method; and (iii) suggestions for urban planning, limitations, and future implications.



**Figure 1.** Population trends in Gulf Cooperation Council countries from 2000 to 2020. Source: World Bank [41].

This exploratory study employed a qualitative research framework, delving into a thorough examination of national visions' structures to unveil both commonalities and distinctions. This approach aims to pave the way for unexplored avenues of investigation that will prove advantageous for subsequent research and practical applications. Additionally, this research delved into the contextual factors influencing the formulation of these visions, along with the intricacies of their implementation frameworks. As a result, this study transcended the confines of a narrow selection of research variables that often restrict the extent and depth of investigation. This approach facilitated an exhaustive analysis of variables that would be challenging to address through quantitative methodologies.

## 2. Study Area

The Gulf Cooperation Council (GCC) was established on 25 May 1981 in Riyadh, Saudi Arabia, by an agreement signed by Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates in recognition of their special relations, geographic proximity, equal systems of governance based on Islamic beliefs, common destiny, and mutual goals [42,43]. GCC countries are located on the western bank of the Red Sea, eastern bank of the Arabian Gulf, and southern bank of the Indian Ocean (Figure 2). Rivers are not common in a large part of the GCC because of its arid climatic conditions, and the Arabian Peninsula has no permanent streams anywhere. Although ringed by the waters of many seas and gulfs, the GCC is generally hot and dry. A subtropical high pressure dominates the region throughout the year to keep the atmosphere stable. The temperature in the region is hot, and in many places the average monthly temperature exceeds 38 degrees, and daily highs of 49 degrees are common [44,45]. The boundaries of the study area extends from 17°03' N to 31°27' N in latitude and from 54°59' E to 37°04' E in longitude, comprising a total area of 2,672,700 sq. km. Most of the GCC countries are highly urbanized, more than 85% of the total population [46]. Aridity exerts a strong imprint on the map of population distribution. Saudi Arabia has the lowest population density, whereas Bahrain has the highest population density (Table 2). Over the last two decades, the population has increased by more than 50% in all GCC countries. However, the United Arab Emirates's population increased the most, from 32.8 lakhs to 92.9 lakhs [41]. The official language is Arabic in these countries. Saudi Arabia is the most important oil producer in the region followed by Kuwait, UAE, and Qatar.

**Table 2.** Overview of the demographic characteristics of the GCC countries.

Country	Total Population	Total Area (In sq. km.)	Population Density (Person per sq. km.)	Percentage of Urban Population	Country Capital
Saudi Arabia	35,950,396	2,149,690	17	85	Riyadh
Qatar	2,688,235	11,490	240	99	Doha
United Arab Emirates	9,365,145	71,020	131	87	Abu Dhabi
Bahrain	1,463,235	785	1882	90	Manama
Kuwait	4,250,114	17,820	245	100	Kuwait City
Oman	4,520,471	309,500	15	87	Muscat

Source: World Bank (2021) [41].

According to the GCC Charter, the basic goals are to foster cooperation, integration, and interconnection among member states in all areas, strengthen ties among their peoples; create regulations that are similar across sectors like the economy, trade, customs, tourism, legislation, and administration; and promote scientific and technological advancement in the mining, agriculture, water resources, and animal resources sectors [47,48]. The GCC region has one of the fastest-growing economies in the world, mostly as a result of rising oil and gas earnings, as well as an increase in infrastructure construction and investment fueled by reserves [49]. The majority of these economies that were impacted by the previous economic slump have since recovered and are once again growing quickly. The Supreme Council, Ministerial Council, and Secretariat General make up the GCC's



organizational structure. The Secretariat is based in the Saudi city of Riyadh [50]. The need of finding measures to realize the unity of Arab States was clearly expressed in the GCC's constitution. The Supreme Council (the GCC's highest authority) is composed of the six member nation's heads of state [51]. This Council is in charge of defining GCC policy and ratifying suggestions made by the Ministerial Council or the Secretariat General. The Foreign Ministers of the six member nations comprise the Ministerial Council [52]. The Supreme Council appoints the Secretary General for a three-year tenure with the advice of the Ministerial Council [53]. The current Secretary General is Jassem Mohamed al-Budaiwi from Kuwait and was appointed on 1 February 2023.

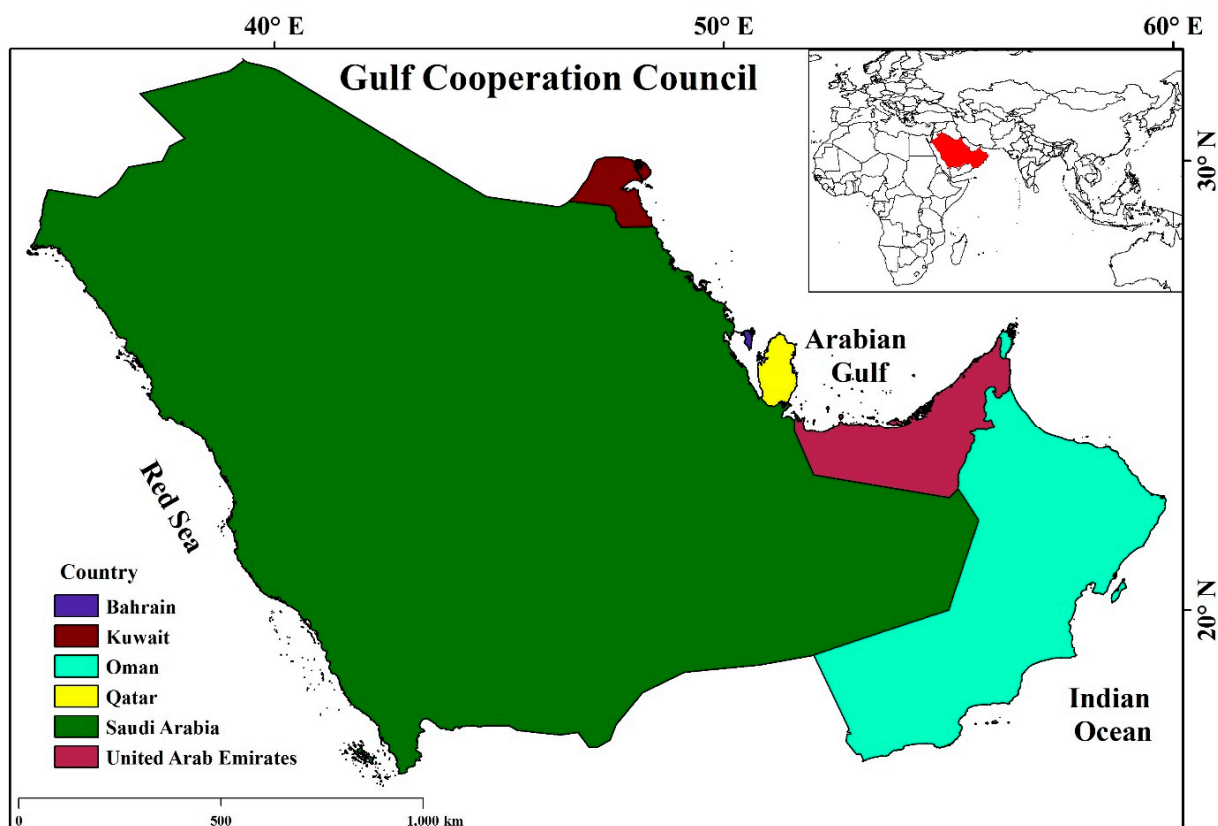


Figure 2. Study area map of the Gulf Cooperation Council.

### 3. Urban Spatial Strategy in GCC Region

Urban spatial strategy is dynamic professional work carried out by the government of a nation state to enhance the quality of life of people by focusing on various sectors and the development of various regions through proper resource allocation, appropriate strategies, the formulation of action plans, and the arrangement of effective implementation, monitoring, and evaluation mechanisms for the achievement of development goals [54,55]. Governments in GCC countries, which have experienced more rapid urbanization in recent decades, are more likely to have a national policy or strategy to promote sustainable urbanization than in other regions [56]. Soon after the discovery of oil, Gulf countries embarked on a national program of economic development and planning (Table 3). The philosophy of planning encompasses policies regarding various aspects of national economy and society that provide a framework for programs that bring about orderly change [57]. A spatial strategy has a policy concerning the role of urban places, small and large, and the entire settlement system, which includes both urban and rural places [58]. These policies should have a clear vision with regard to the internal problems of cities, such as land use land cover, slums, and urban transportation [59]. A national spatial strategy ought to reflect the national ethos regarding urbanization and urban problems. The strategic viewpoint is

the policy of the decentralization of economic activities. So, a meaningful and pragmatic spatial strategy policy should recognize the significance of the spontaneous urbanization process at work in the country [60]. GCC governments are now implementing their national transformation plans to restructure their economies using digital technology and achieving sustainable growth [61].

**Table 3.** Overview of current strategies in the national vision documents of GCC countries.

Country	Vision and Strategies	Aims and Objectives
Saudi Arabia	Saudi Vision 2030	Increase the quality of urban development and the performance of cities
Qatar	Qatar National Vision 2030	Encourage the development of a high-quality capital city with a beautiful public realm and peerless lifestyle options
United Arab Emirates	UAE Vision 2021 Abu Dhabi Vision 2030	Conserving natural and cultural resources/producing renewable energy and reducing hydrocarbon energy sources
Bahrain	Bahrain Economic Vision 2030	A top-notch infrastructure that connects Bahrain to the global economy
Kuwait	Kuwait Vision 2035	Enhancing human and social development and consolidation of Arab and Islamic identity
Oman	Vision 2040	Dynamic economic leadership, renewing skills within an integrated institutional framework

### 3.1. Saudi Arabia

The Kingdom of Saudi Arabia (KSA) has become a prominent international performer and economic powerful nation because of its geographic, cultural, social, demographic, and economic advantages [62,63]. The Kingdom is strategically located forming an axis that connects the three continents of Africa, Asia, and Europe and oversees the most important waterways driving its status as a leader in international trade [64]. Saudi Arabia has the most centralized approach to urban planning and administration. Since the 1970s, the national development policy of Saudi Arabia has included urban development as an integral aspect. This centralization is distinctive of GCC nations, where ministries formulate national, regional, and local policy [65]. Although certain important cities, such as Mecca and Medina, enjoy some degree of autonomy in urban planning, GCC municipalities are generally solely responsible for the implementation of local plans [66]. The Ministry of Economy and Planning is responsible for national development planning in Saudi Arabia, while the Ministry of Municipal and Rural Affairs (MOMRA) is in charge of developing spatial strategies for all levels of government [67]. The national spatial strategy (NSS) is the cornerstone of Saudi Arabia's strategy for managing urban settlements and directing urban growth.

#### 3.1.1. National Spatial Strategy

The NSS was authorized by the Council of Ministers on 28 August 2000 (Decree No. 127) in order to ensure long-term balanced development across regions and within regions, with a focus on integrating rural and urban areas. A strong focus has been placed on balanced regional development since the 5th National Development Plan (1985–1990). The relevance of the spatial component in policymaking has recently been underlined in the 9th National Development Plan (2010–2014) and 10th National Development Plan (2015–2019) [68]. The Development Plans initiated an ambitious effort to promote balanced urban development in Saudi Arabia by incentivizing a shift away from the three primary urban hubs of Riyadh, Jeddah, and Dammam towards secondary cities and new technology-driven urban centers (Figure 3).



**Figure 3.** Development of urban spatial strategy in Saudi Arabia.

### 3.1.2. New Strategy of the Ministry of Municipal and Rural Affairs (MOMRA) 2015

The MoMRA recently provided a new strategy, which was adopted by the newly formed Council of Economic and Development Affairs in 2015. This new strategy includes a goal to create high-efficiency urban settings throughout the Kingdom in order to achieve balance and sustainability in urban development within the framework of justice and competitiveness [68].

### Saudi Vision 2030

The Council of Ministers approved a major and ambitious new vision for the Kingdom in 2016. A comprehensive national development strategy, known as Vision 2030, is reshaping the Kingdom of Saudi Arabia. This vision is being carried out by empowering individuals, making investments in the future, and building a varied, thriving, and sustainable economy to improve the lives of residents [35]. The ‘Saudi Vision 2030’ is built on three pillars. The first aspect has to do with the Kingdom’s prominence in the Arab and Islamic worlds, the second with its investing prowess, and the third with its crucial geographic position that connects three continents. The vision is based on three main themes: ‘vibrant society’, ‘ambitious nation’, and ‘thriving economy’ [69]. The level-one strategic objectives are to offer a fulfilling and healthy life, strengthen Islamic and national identity, grow and diversify the economy, increase employment, enhance government effectiveness, and enable social responsibility. This ambitious vision outlines significant goals for the nation and highlights the need for significant reforms in the public sector, economy, and society at large. This includes initiatives to diversify the economy, increase the cultural and entertainment industry, open up for tourism, implement modern technologies, and create new job opportunities, particularly for women and young people, all with the goal of improving the quality of life for Saudi citizens and those who visit the country. Some giga projects that are reinventing the way it views urban and sustainable development for Vision 2030 are the Neom project, Qiddiya project, King Abdullah Economic City, Diriyah Gate, Red Sea, Wadi Hanifah, AMAALA, Sports Boulevard, King Salman Park, Riyadh Art, Haramain Express Train, King Salman Energy Park, and, most recently, a new project coming up in Riyadh, the Mukaab [70].



### 3.2. Qatar

The State of Qatar is one of the nations of the Arabian Peninsula and is quickly growing into a regional and international powerhouse [71]. It is a small peninsula located on the bank of the Arabian Gulf among the countries of Bahrain, Saudi Arabia, and the United Arab Emirates [72]. Qatar is one of the world's richest nations in terms of natural resources. Oil and natural gas exports account for more than half of the Qatari government's earnings [73]. Qatar's National Vision (QNV) was launched in July 2008. The vision is to achieve economic and social improvement and elevate the country to first world by 2030. Qatar's National Vision for 2030 was authorized in 2008 by Emiri Decree No. 44. One of the most significant key goals of the national development strategy is to provide a basic framework for Qatar's growth and the diversification of its economy, reducing its dependency on the oil and gas industry.

#### Qatar National Development Framework

The Qatar National Development Framework (QNDF) is the state of the Qatar's overarching policy and strategic foundation for physical and spatial development through 2032 [74]. It lays out a set of guiding principles and objectives based on the Qatar National Vision 2030 (QNV2030), and it includes structure plans created for each municipality that serves as the strategic planning context for each Municipal Spatial Development Plan (MSDP) (Figure 4). The Qatari government explicitly states that the National Vision envisions progress through four interconnected pillars encompassing human, social, economic, and environmental development [75]. Based on the QNV2030's Four Pillars of Sustainability, some guiding principles for sustainability were established for the QNDF like Quality of Life, Economic Growth and Diversification, Connectivity of People and Places, Ownership in Planning and Implementation, and Environmental Values [76].



**Figure 4.** Spatial representation of the Qatar National Vision 2030. Source: Qatar National Vision 2030.

The National Development Strategy, the Qatar QNV2030, and the QNDF have all been taken into consideration while creating the Doha MSDP, which serves as the regulatory framework for controlling development [77]. The vision for the Doha Municipality is:

- a. A world-class, contemporary Arab capital that reflects Qatar's culture, past, and Islamic values;

- b. A downtown that honors its former status as the city's heart and serves as a hub for economic activity in addition to West Bay;
- c. A number of employment sectors that cater to business demands and promote economic diversity and growth for small- and medium-sized companies;
- d. A collection of thriving, livable neighborhoods, each with top-notch local amenities that reflect the social and urban character of the region in which they are located.

Doha's preparedness for a post-oil paradigm can be seen on three levels: strategically, in urban planning, and in architecture. Doha is deliberately working towards a development vision centered on the notion of a knowledge and creative economy. On an urban planning level, Doha is working towards a translated style of urbanism by focusing on multicenter-city growth to end the unsustainable sprawl that has characterized the previous three decades. Furthermore, the city is implementing a robust transit-oriented development strategy that prioritizes public transportation as the primary means of movement inside the city [78].

### 3.3. United Arab Emirates

The United Arab Emirates is located in the eastern part of the Arabian Peninsula and in the southeast of the Asian continent. It borders the Sultanate of Oman to the southeast, the Kingdom of Saudi Arabia to the west and south, and the Arabian Gulf to the north and northwest [79,80]. The United Arab Emirates, simply called the Emirates or UAE, is a federation of seven emirates (i.e., states). The capital city is Abu Dhabi, and the largest city is Dubai [81]. H.H. Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, unveiled UAE Vision 2021 at the conclusion of a Cabinet meeting in 2010 [82]. UAE Vision 2021 (UAE-2021) emphasizes superior healthcare, a vibrant knowledge economy, a secure public, and impartial courts, as well as a strong sense of community and identity, a world-class educational system, and environmentally friendly infrastructure [83]. Four national priorities, which stand for the major areas of government concentration in the upcoming years, have been developed from the vision's pillars in order to make it a reality (Figure 5).



**Figure 5.** Information about the pillars of the UAE's Vision 2021. Source: United Arab Emirates and 2030 Agenda for Sustainable Development.

### 3.3.1. Abu Dhabi Economic Vision 2030

The Government of Abu Dhabi has established directives and key priorities within its policy agenda to guide the Emirate's socioeconomic advancement. The government, in collaboration with the private sector, has created the Abu Dhabi Economic Vision 2030 as a 22-year strategy to accomplish these objectives and make sure that all economic stakeholders are acting in unison and with a clear understanding of the long-term objectives [84]. The Abu Dhabi Economic Vision 2030 aims to assess the present economic environment and pinpoint critical areas for development in order to meet the policy agenda's objectives. The seven areas of ongoing economic policy focus are:

- Create a worldwide, integrated, open, and efficient corporate environment;
- Adopt a strict budgetary strategy that takes into account economic cycles;
- Create a stable financial system and monetary system with sustainable inflation;
- Drive significant improvement in the efficiency of the labor market;
- Build a strong infrastructure that is adequate for the expected economic expansion;
- Develop a workforce that is both highly skilled and productive;
- Make it possible for the financial markets to play a major role in financing various economic sectors and initiatives.

### 3.3.2. Plan Abu Dhabi 2030 Urban Structure Framework Plan

The Abu Dhabi Urban Planning Council undertook a comprehensive initiative to create an Urban Structure Framework Plan for the development of Abu Dhabi city. A timeline spanning from 2007 to 2030 was established by the council for the plan's implementation. Plan Abu Dhabi 2030, also known as the Urban Structure Framework Plan, was created to assist Abu Dhabi in identifying and meeting its development needs both now and in the future. It also aims to foster a culture of planning and adopt strong guiding principles for future development. This Urban Structure Framework Plan's guiding principles, governing policies, geographical plans and schemes, and related commentary work together to offer a temporary instrument for assessing growth and development proposals before the city has fully adopted a planning culture. The cultural and environmental character of Abu Dhabi serves as the primary foundation for this urban structure framework plan [84,85]. The main focal points encompass sustainability, a distinctive environment, a developing culture, identity and opportunities, excellence and quality of life, and connectivity. These initiatives, operating under the initiative 'Transforming Our Abu Dhabi', are aimed at contributing to the ambitious objective set by leadership to establish Abu Dhabi as one of the world's most habitable cities by 2021. The initiative 'Transforming Our Abu Dhabi' seeks to improve the city's quality of life by concentrating on a few key areas: transport, urban mobility, active lifestyle, and development and cultural initiatives.

### 3.3.3. Dubai Strategic Plan (DSP) 2015

DSP 2015 outlined important sectors of concentration and priority areas that would mold the emirate as it continued to advance, setting lofty goals for Dubai's long-term growth. DSP 2015 provided direction to government organizations and other key figures in the Dubai narrative, assisting in ensuring cooperation among the numerous stakeholders in pursuit of the leadership's goal [86]. The emirate's strategic goals were stated in DSP 2015 in five key areas: infrastructure, land use, environmental protection, social development, justice and safety, and excellence in government.

### 3.3.4. Dubai Plan 2021

Dubai Plan 2021 provides a comprehensive and complementary view of the city's future, beginning with the people and society that have always been and always will be the foundation of the city. This aspect explores the qualities that residents of Dubai must possess in order to fulfil the city's aims in all spheres, as well as the society that is required to enable and empower these people as they pursue their objectives. The plan takes into account the urban environment, which includes both natural and built resources,

and considers how Dubai residents and tourists experience daily life as a consequence of their interactions with the environment and the economic and social services offered [87]. The plan also emphasizes the economy, which is the city's main driver of growth and the gasoline that propels it ahead.

### 3.4. Bahrain

Bahrain is a small Arab state of the Gulf Cooperation Council located in a bay on the Arabian Gulf's southwestern coast with the smallest population. This country is only an urban archipelago that consists of 33 original islands [88]. With a population density of 1882 persons per square kilometer, Bahrain is one of the world's densest countries because of the scarcity of available land. Mainland Bahrain is the largest and most populous island in the archipelago, followed by Muharraq and Sitra [89]. The principal organization in Bahrain responsible for national urban policy is the Ministry of Works, Municipalities Affairs, and Urban Planning.

#### Bahrain Economic Vision 2030

The Kingdom of Bahrain envisions a shift from its current oil-dependent economy to a dynamic, internationally competitive economy driven by proactive governmental policies and an innovative private sector. This economic transformation aims to cultivate a substantial Bahraini middle class, characterized by improved living standards, achieved through heightened productivity and the creation of well-paying employment opportunities [90]. The following are the guiding principles behind Vision 2030. (i) Sustainability: Economic development must never come at the expense of the environment or the people's long-term well-being, so efforts will be made to safeguard the environment and preserve cultural heritage. (ii) Competitiveness: Efforts will be made to make Bahrain a great place to conduct business by offering top-notch public services, state-of-the-art infrastructure, and a welcoming living environment. (iii) Fairness: The government will make every effort to ensure that all citizens are treated fairly [91].

### 3.5. Kuwait

Kuwait is an oil-rich country that is situated on the Arabian Peninsula, bordering the northwestern part of the Arabian Gulf [92]. Kuwait stretches over 17,818 square kilometers with a 100% urban population. The General Secretariat of the Supreme Council for Planning and Development is in charge of administering Kuwait's 2035 Vision [93,94]. Since Kuwait's entire population lives in cities, the majority of its development planning results in implicit national urban policies.

#### 3.5.1. Kuwait Vision 2035

The Kuwaiti government is acutely aware of the risks associated with the sustainability of the nation's economy being reliant on oil (an exhaustible resource). As a result, it has introduced Kuwait Vision 2035, a long-term policy vision [95]. The main planks of this vision can be summed up as follows:

- Reinstating Kuwait's historic regional leadership and reshaping it into a financial and commercial focal point that magnetizes investors, akin to its previous pioneering eras. In this vision, the private sector spearheads economic endeavors, fostering competition and driving efficiency. Complementary national governmental bodies establish essential infrastructure, a favorable legal structure, and an invigorating business atmosphere to support this aspiration;
- Creating an environment conducive to healthy human growth, sustaining social values and national identity, and protecting the community's values, as well as its Arab and Islamic identities;
- Strengthening the democratic system, ensuring constitutional observance, and promoting justice, political involvement, and freedom.

### 3.5.2. The Kuwait National Development Plan

The National Development Plan represents a cohesive strategy for a thriving and enduring future, founded upon the goal of shaping the State of Kuwait by 2035. Presently, endeavors are in progress to realize the aims of this plan, employing seven fundamental pillars. These pillars are designed to metamorphize Kuwait into a prominent regional financial, commercial, cultural, and institutional hub by the year 2035 [96]. These pillars are healthcare, living environment, infrastructure, economy, public administration, human capital, and global position.

### 3.6. Oman

Oman is located on the southeast coast of the Arabian Peninsula at the intersection of the Arabian Gulf and the Arabian Sea [97]. This country is the oldest sovereign state in the Arab world and a large nation in the GCC. It is also blessed with great natural beauty. The population of the country was 4.5 million in 2021.

#### Oman 2040

Oman Vision 2040 serves as the Sultanate's strategic blueprint for surmounting challenges, adapting to shifts on regional and global fronts, harnessing opportunities to enhance societal welfare and economic competitiveness, stimulating progress, and fostering confidence in all aspects of economic, social, and developmental interactions throughout the nation [98]. The vision emphasizes redefining the roles and relationships among the public, private, and civil sectors in order to achieve a developed, diversified, and sustainable national economy, ensure equitable distribution of development gains among governorates, and preserve the country's natural resources and distinctive environment [99]. Along with modernizing the educational ecosystem, the vision also supports scientific research and innovation, the development of healthcare legislation, and a true Omani identity. The national priorities of the Vision 2040 are:

- Education, knowledge acquisition, scientific exploration, and national competencies;
- Health;
- Citizenship, individuality, national heritage, and cultural legacy;
- Well-being and social security;
- Guidance in economic management and leadership;
- Promotion of economic diversity and fiscal resilience;
- Labor market dynamics and employment initiatives;
- Fostering private sector growth, investment, and global collaboration;
- Advancement of governorates and resilient cities;
- Environmental conservation and natural resource management;
- Legal, judicial, and supervisory frameworks;
- Governance of the state administration, resources, and ventures.

Oman Vision 2040 implemented an inclusive approach, involving individuals from diverse regions of Oman. They shared their perspectives and input throughout different stages of crafting the vision. This approach was adopted to enhance the influence of various sectors within Omani society in shaping the future of the nation [100]. Aside from expatriates, the initiative aimed to engage the general populace and corporate entities, along with civil society entities, local governing bodies, and educational establishments. Additionally, they targeted specific groups, including women, youth, media practitioners, individuals with disabilities, as well as university and school students.



### 3.7. Technology Roadmap of GCC Countries

A technology roadmap for urban spatial strategy outlines the strategic plan for integrating technology into the planning and development of cities and urban areas [101]. It serves as a guide for leveraging technological advancements to enhance various aspects of urban living, including infrastructure, sustainability, mobility, governance, and quality of life [102]. Creating a technology roadmap for the urban spatial strategy of the Gulf Cooperation Council (GCC) region involves considering the unique characteristics and challenges of each member country. Here is what a technology roadmap table might look like for the GCC region, focusing on common priorities (Table 4).

**Table 4.** Summarized technology roadmap for urban spatial strategy in Gulf Cooperation Council.

Priority Area	Objectives	Technologies	Responsible Stakeholders	Country-Wise Timeline
Smart Transportation	Reduce traffic congestion and improve mobility	Intelligent traffic management, smart traffic signals	Department of transportation, technology partners	Saudi Arabia—Vision 2030 Qatar—QNDF 2030 UAE—We the UAE 2031 Bahrain—Economic Vision 2030 Kuwait—Vision 2035 Oman—Vision 2040
	Enhance public transportation systems	Integrated metro systems, bus rapid transit	Public transportation agencies	
	Future mobility	Pilot autonomous vehicle lanes, introduce smart parking solutions	Transportation department, tech partners	
Sustainable Energy	Increase renewable energy adoption	Solar farms, wind energy projects, develop connected utility grids for energy management	Energy ministries, utilities	
	Implement energy-efficient technologies	Smart lighting, energy efficient buildings	Urban planning departments	
Smart Governance	Enhance digital government services	E-government platforms, online services	Government IT departments	
	Improve data-driven decision making	Data analytics, open data initiatives, deploy IoT sensors for real-time data collection	Data management authorities	
Sustainable Infrastructure	Develop green and resilient infrastructure	Green roofs, flood-resistant buildings	Infrastructure planning agencies	
	Modernize water and waste management	Smart water meters, waste recycling tech	Environmental agencies, utilities	
Digital Inclusion	Bridge the digital divide	Community tech centers, digital literacy programs	Community organizations	
	Promote digital accessibility for all	Accessible websites, assistive technologies	Accessibility advocacy groups	

The above table provides a simplified overview and should be tailored to the specific goals, challenges, and priorities of each GCC country. The timeline for implementation can vary based on factors such as technology readiness, funding availability, and project complexity. Additionally, involving relevant stakeholders from government bodies, technology partners, community organizations, and more is crucial for the successful execution of the technology roadmap.

## 4. Comparative Analysis

Undoubtedly, GCC nations are the fastest growing countries that enjoy higher economic growth. The strategic geographical locations, legacy of cooperation, and reserve of fossil fuel resources made these countries among the wealthiest ones. The pace of urban development has been enjoying tremendous momentum with the advancement of technological innovations. The problems caused by growing urbanization are undoubtedly lessened in GCC nations. Urban development has been a key component of the national

development strategy in these countries [31]. Therefore, it is important to re-think the future spatial strategies and policies of the cities in the GCC countries. These countries have individual future vision plans to promote spatially balanced development.

#### *4.1. Country-Wise SWOT Analysis of Urban Strategy*

A SWOT analysis of urban spatial strategy involves assessing the strengths, weaknesses, opportunities, and threats associated with a city or region's approach to spatial planning and development. The process of setting goals, creating plans and regulations to accomplish these goals, and assigning resources to carry out the plans is known as the strategic management of a city [103]. The SWOT analysis would serve as the basis for the planning process. The SWOT analysis is a strategic planning method used to assess a city's strengths, weaknesses, opportunities, and threats [104]. The purpose of a SWOT analysis is to differentiate internal (strengths and weaknesses) and external (opportunities and threats) issues using information from national urban policy of GCC. This research examined the SWOT analyses of all GCC countries.

##### *4.1.1. SWOT Analysis of Saudi Arabia*

Saudi Arabia has been undergoing significant urban transformations driven by economic diversification, urbanization, and social development initiatives. The country's urban strategies are aimed at creating more sustainable, vibrant, and livable cities. The SWOT analysis provided a brief overview of the strengths, weaknesses, opportunities, and threats related to Saudi Arabia's urban spatial strategy. In the context of spatial strategy, the strengths refer to the positive internal attributes that can contribute to the success of a plan. The major strength is Saudi Arabia's abundant oil reserves and financial resources that provide a strong foundation for implementing ambitious urban spatial projects and infrastructure development, whereas the weakness is the heavy reliance on oil revenues that makes it vulnerable to global oil price fluctuations, impacting funding for urban projects [64]. However, there is a good opportunity to develop entertainment and tourism sectors, which can enhance urban vibrancy and create employment opportunities, contributing to urban growth. The following SWOT analysis offers a comprehensive overview to guide strategic decision making and ensure a balanced approach to plan the implementation (Table 5).

##### *4.1.2. SWOT Analysis of Qatar*

The urban spatial strategy of Qatar is characterized by a comprehensive and forward-looking approach to urban planning and development. Qatar envisions creating sustainable, livable, and resilient cities that cater to the needs of its citizens and residents while embracing technological advancements. Qatar's strategy aims to integrate urban development with social, economic, and environmental considerations. The SWOT analysis provides insight into Qatar's urban spatial strategy, highlighting its strengths, weaknesses, opportunities, and threats. The major strength is Qatar's strong financial position, which enables significant investments in urban infrastructure and development projects. The Qatar National Vision 2030 provides a clear long-term framework for urban planning and development. Its weakness is that its economy heavily relies on hydrocarbon revenues, exposing it to fluctuations in global oil and gas markets that can impact funding for urban projects [75]. However, Qatar has many good opportunities like sustainable urbanization, knowledge economy, and digital transformation (Table 6).

**Table 5.** SWOT matrix of urban strategy in Saudi Arabia.

Strategies	Strengths	Weaknesses	Opportunities	Threats
Saudi Vision 2030—A thriving Economy				
<ul style="list-style-type: none"> <li>Enhance and Diversify Economic Growth               <ul style="list-style-type: none"> <li>Strengthen the role of the private sector in contributing to economic expansion</li> <li>Improve the business environment</li> <li>Promote privatization initiatives</li> <li>Foreign direct investment to bolster economic development</li> <li>Establishment of special zones</li> <li>Revitalize economic cities</li> </ul> </li> <li>Optimize energy sector production               <ul style="list-style-type: none"> <li>Localize the oil and gas industry</li> <li>Increase the share of renewable energy sources</li> </ul> </li> <li>Unleash nonoil sector potential               <ul style="list-style-type: none"> <li>Foster the growth of the digital economy</li> <li>Promote the growth of the retail and tourism sectors</li> </ul> </li> <li>Strengthen the public investment fund               <ul style="list-style-type: none"> <li>Promote the localization of cutting-edge technology</li> <li>Cultivate robust economic partnerships on a strategic level</li> </ul> </li> <li>Establish Saudi Arabia as a global logistic hub</li> <li>Enhance regional and global integration of Saudi economy               <ul style="list-style-type: none"> <li>Advance the agenda of integrating GCC economies</li> <li>Foster economic relationships with neighboring regions</li> </ul> </li> <li>Boost nonoil exports</li> </ul>	<p>Leading economy in the Middle East</p> <p>Extensive oil reserves</p> <p>Economic growth and diversification across Arab Nations</p> <p>Ambitious plan to establish an extensive railroad network linking ports</p> <p>Joining the World Trade Organization</p> <p>Facilitated a more open market for private enterprise, bolstering Saudi Arabia's position</p>	<p>Heavy dependency on oil exports</p> <p>Susceptible to a decline in oil prices</p>	<p>Shifting investments into nonhydrocarbon industries</p> <p>Enactment of legislation to stimulate foreign trade and provide tax incentives for companies initiating operations in KSA</p> <p>Positive economic expansion and highly attractive corporate tax rates encouraging business initiatives</p> <p>Significant arrival of religious pilgrims</p>	<p>Escalating business expenses</p> <p>Unemployment rate</p> <p>Regional geopolitical tensions</p> <p>Job losses</p> <p>Disruptions in global financial Markets impacting financing costs</p>

**Table 6.** SWOT matrix of urban strategy in Qatar.

Strategies	Strengths	Weaknesses	Opportunities	Threats
Qatar National Vision 2030 Effective economic governance <ul style="list-style-type: none"> <li>- Ensuring financial and economic stability</li> <li>- Cultivating an attractive business environment to draw foreign investment</li> <li>- Foster open and adaptable economic frameworks</li> <li>- Collaborating with Gulf Cooperation Council nations and regional economic entities</li> </ul>	Possessing the World's second-largest proven gas reserves, exceeding 900 trillion cubic feet strong political stability Decrease in external debt burden Economic diversification strategy moving away from oil dependency Well-established infrastructure encompassing top-notch medical and educational facilities Corporate profit tax exemption for specified durations Clear legal frameworks with essential protections Open immigration and employment policies Anticipated growth in the service sector with the approach of the FIFA World Cup	Foreign investors are restricted from investing in banking, insurance, commercial agencies, and real estate sectors Strong dependence on natural resources and hydrocarbon sectors	Hydrocarbon, manufacturing, construction, tourism, banking, and education sectors demonstrating growth trajectory FIFA World Cup 2022	Qatar's economy susceptible to fluctuations in oil prices gradual depletion of oil reserves Ongoing disputes between Qatar and neighboring nations
Appropriate Economic Diversification <ul style="list-style-type: none"> <li>- Developing industries and services leveraging advantages from hydrocarbon sectors</li> <li>- Establishing a knowledge-driven economy characterized by               <ul style="list-style-type: none"> <li>✓ Innovation</li> <li>✓ Entrepreneurship</li> <li>✓ Educational excellence</li> <li>✓ Globally competitive infrastructure foundation</li> <li>✓ Effective provision of public services</li> <li>✓ Transparent and responsible government</li> </ul> </li> </ul>				

#### 4.1.3. SWOT Analysis of United Arab Emirates

The urban spatial strategy of the United Arab Emirates (UAE) is marked by visionary planning, rapid urbanization, and sustainable development. The UAE envisions creating modern, livable, and smart cities that cater to the diverse needs of its residents while promoting economic growth and environmental stewardship. Some key aspects of the UAE's urban spatial strategies are smart and sustainable cities, economic diversification, strategic urban projects, investment and business hubs, transportation and connectivity, integrated Governance and Tourism. UAE's urban spatial strategy is geared towards creating a sustainable, technologically advanced, and vibrant urban landscape that enhances the country's economic competitiveness, cultural richness, and quality of life for its residents and visitors [85]. The in-depth SWOT analysis of the urban spatial strategy provides insight to guide strategic decision making, capitalize on strengths, address weaknesses, seize opportunities, and mitigate threats for a sustainable and vibrant urban future in the UAE, which the following SWOT matrix table clearly describes (Table 7).

**Table 7.** SWOT matrix of the urban strategy in the United Arab Emirates.

Strategies	Strengths	Weaknesses	Opportunities	Threats
<p>Abu Dhabi's Economic Vision 2030</p> <ul style="list-style-type: none"> <li>• Create a globally integrated, open efficient, and effective business environment</li> <li>• Implement a disciplined fiscal policy that adapts to economic cycles</li> <li>• Establish a robust monetary and financial market ecosystem</li> <li>• Enhance the labor market's efficiency significantly</li> <li>• Foster the development of resilient and adequate infrastructure</li> <li>• Cultivate a highly skilled and productive workforce</li> <li>• Facilitate financial markets to play a key role in financing economic sectors and projects</li> </ul>	<p>Centrally positioned in the Arabian Gulf</p> <p>Internationally acclaimed airports and regional air traffic centers</p> <p>Allowed 100% foreign ownership for numerous business categories</p> <p>Extremely beneficial tax framework</p> <p>Provision of premier business support services</p> <p>Simplified administrative procedures and enhanced commercial laws</p> <p>Open to state-of-the-art high technologies and their application</p>	<p>Limited longevity of oil reserves</p> <p>Weakness against global financial crisis (Dubai)</p> <p>Suppressed nonoil growth</p> <p>Mostly focused on Abu Dhabi and Dubai emirates. Rest of the emirates, like Sharjah, Ajman, Umm Al Quwain, Ras Al Khaimah and Fujairah, are neglected and do not have separate vision plan</p>	<p>Enduring commercial and business hub within the Arabian world</p> <p>Promoting private sector involvement in expanding infrastructure, like transport, telecommunications, energy, and ports</p> <p>Substantial advancements in the manufacturing sector, offering lucrative prospects in industries such as cement, building materials, aluminum, chemical fertilizers, and foodstuffs</p> <p>Distinctive tourist attractions presenting opportunities for hotel chains to enter the UAE</p> <p>Favorable business environment with bulk purchasing options, low taxes, robust infrastructure, and a rich trading history</p>	<p>Geopolitical tensions in the Middle East</p> <p>Competition from neighboring nations to attain regional hub status</p> <p>excess supply in the real estate sector</p>
<p>Dubai Plan 2021</p> <ul style="list-style-type: none"> <li>• A pivotal hub in the global economy <ul style="list-style-type: none"> <li>- A city focused on sustainable economic growth</li> <li>- One of the leading global business hubs</li> <li>- The most attractive business-friendly city and a preferred investment destination</li> </ul> </li> </ul>				

#### 4.1.4. SWOT Analysis of Kingdom of Bahrain

The national urban strategy of Bahrain is a comprehensive framework that guides the sustainable development and urban growth of the country. It outlines the strategic direction and policies for shaping cities and communities, ensuring that they are livable, well-connected, economically vibrant, and environmentally responsible. The strategy also focuses on centralized planning, protecting the coast, preserving heritage, boosting economic productivity through an intermodal transportation system, promoting compact community design, and integrating green spaces within the city-state [91,105]. SWOT analysis provides insights into the strengths, weaknesses, opportunities, and threats associated with Bahrain's national urban strategy. It aids in strategic decision-making, allowing the policy to capitalize on its strengths, address weaknesses, seize opportunities, and mitigate threats for a prosperous and sustainable urban future. Following table provides a structured overview of internal and external factors of the strategy (Table 8).



**Table 8.** SWOT Matrix of Urban Strategy in Kingdom of Bahrain.

Strategies	Strength	Weaknesses	Opportunities	Threats
Bahrain Economic Vision 2030				
<ul style="list-style-type: none"> <li>Sustainability               <ul style="list-style-type: none"> <li>Enhancing the country's human capital, especially in applied sciences</li> <li>Promoting entrepreneurship, fostering innovation, and prioritizing environmental protection and cultural heritage preservation</li> </ul> </li> <li>Competitiveness               <ul style="list-style-type: none"> <li>Higher Productivity</li> <li>Attracting high-value-added industries with top-notch public services, advanced infrastructure, and a captivating living environment</li> </ul> </li> <li>Fairness               <ul style="list-style-type: none"> <li>Transparency/Free and Fair Competition</li> <li>Ensuring equitable access to services, education, and healthcare for all through vocational training and a safety net</li> </ul> </li> </ul>	Open and exceptionally business-friendly environment in the Middle East Unique Location at the center of Arabian Gulf and coupled with ongoing logistics infrastructure enhancements Most mature and well-established business hub with the Arabian Gulf's largest financial institutions Lowest Tax Jurisdiction within the Region Financial market liberalizations and free-trade agreements Foreign firms face no restrictions on land ownership Boasting the most productive, highly skilled bilingual workforce in the GCC Capital, profits, and dividends can be freely repatriated	Considerable economic dependence on the economies of KSA Limited Natural Resources	Recognized as the most well-regulated financial hub in the Middle East Offering business-friendly opportunities and conducive conditions Serving as an accessible service center for other Gulf markets, particularly Saudi Arabia Attracting renowned courier companies like DHL, ARAMEX, and TNT due to excellent transport infrastructure. Education Reforms Boosting the Meetings, Incentive Travel, Conferences, and Exhibitions (MICE) sectors Regional Leadership in information technology and expanding ICT Market	Government Finances Tighter Internal Religious Clashes Tension Against Iran and Qatar

#### 4.1.5. SWOT Analysis of State of Kuwait

The comprehensive framework of Kuwait's National Urban Strategy delineates the strategic orientation and policies to steer sustainable urban development and growth within the nation. Like its counterparts in the GCC, Kuwait has maintained a relatively stable set of oil sector policies, combined with macroeconomic stability, contributing to a superior quality of life for its citizens [105]. This SWOT analysis offers insight into the strengths, weaknesses, opportunities, and threats associated with Kuwait's Vision 2035. The major strength is Kuwait's Vision 2035, which provides a clear and ambitious roadmap for the country's economic and social transformation with strong government support and commitment enhancing the likelihood of its successful implementation [106]. In the following table, the SWOT analysis is discussed (Table 9).

**Table 9.** SWOT matrix of the urban strategy in the state of Kuwait.

Strategies	Strength	Weaknesses	Opportunities	Threats
Kuwait Vision 2035				
<ul style="list-style-type: none"> <li>Enhancing GDP growth and elevating its citizens' living standards               <ul style="list-style-type: none"> <li>Boosting nonoil sector expansion to enhance the quality of its citizens' lives</li> <li>Expanding the production base through financial, commercial, and service sectors diversification</li> <li>Strengthening the competitiveness of financial institutions</li> <li>Enhancing the performance of the oil sector</li> <li>Restructuring the general budget to reduce nonoil deficits</li> <li>Ensuring economic stability and equitable distribution of national income</li> </ul> </li> <li>Promoting private sector leadership in national development through incentivizing mechanisms               <ul style="list-style-type: none"> <li>Privatizing state-owned enterprises</li> <li>Streamlining regulatory processes</li> <li>Simplifying investment procedures</li> <li>Completing ongoing infrastructure projects</li> <li>Creating an attractive environment for foreign investment</li> </ul> </li> </ul>	Abundant reserves of oil and gas Favorable rights and incentives for foreign investors Tax exemptions for up to 10 years Full or partial waiver of customs duties on project-related imports Government support in land allocation, procurement, and foreign labor recruitment for projects State-of-the-art infrastructure and advanced maritime transportation sector	Heavy dependency on oil Lack of diversification	Kuwait free zone law offering tax and duty exemptions Promoting industrial growth, facilitating loans, and providing essential facilities Broadening the scope of the construction sector, encompassing transport infrastructure and extensive real estate projects	Regional tension Parliamentary opposition to critical fiscal reforms Volatility in oil prices

#### 4.1.6. SWOT Analysis of Sultanate of Oman

The National Urban Strategy of Oman is a comprehensive framework designed to guide and shape the sustainable development and growth of urban areas across the country. This strategy serves as a means for the Sultanate to surmount obstacles, align with regional and global transformations, capitalize on opportunities, enhance economic competitiveness, promote societal well-being, drive growth, and instill confidence across all national economic, social, and developmental spheres. Oman's National Urban Plan envisions creating sustainable, inclusive, and culturally rich urban environments that support economic growth, preserve cultural heritage, and enhance the overall well-being of its residents [99,107]. This SWOT analysis provides insight into the strengths, weaknesses, opportunities, and threats associated with Oman's national urban plan. The major strengths are its strategic location where Oman's favorable geographic location provides opportunities for trade, investment, and regional connectivity and strong government support and

that enhance the potential for successful plan implementation. The weaknesses are internal factors that hinder the success of the plan. This research analyzed these weaknesses to address the challenges effectively. The major weaknesses are dependency on oil and the need for modern infrastructure. The following SWOT table can guide decision making, resource allocation, risk mitigation, and strategy development (Table 10).

**Table 10.** SWOT matrix of urban strategy in the Sultanate of Oman.

Strategies	Strengths	Weaknesses	Opportunities	Threats
Oman 2040				
<ul style="list-style-type: none"> <li>Fostering a knowledge-based society and cultivating a competitive national workforce</li> <li>Decent and sustainable life for all</li> <li>Enabling dynamic economic leadership with renewable skills within a cohesive institutional framework</li> <li>A diversified and sustainable economy</li> <li>Cultivating a dynamic labor market that draws skilled individuals responsive to economic and technological shifts</li> <li>Empowered private sector</li> <li>Developing select urban centers and employing land in a sustainable manner</li> <li>Promoting a participatory legislative system and establishing balanced partnerships</li> </ul>	Positioned strategically along the route connecting the Arabian Gulf and the Indian Ocean Security and political stability Abundant national resources (except oil) Integrated and state-of-the-art infrastructure Rich tourism potential unrestricted repatriation of capital and profits to home country	Limited oil reserves Relatively insufficient IT infrastructure compared to other GCC countries Low levels of skilled workers government bureaucracy	Varied climates, diverse topography, and rich historical heritage attracting tourism investment attention towards investment in information technology High rate of adoption for education and technology	Oil depletion Investor confidence is lower, and debt sustainability prospects are impacted by sluggish fiscal and structural reforms Fiscal slippages and lower oil prices 49% youth unemployment rate

#### 4.1.7. SWOT Analysis of Gulf Cooperation Council

Gulf Cooperation Council (GCC) member countries consist of Qatar, Saudi Arabia, Bahrain, Kuwait, Oman, and the United Arab Emirates. These countries have experienced rapid urbanization and development over the past few decades due to their substantial oil wealth and ambitious economic diversification efforts [53]. Urban spatial strategies within the GCC have aimed to address various challenges and opportunities associated with this rapid growth. These strategies discuss how the cities would still be competitive and adaptive to the transformation from fossil fuel to a renewable energy driven economy sets the key questions and challenges for the time to come. Thus, the GCC countries focused on addressing the ‘path dependency’ on fossil fuel driven urban growth and policies in favor of ‘resilient’ and ‘smart’ growth for development of the (future) cities in the post-oil economy. The SWOT analysis table provides an in-depth understanding of the urban spatial strategy of the Gulf Cooperation Council. By considering both internal and external factors, it helps strategic decision making, enabling effective utilization of the strengths and opportunities while addressing weaknesses and threats in urban planning initiatives. The following SWOT matrix table is discussed in detail (Table 11).

**Table 11.** GCC SWOT matrix of urban strategies.

Strategies	Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> <li>• Sustainable development</li> <li>• Increasing the income of local people</li> <li>• Efficient government</li> <li>• Empowering private sector</li> <li>• Diversification and privatization</li> <li>• Attracting foreign investment</li> <li>• Transforming into knowledge-based economy</li> <li>• Providing state-of-the-art infrastructure of IT, as well as transportation</li> <li>• Regional integration with inter-GCC railway projects</li> <li>• Smart cities</li> <li>• Develop economic ties with the region grow nonoil exports</li> </ul>	<ul style="list-style-type: none"> <li>• Strategic location between Europe, Africa, and Asia</li> <li>• Existing developed infrastructure and continuance of infrastructure projects</li> <li>• Political stability through rulers' leadership</li> <li>• Urban planning authorities in place to manage urban development and growth through the creation of plans</li> </ul>	<ul style="list-style-type: none"> <li>• Dependency on oil, natural gas, and subsidy-based economy</li> <li>• Highly vulnerable to a fall in oil prices</li> <li>• Lack of advanced technicians among local people</li> <li>• Arid or semi-arid land</li> <li>• No agricultural land cover in most GCC countries, except KSA</li> <li>• Low food security</li> </ul>	<ul style="list-style-type: none"> <li>• Strong willingness and support of rulers and governments to achieve visions</li> <li>• Spread of business friendly environment</li> <li>• Continuance of infrastructure projects</li> <li>• High-speed winds might be a good source of renewable energy</li> </ul>	<ul style="list-style-type: none"> <li>• Regional political tensions with Qatar, Iran, and Iraq</li> <li>• Oil resource depletion</li> <li>• Investment duplication due to the increased competition in the region</li> <li>• Government bureaucracy</li> <li>• Need for increased energy use to maintain people's thermal comfort within buildings during the summer</li> </ul>

Considering the abundant resources accumulated in the region due to a decade of high oil prices, enabling societal development, it is valuable to assess whether the GCC countries will persist in following their current developmental path. This research utilized SWOT analyses to examine the urban development trajectory of the six GCC countries. By reviewing their existing development plans, it aimed to offer insight into how decision-makers within these nations perceive the economic challenges they face and their proposed strategies to address them. This research discussed some potential major strengths and weaknesses associated with urban spatial strategies in the Gulf Cooperation Council (GCC) countries. Many GCC countries possess substantial financial reserves, which can be directed towards implementing ambitious urban spatial strategies, infrastructure projects, and development initiatives. Governments in the GCC have shown a strong commitment to urban development, evidenced by the allocation of resources, policy support, and strategic planning to ensure successful implementation. On the other hand, a major weakness is the heavy reliance on oil revenues, which makes GCC economies vulnerable to fluctuations in global oil prices, impacting funding availability for urban projects. In addition, GCC countries heavily depend on expatriate labor for various sectors, which can create challenges for long-term urban planning and the development of local workforce skills. So, the strengths and weaknesses of urban spatial strategies can vary based on the specific context of each GCC country.

The Gulf Cooperation Council is a predominantly under-analyzed and under-criticized international organization [31]. The form and functioning of GCC countries' vision plans have been reviewed and criticized, while the GCC successes have been prominent in the economic sector. In evaluating how the Vision Plan objectives lend themselves to both sectoral classification and geographical application for effective implementation, this research discovered a lack of the following.

- The right form of growth and concomitant nature of infrastructure development: (i) sprawl, (ii) mixed/compact, or (iii) something 'new';
- The nature and strength of regional cooperation and competitiveness in the post-oil economy;

- The adaptive and tapping strategies of new market forces, e.g., renewable energies in favor of adaptive growth;
- Investigation of the morphological character of the region while looking into demographic and economic sizes (differentiated GDPs and investments) of the cities, their hierarchy, and spatial relations measured in connectivity and interdependencies through backward and forward linkage industries.

## 5. Conclusions

The countries examined in this study collectively face several significant issues akin to those encountered by the swiftly urbanizing GCC region. These issues encompass heightened susceptibility to climate change, sizable youth demographics struggling to seamlessly integrate into the job market, and, notably, the widespread emergence of unregulated settlements and a dearth of budget-friendly housing. The latter often serves as a catalyst for the inception of comprehensive national urban strategies. National Urban Policies are distinguished by their methods, as well as their substance, namely, how they handle the social, economic, and environmental difficulties brought on by urbanization. They are also distinguished by their political nature, which ideally entails the involvement of several governmental, business, and civil associates.

### 5.1. Suggestions for Urban Planning Strategies for the GCC

On the basis of the SWOT analysis, this research has some recommendations to take greater steps to recognize the challenges.

- To effectively manage the urban expansion of GCC cities and pursue modernity, it is imperative to establish a comprehensive urban planning strategy. This strategy should be dedicated to safeguarding and revitalizing the city's cultural heritage and historical urban development, both of which serve as wellsprings of innovative concepts and guiding principles for designing vibrant and habitable communities;
- Enhance the interconnections between the physical infrastructure essential for urban development, including roads and utility grids, and the intangible yet equally vital elements like educational institutions and diverse value networks. These elements shape individuals, foster relationships, disseminate ideas, and cultivate vibrant cultures within urban settings;
- Additionally, some way, form, or suggestion of a seamless integration of the borders among the GCC states to integrate and activate the bond and fast development of the border areas among the GCC states for an effective and successful GCC spatial strategy implementation;
- At the national, regional, and local levels, ambitious urban planning must incorporate both substantial public initiatives and significant private real estate developments;
- The GCC member states need to engage youth in national development and provide opportunities to participate in urban projects;
- Most importantly is preparing a strategic management plan (governance plan) for the Gulf Cooperation Council Spatial Strategy. It is necessary to establish and activate the Gulf Urban Observatory and also the founding of a strategy follow-up unit within the General Secretariat of the Cooperation Council. Further, is the establishment of a unit to link the Gulf Urban Observatory with the national urban observatories in the GCC countries to adopt and collect indicators of sustainable development at the level of the GCC countries and providing them to the Urban Observatory follow-up unit on a regular basis;
- An array of initiatives to press forward such as starting to prepare the details of border development projects in the short term, establishing a research and development center to take care of the urban and economic affairs of the GCC states, and the formation of committees to activate border development projects;
- A long-term performance framework should be developed by adopting a unified negotiating committee representing the GCC states. This committee would operate



as an economic system in negotiations with representatives of promising markets to achieve greater gains for the GCC states, rather than relying solely on bilateral negotiations. Additionally, there is the recommendation to establish a unit within the General Secretariat of the Cooperation Council to manage and oversee border development affairs.

### 5.2. Limitations of the Research

The GCC spatial strategy was approved by the Kings and Emirs of the GCC States in their Summit in Al Ula, Saudi Arabia, 2021 [108]. However, only two countries, namely, the Kingdom of Saudi Arabia and Qatar, have their own National Spatial Strategy. The rest of the GCC countries do not have spatial strategies, except for National Vision Plans. This research found some limitations in the interpretation of the urban spatial strategies of the Gulf Cooperation Council. This study is limited in addressing the General Spatial policies to maintain a coherent urban development across the GCC region. It does not cover the border development strategies and projects, the economic integration strategies and projects, and the governance of the spatial strategy integration among the GCC countries. It also does not cover the urban codes and architectural codes and policies across the region. These could be the subject of subsequent research work. It is important to note that limited access to comprehensive and up-to-date data on urban development, infrastructure, and economic indicators across GCC countries can hinder accurate analysis. The transparency of government policies and strategies might vary, affecting the accuracy and comprehensiveness of the information available for analysis. Moreover, fluctuations in oil prices can impact the economic conditions and development priorities of GCC countries, influencing the effectiveness of strategies. Another constraint is that the involvement of local communities and stakeholders in the planning process might be limited, affecting the representation of diverse perspectives in the analysis. An additional limitation is that comprehensive analysis of multiple GCC countries' urban spatial strategies requires substantial time and resources, which might not always be feasible. So, addressing these challenges requires comprehensive planning, strategic foresight, and adaptive policies.

### 5.3. Future Implication

The urban spatial strategies developed by the Gulf Cooperation Council (GCC) can offer valuable insight that can be adapted and applied to both European Union (EU) and ASEAN countries, despite the differing contexts. Here is how these strategies might be relevant.

#### 5.3.1. Sustainable Urban Development

GCC strategies often emphasize sustainable urban development to address environmental challenges. The EU and ASEAN countries can learn from these approaches to incorporate green infrastructure, energy efficiency, and waste management into their own urban planning.

#### 5.3.2. Economic Diversification

Both the EU and ASEAN countries can benefit from the GCC's focus on economic diversification. They can explore ways to reduce dependence on specific industries and foster sectors like technology, tourism, and manufacturing for long-term resilience.

#### 5.3.3. Smart City Technologies

The adoption of smart city technologies and digital infrastructure is a common aspect of GCC strategies. The EU and ASEAN can integrate technology-driven solutions to enhance urban services, improve governance, and optimize resource use.

#### 5.3.4. Infrastructure Development

The emphasis on robust infrastructure development in GCC strategies can inspire the EU and ASEAN to prioritize transportation networks, utilities, and public services to support urban growth and connectivity.

#### 5.3.5. Affordable Housing and Social Inclusivity

The GCC's strategies for providing affordable housing can serve as a model for EU and ASEAN countries grappling with housing affordability issues. Implementing policies that ensure social inclusivity and affordable living can improve citizens' quality of life.

#### 5.3.6. Cultural Heritage Preservation

While the cultural context differs, the GCC's focus on preserving cultural heritage can be adapted by the EU and ASEAN to integrate historical sites and cultural assets into urban planning, enhancing local identity and tourism.

#### 5.3.7. Stakeholder Engagement

Engaging communities, stakeholders, and experts in the planning process, as seen in GCC strategies, is essential for the EU and ASEAN to ensure inclusive and effective urban development.

#### 5.3.8. Cross-Border Collaboration

The GCC's strategies for regional collaboration can inspire EU and ASEAN countries to work together on shared urban challenges, exchange best practices, and promote cross-border initiatives.

While adapting the GCC strategies to the EU and ASEAN contexts, it is important to consider the unique socioeconomic, cultural, and governance factors of each region. Effective implementation will require tailoring strategies to align with local needs and priorities.

In conclusion, this study has underscored that the effectiveness of a national spatial strategy (NSS) hinges on well-defined and explicit synergy among clearly articulated national objectives, whose priorities are executed through programs implemented by line ministries, and the effective management of urban spatial expansion by municipal governments. As a result, a successful NSS is one that can balance the responsibilities of the national and local levels of government, provide each one with a distinct function, and guarantee that the latter has the appropriate people and financial resources.

**Author Contributions:** Conceptualization, M.A. and A.S.A.; Methodology, M.A. and A.S.A.; Software, M.A.; Validation, A.S.A.; Formal analysis, M.A. and A.S.A.; Investigation, M.A. and A.S.A.; Resources, A.S.A.; Writing—original draft, M.A.; Writing—review & editing, M.A. and A.S.A.; Visualization, M.A. and A.S.A.; Supervision, A.S.A. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** All data are available in the public domain.

**Acknowledgments:** This publication supported by King Fahd University of Petroleum and Minerals, Saudi Arabia.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Buettner, T. Urban estimates and projections at the United Nations: The strengths, weaknesses, and underpinnings of the world urbanization prospects. *Spat. Demogr.* **2015**, *3*, 91–108. [[CrossRef](#)]
2. Gottdiener, M.; Budd, L.; Lehtovuori, P. *Key Concepts in Urban Studies*; Sage: Newcastle, UK, 2015.

3. Angotti, T. *The New Century of the Metropolis: Urban Enclaves and Orientalism*; Routledge: London, UK, 2013.
4. UN DESA. *World Urbanization Prospects: The 2014 Revision*; Population Division, Department of Economic and Social Affairs, United Nations Secretariat: New York, NY, USA, 2014.
5. Pred, A. *City-Systems in Advanced Economies: Past Growth, Present Processes and Future Development Options*; Routledge: London, UK, 2017.
6. Sassen, S. Why cities matter. In Proceedings of the Catalogue of the 10th International Architecture Exhibition, Venice Biennale, Gemma Tipton, Venice, 16 July 2006; pp. 26–51.
7. Buffel, T.; Phillipson, C.; Rémillard-Boilard, S. Age-friendly cities and communities: New directions for research and policy. In *Encyclopedia of Gerontology and Population Aging*; Gu, D., Dupre, M.E., Eds.; Springer: Cham, Switzerland, 2019; pp. 1–11.
8. Bulkeley, H. Cities and the governing of climate change. *Annu. Rev. Environ. Resour.* **2010**, *35*, 229–253. [\[CrossRef\]](#)
9. Healey, P. *Urban Complexity and Spatial Strategies: Towards a Relational Planning for Our Times*; Routledge: London, UK, 2006.
10. Bibri, S.E.; Krogstie, J.; Kärrholm, M. Compact city planning and development: Emerging practices and strategies for achieving the goals of sustainability. *Dev. Built Environ.* **2020**, *4*, 100021. [\[CrossRef\]](#)
11. Leita, A.B.; Ahern, J. Applying landscape ecological concepts and metrics in sustainable landscape planning. *Landsc. Urban Plan.* **2002**, *59*, 65–93. [\[CrossRef\]](#)
12. Houghton, G.; Counsell, D. *Regions, Spatial Strategies, and Sustainable Development*; Psychology Press: London, UK, 2004.
13. Artmann, M.; Inostroza, L.; Fan, P. Urban sprawl, compact urban development and green cities. How much do we know, how much do we agree? *Ecol. Indic.* **2019**, *96*, 3–9. [\[CrossRef\]](#)
14. Salahi Moghadam, A. A Multidimensional and Dynamic Analysis of Urban Spatial Structure: A Case-Study of the Sydney Metropolitan Area, 1981–2006. Ph.D. Dissertation, UNSW Sydney, Sydney, NSW, Australia, 2013.
15. Bibri, S.E. Compact urbanism and the synergic potential of its integration with data-driven smart urbanism: An extensive interdisciplinary literature review. *Land Use Policy* **2020**, *97*, 104703. [\[CrossRef\]](#)
16. Rosehan, N.; Abas, A.; Aiyub, K. Systematic review on urban ecosystem services in south-east asia: Asean countries. *Probl. Ekorozwoju/Probl. Sustain. Dev.* **2022**, *17*, 256–266. [\[CrossRef\]](#)
17. Cortinovis, C.; Haase, D.; Zanoni, B.; Geneletti, D. Is urban spatial development on the right track? Comparing strategies and trends in the European Union. *Landsc. Urban Plan.* **2019**, *181*, 22–37. [\[CrossRef\]](#)
18. Van Den Berg, L.; Braun, E.; Van Der Meer, J. (Eds.) *National Urban Policies in the European Union*; Routledge: London, UK, 2018.
19. Faludi, A. Positioning European spatial planning. *Eur. Plan. Stud.* **2002**, *10*, 897–909. [\[CrossRef\]](#)
20. Dühr, S.; Colomb, C.; Nadin, V. *European Spatial Planning and Territorial Cooperation*; Routledge: London, UK, 2010.
21. Houghton, G. *Regional Development and Spatial Planning in an Enlarged European Union*; Ashgate Publishing, Ltd.: Farnham, UK, 2012.
22. Salet, W.G.; Thornley, A.; Kreukels, A. (Eds.) *Metropolitan Governance and Spatial Planning: Comparative Case Studies of European City-Regions*; Taylor & Francis: Milton Park, UK, 2003.
23. Thuzar, M. Urbanization in Southeast Asia: Developing smart cities for the future? *Reg. Outlook* **2011**, *183*, 96–100.
24. Caprotti, F.; Yu, L. (Eds.) *Sustainable Cities in Asia*; Routledge: London, UK, 2017.
25. Padawangi, R. (Ed.) *Routledge Handbook of Urbanization in Southeast Asia*; Routledge: London, UK, 2018.
26. Day, I.; Lazzarini, P.; de Caen, S.; AlHendawi, A.; Khuri, F.R.; Chaaban, J.; Abdellatif, A.; ElKhawaja, D.; Langhi, Z.; Barakat, S.; et al. The Arab Human Development Report 2016 Youth and the Prospects for Human Development in a Changing Reality. 2016. Available online: [http://www.undp-aciac.org/publications/ac/2016/AHDR2016\\_Launch\\_Agenda\\_23Nov2016-Eng.pdf](http://www.undp-aciac.org/publications/ac/2016/AHDR2016_Launch_Agenda_23Nov2016-Eng.pdf) (accessed on 12 May 2023).
27. UNDP. Framework for Ensuring No One Is Left Behind. 2019. Available online: <https://sdg.iisd.org/news/undp-presents-framework-for-ensuring-no-one-is-left-behind> (accessed on 12 April 2023).
28. Ramadan, E. Sustainable urbanization in the Arabian Gulf region: Problems and challenges. *Arts Soc. Sci. J.* **2015**, *6*, 1–4.
29. Helmy, M. Urban Branding Strategies and the Emerging Arab Cityscape: The Image of the Gulf City. 2008. Available online: <https://elib.uni-stuttgart.de/handle/11682/78> (accessed on 10 May 2023).
30. Almulhim, A.I.; Bibri, S.E.; Sharifi, A.; Ahmad, S.; Almatar, K.M. Emerging trends and knowledge structures of urbanization and environmental sustainability: A regional perspective. *Sustainability* **2022**, *14*, 13195. [\[CrossRef\]](#)
31. Zaidan, E.; Abulibdeh, A. Master planning and the evolving urban model in the Gulf cities: Principles, policies, and practices for the transition to sustainable urbanism. *Plan. Pract. Res.* **2021**, *36*, 193–215. [\[CrossRef\]](#)
32. Alam, M.; Azalie, I.A.N. Greening the Desert: Sustainability Challenges and Environmental Initiatives in the GCC States. In *Social Change in the Gulf Region: Multidisciplinary Perspectives*; Springer Nature Singapore: Singapore, 2023; pp. 493–510.
33. Potesta, G. Smart Cities and Place Making: The “Sense of Place” in the Implementation of Smart Cities in the Arabian Gulf. In *Smart Cities in the Gulf: Current State, Opportunities, and Challenges*; Springer Nature: Singapore, 2018; pp. 223–245.
34. Callen, M.T.; Cherif, R.; Hasanov, F.; Hegazy, M.A.; Khandelwal, P. *Economic Diversification in the GCC: Past, Present, and Future*; International Monetary Fund: Washington, DC, USA, 2014.
35. Nurunnabi, M. Transformation from an oil-based economy to a knowledge-based economy in Saudi Arabia: The direction of Saudi vision 2030. *J. Knowl. Econ.* **2017**, *8*, 536–564. [\[CrossRef\]](#)
36. Asmyatullin, R.R.; Tyrkba, K.V.; Ruzina, E.I. Smart cities in GCC: Comparative study of economic dimension. In *IOP Conference Series: Earth and Environmental Science*; IOP Publishing: Bristol, UK, 2020; Volume 459, p. 062045.

37. Furlan, R. Urban Regeneration of GCC Cities: Preserving the Urban Fabric's Cultural Heritage and Social Complexity. *J. Hist. Archaeol. Anthropol. Sci.* **2017**, *1*. [CrossRef]
38. *UN Habitat Inclusive and Sustainable Urban Planning: A Guide for Municipalities*; UN-HABITAT, United Nation Human Settlements Programme: Nairobi, Kenya, 2007; Volume 3.
39. Comino, E.; Ferretti, V. Indicators-based spatial SWOT analysis: Supporting the strategic planning and management of complex territorial systems. *Ecol. Indic.* **2016**, *60*, 1104–1117. [CrossRef]
40. Terrados, J.; Almonacid, G.; Hontoria, L. Regional energy planning through SWOT analysis and strategic planning tools: Impact on renewables development. *Renew. Sustain. Energy Rev.* **2007**, *11*, 1275–1287. [CrossRef]
41. World Bank, World Development Indicators. Population Data. 2022. Available online: <https://data.worldbank.org/indicator/SP.POP.TOTL?end=2022&locations=SA&start=1960&view=chart> (accessed on 22 May 2023).
42. Al-Naser, M.; Hamdan, A. The impact of public governance on economic growth: Evidence from gulf cooperation council countries. *Econ. Sociol.* **2021**, *14*, 85–110. [CrossRef]
43. Abdulla, A.K. The Gulf Cooperation Council: Nature Origin, and Process. In *Middle East Dilemma: The Politics and Economics of Arab Integration*; Columbia University Press: London, UK, 1999; Chapter 7; p. 150168.
44. Long, D.E. *Culture and Customs of Saudi Arabia*; Bloomsbury Publishing USA: New York, NY, USA, 2005.
45. Al-Sayari, S.S.; Zötl, J.G. (Eds.) *Quaternary Period in Saudi Arabia: 1: Sedimentological, Hydrogeological, Hydrochemical, Geomorphological, and Climatological Investigations in Central and Eastern Saudi Arabia*; Springer Science & Business Media: New York, NY, USA, 2012.
46. Clarke, J.I. Contemporary urban growth in the Middle East. In *Change and Development in the Middle East (Routledge Revivals): Essays in Honour of WB Fisher*; Routledge: London, UK, 2013; pp. 172–188.
47. Al Hassan, O. The GCC's formation: The official version. In *Gulf Cooperation Council: Challenges and Prospects*; Routledge: London, UK, 2014; pp. 9–21.
48. Hvidt, M. Planning for development in the GCC states: A content analysis of current development plans. *J. Arab. Stud.* **2012**, *2*, 189–207. [CrossRef]
49. Al-Maamary, H.M.; Kazem, H.A.; Chaichan, M.T. The impact of oil price fluctuations on common renewable energies in GCC countries. *Renew. Sustain. Energy Rev.* **2017**, *75*, 989–1007. [CrossRef]
50. Legrenzi, M. Did the GCC make a difference? Institutional realities and (un) intended consequences. In *Beyond Regionalism?* Routledge: London, UK, 2016; pp. 107–124.
51. Reiche, D. Energy Policies of Gulf Cooperation Council (GCC) countries—Possibilities and limitations of ecological modernization in rentier states. *Energy Policy* **2010**, *38*, 2395–2403. [CrossRef]
52. Legrenzi, M. *The GCC and the International Relations of the Gulf: Diplomacy, Security and Economic Coordination in a Changing Middle East*; Bloomsbury Publishing: New York, NY, USA, 2015.
53. Khaleel, A.I. The Bilateral Disagreements between the Countries of Gulf Cooperation Council and their Impact on the Cohesion of the Cooperation Council for the Arab States of the Gulf. *Rev. Int. Geogr. Educ. Online* **2021**, *11*, 1–23.
54. Healey, P. Relational complexity and the imaginative power of strategic spatial planning. *Eur. Plan. Stud.* **2006**, *14*, 525–546. [CrossRef]
55. Arif, M.; Gupta, K. Spatial development planning in peri-urban space of Burdwan City, West Bengal, India: Statutory infrastructure as mediating factors. *SN Appl. Sci.* **2020**, *2*, 1–19. [CrossRef]
56. Alshuwaikhat, H.; Aina, Y.; Rahman, S.M. Integration of urban growth management and strategic environmental assessment to ensure sustainable urban development. *Int. J. Sustain. Dev. Plan.* **2006**, *1*, 203–213. [CrossRef]
57. Aoun, O.; Teller, J. Planning urban megaprojects in the Gulf: The international consultancy firms in urban planning between global and contingent. *Front. Archit. Res.* **2016**, *5*, 254–264. [CrossRef]
58. Human Settlements, Infrastructure, and Spatial Planning. In *Climate Change 2014: Mitigation of Climate Change*; Cambridge University Press: London, UK, 2015; pp. 923–1000. [CrossRef]
59. Arif, M.; Sengupta, S.; Mohinuddin, S.K.; Gupta, K. Dynamics of land use and land cover change in peri urban area of Burdwan city, India: A remote sensing and GIS based approach. *GeoJournal* **2023**, *88*, 4189–4213. [CrossRef]
60. Cervero, R. Linking urban transport and land use in developing countries. *J. Transp. Land Use* **2013**, *6*, 7–24. [CrossRef]
61. Aidrous, I.A.; Asmyatullin, R.R.; Glavina, S.G. The development of the digital economy: GCC countries experience. In *Industry Competitiveness: Digitalization, Management, and Integration: Volume 2*; Springer International Publishing: New York, NY, USA, 2021; pp. 163–169.
62. Alshuwaikhat, H.M.; Mohammed, I. Sustainability matters in national development visions—Evidence from Saudi Arabia's vision for 2030. *Sustainability* **2017**, *9*, 408. [CrossRef]
63. Shabir, S.; Sharma, R. Role of soft skills in tourism industry in Saudi Arabia. *Int. J. Eng. Manag. Res.* **2019**, *9*, 87–92.
64. Kinninmont, J. Vision 2030 and Saudi Arabia's Social Contract: Austerity and Transformation. Middle East and North Africa Programme. 2017. Available online: <https://www.chathamhouse.org/sites/default/files/publications/research/2017-07-20-vision-2030-saudikinninmont.pdf> (accessed on 5 June 2023).
65. Alshuwaikhat, H.M. Strategic environmental assessment can help solve environmental impact assessment failures in developing countries. *Environ. Impact Assess. Rev.* **2005**, *25*, 307–317. [CrossRef]



66. Addas, A. Enhanced Public Open Spaces Planning in Saudi Arabia to Meet National Transformation Program Goals. *Curr. Urban Stud.* **2020**, *8*, 184. [CrossRef]
67. Al-Qawasmi, J.; Saeed, M.; Asfour, O.S.; Aldosary, A.S. Assessing urban quality of life: Developing the criteria for Saudi cities. *Front. Built Environ.* **2021**, *7*, 682391. [CrossRef]
68. Saudi Arabia Ministry of Economy and Planning (MEP): Tenth Development Plan, 1437-1440 H (2015-2019) Ninth Development Plan, 1431-1435 H (2010-2014) Eighth Development Plan, 1425-1430 H (2005-2009) Achievements of the Development Plans: Facts and Figures, 1390-1434 H (1970-2013) The Saudi Development March. 2009. Available online: <http://www.mep.gov.sa> (accessed on 16 May 2023).
69. Grand, S.; Wolff, K. Assessing Saudi vision 2030: A 2020 review. Atlantic Council. 2020. Available online: <https://www.atlanticcouncil.org/wp-content/uploads/2020/10/Assessing-Saudi-Vision-2030.pdf>. (accessed on 10 May 2023).
70. Garfield, L. Saudi Arabia Is Building a \$500 Billion Mega-City that's 33 Times the Size of New York City. 2018. Available online: <https://www.businessinsider.com/saudi-arabia-neom-mega-city-2018-10> (accessed on 12 June 2023).
71. Ulrichsen, K.C. *Qatar and the Arab Spring*; Oxford University Press: Oxford, UK, 2014.
72. Rizzo, A. Rapid urban development and national master planning in Arab Gulf countries. Qatar as a case study. *Cities* **2014**, *39*, 50–57. [CrossRef]
73. Al-Tamimi, N.; Amin, A.; Zarrinabadi, N. Describing Qatar. In *Qatar's Nation Branding and Soft Power: Exploring the Effects on National Identity and International Stance*; Springer Nature Switzerland: Cham, Switzerland, 2023; pp. 35–47.
74. QNDF. Qatar National Development Framework 2032. 2016. Available online: <https://andp.unescwa.org/plans/1231> (accessed on 18 June 2023).
75. Tan, T.; Al-Khalaqi, A.; Al-Khulaifi, N. Qatar national vision 2030. *Sustain. Dev. Apprais. Gulf Reg.* **2014**, *19*, 65–81.
76. Al-Thani, S.K. Neighborhood sustainability and livability in Qatar national development framework 2032. *Int. J. Res. Environ. Stud* **2019**, *6*, 47–56.
77. Al-Hababi, R. The Evolvement of Qatar's Environmental Sustainability Policy: The Strategies, Regulations, and Institutions. In *Sustainable Qatar: Social, Political and Environmental Perspectives*; Springer Nature Singapore: Singapore, 2022; pp. 17–35.
78. General Secretariat for Development and Planning (GSDP), State of Qatar, *Qatar National Development Strategy, 2011–2016*; Qatar General Secretariat for Development Planning: Doha, Qatar, 2011.
79. *The Statesman's Yearbook Companion*; Palgrave Macmillan: Abu Dhabi City, United Arab Emirates, 2019; pp. 443–444. [CrossRef]
80. *Art in the United Arab Emirates*; Gulf Region: Abu Dhabi, United Arab Emirates, 2016; pp. 179–187. [CrossRef]
81. Mansour, A.M.E. Population imbalance and immigration as a public policy problem in the United Arab Emirates. In *Adjusting to a World in Motion: Trends in Global Migration and Migration Policy*; Besharov, S.J., Lopez, M.H., Eds.; Oxford University Press: Oxford, UK, 2015; pp. 308–329.
82. Riaz, S.; Mushtaq, A. A framework of innovation driven eco-system for Dubai. In Proceedings of the 2017 International Conference on Infocom Technologies and Unmanned Systems (Trends and Future Directions) (ICTUS), Dubai, United Arab Emirates, 18–20 December 2017; pp. 1–8.
83. Krzymowski, A. Sustainable development goals in Arab region–United Arab Emirates' case study. *Problemy Ekorozwoju* **2020**, *15*, 211–220. [CrossRef]
84. Abu Dhabi Urban Planning Council (ADUPC) (2015). Abu Dhabi Vision 2030. Available online: <http://www.upc.gov.ae/abu-dhabi-2030.aspx> (accessed on 29 June 2023).
85. Government of Abu Dhabi. *The Abu Dhabi Economic Vision 2030*; Government of Abu Dhabi: Abu Dhabi, United Arab Emirates, 2008.
86. Ziadah, R. Transport Infrastructure and Logistics in the Making of Dubai Inc. *Int. J. Urban Reg. Res.* **2018**, *42*, 182–197. [CrossRef]
87. Riadh, A.D. Dubai, the sustainable, smart city. *Renew. Energy Environ. Sustain.* **2022**, *7*, 3.
88. Larsen, C.E. *Life and Land Use on the Bahrain Islands: The Geoarchaeology of an Ancient Society*; University of Chicago Press: Chicago, IL, USA, 1983.
89. Al Hermi, M. Statement by Mr. Masoud Al Hermi, Advisor at HRH the Prime Minister Court Kingdom of Bahrain. In Proceedings of the Plenary Meeting, 25th Session of the Governing Council UN-Habitat, Nairobi, 20 April 2015; Available online: <http://unhabitat.org/wp-content/uploads/2015/01/Statement-by-the-Kingdomof-Bahrain.pdf> (accessed on 6 July 2023).
90. Khairy, H. Exploring the Implementation of Government Work Program towards Bahrain Economic Vision 2030 with Respect to Strategic and Project Management (A Retrospective Study for the Period 2011–2014). *Int. J. Inspir. Resil. Econ.* **2017**, *1*, 14–27.
91. Government of Bahrain. *Our Vision: The Economic Vision 2030 for Bahrain*; Bahrain Economic Development Board: Manama, Bahrain, 2008.
92. Mukhopadhyay, A.; Al-Sulaimi, J.; Al-Awadi, E.; Al-Ruwaihi, F. An overview of the Tertiary geology and hydrogeology of the northern part of the Arabian Gulf region with special reference to Kuwait. *Earth-Sci. Rev.* **1996**, *40*, 259–295. [CrossRef]
93. Mahgoub, Y. Kuwait: Learning from a globalized city. In *The Evolving Arab City: Tradition, Modernity and Urban Development*; Routledge: London, UK, 2008; pp. 152–183.
94. Alsharija, M.; Watters, J.J. Secondary school principals as change agents in Kuwait: Principals' perspectives. *Educ. Manag. Adm. Leadersh.* **2021**, *49*, 883–903. [CrossRef]
95. Olver-Ellis, S. *Building the New Kuwait: Vision 2035 and the Challenge of Diversification*; LSE Middle East Centre: London, UK, 2020.



96. Omar, S.A. Three Decades and Beyond of Strategic Planning for Research and Development in Kuwait: The Case of Kuwait Institute for Scientific Research. In *Higher Education in the Arab World: Research and Development*; Springer International Publishing: Cham, Switzerland, 2022; pp. 237–258.
97. Al-Shaqsi, S.Z. Emergency Management in the Arabian Peninsula: A Case Study from the Sultanate of Oman. 2015. Available online: <https://hozir.org/emergency-management-in-the-arabian-peninsula-a-case-study-fro.html> (accessed on 24 July 2023).
98. Abbès, M.; Bonnefoy, L. Oman Over Times. A Nation from the Nahda to the Oman Vision 2040. *Arab. Humanit.* **2022**, 2022.
99. Prabhu, C. Oman's National Spatial Strategy Gets under Way. *Oman Daily Observer*. 23 February 2015. Available online: <http://omanobserver.om/omans-national-spatialstrategy-gets-under-way> (accessed on 5 July 2023).
100. East, P.M. Oman: Incentives announced by the Government as part of Oman Vision 2040. In *Insights Tax and Legal Services*; Routledge: London, UK, 2021; pp. 2–5.
101. Lee, J.H.; Phaal, R.; Lee, S.H. An integrated service-device-technology roadmap for smart city development. *Technol. Forecast. Soc. Chang.* **2013**, *80*, 286–306. [[CrossRef](#)]
102. Saxena, S.; Al-Tamimi TA, S.M. Visioning “smart city” across the Gulf Cooperation Council (GCC) countries. *Foresight* **2018**, *20*, 237–251. [[CrossRef](#)]
103. Jamnický, P. The strategic management of a city's development. *Slovak J. Civ. Eng* **2006**, *1*, 30–36.
104. Abya, H.; Nasiri Khalili, M.M.; Ebrahimi, M.; Movahed, A. Strategic planning for tourism industry using SWOT and QSPM. *Manag. Sci. Lett.* **2015**, *5*, 295–300. [[CrossRef](#)]
105. SOM. Bahrain National Planning Development Strategy. 2007. Available online: [http://www.som.com/projects/bahrain\\_national\\_planning\\_development\\_strategy](http://www.som.com/projects/bahrain_national_planning_development_strategy) (accessed on 12 July 2023).
106. *State of Kuwait, Five-Year Development Plan of the State of Kuwait 2009/2010–2013/2014: A Draft General Framework*; The General Secretariat of the Supreme Council for Planning and Development: Kuwait City, Kuwait, 2009.
107. Ministry of National Economy (MONE). *Sultanate of Oman, Long-Term Development Strategy, 1996–2020: Vision for Oman's Economy, 2020*; Sultanate of Oman, Ministry of National Economy: Muscat, Oman, 1995.
108. Elkahlout, G.; Milton, S. The Evolution of the Gulf States as Humanitarian Donors. *Third World Q* **2023**, 1–20. Available online: <https://www.tandfonline.com/doi/full/10.1080/01436597.2023.2229742> (accessed on 24 July 2023). [[CrossRef](#)]

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