

QATAR LAND SECTOR

A SNAPSHOT

مبادرة
الاراضي العربية
Arab Land Initiative



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Author: Ali Abd Alraouf

Task managers: Doaa El-Sherif and Ombretta Temptra

Editing: Nikola Stalevski and Heather Elaydi

ABOUT THIS PAPER

This background paper presents the results of an assessment conducted on land management and land administration in Qatar between 2020 and 2022. Good land governance is essential for realizing sustainable social, economic, and environmental development, peace and stability. The paper indicates the country's capacity to deliver good land governance by measuring its performance on the core land administration functions: land tenure, land value, land use, land development and land disputes resolution. It also maps the existing learning offer on land governance, identifying the key institutions and the courses available in Qatar. The paper was prepared as part of the work of the Arab Land Initiative, and its preparation was coordinated by the Urban Training and Studies Institute (UTI) of the Housing and Building National Research Center (HBRC), Egypt, under the leadership of UN-Habitat and the Global Land Tool Network.

THE GLOBAL LAND TOOL NETWORK AND THE ARAB LAND INITIATIVE – GLTN is a multi-sectoral alliance of international partners committed to increasing access to land and tenure security for all, with a focus on the poor, women and youth. The Network's partners include international rural and urban civil society organizations, research and training institutions, bilateral and multilateral organizations, and international professional bodies.

In 2016, GLTN Partners, led by UN-Habitat and the World Bank, launched the Arab Land Initiative to promote equal access to land, peace, stability and economic growth in the Arab region through good land governance and transparent, efficient and affordable land administration systems. The Initiative aims at empowering land champions from the region by developing capacities, increasing collaboration and promoting innovation, learning and sharing of best practices. It also supports the implementation of land gender-responsive and fit-for-purpose land tools and approaches at national and local level. The Initiative is supported by the Federal Ministry for Economic Cooperation and Development of the Federal Republic of Germany (BMZ).

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ABBREVIATIONS

CCS	Climate Change Strategy
DAUP	Department of Architecture and Urban Planning
GCC	Gulf Cooperation Council
GIS	Geographic Information System
GLTN	Global Land Tool Network
GORD	Gulf Organization for Research and Development
GSAS	Global Sustainability Assessment System
HBKU	Hamad bin Khalifa University
MME	Ministry of Municipality and Environment
QGBC	Qatar Green Building Council
QNDF	Qatar National Development Framework
QNMP	Qatar National Master Plan
QNV 2030	Qatar National Vision 2030
QU	Qatar University
UN-Habitat	United Nations Human Settlements Programme
UTI	Urban Training and Studies Institute

1. INTRODUCTION

About the country

The Gulf states, including Qatar, face a unique set of challenges driven primarily by the unprecedented pace of urbanization, a result of the oil revenue boom during the second half of the 20th century. Today, Qatar is one of the world’s wealthiest countries, possessing extensive oil and natural gas reserves that have driven its remarkable growth over the past few decades. The capital city of Doha has transformed from a small fishing village community to an emerging regional urban centre with more than 1.9 million inhabitants. Qatar is situated on the Qatari Peninsula, a portion of the Arabian Peninsula, measuring about 160 km north-south and 55 to 80 km east-west. The only land border – with Saudi Arabia – lies on Qatar’s southern end. Urban areas in the Doha region have grown at a rate of 5.45 per cent per year since 1987, increasing by 315 km², with the peak growth period occurring between 1998 and 2003 (Shandas et al., 2017).

Any road map for better land-related management, governance and development strategies should address several priority areas, including the legal and institutional framework, land-use planning and management, land valuation and taxation, public provision of land information, large-scale land acquisition, public land management and the capacity of national and municipal authorities.

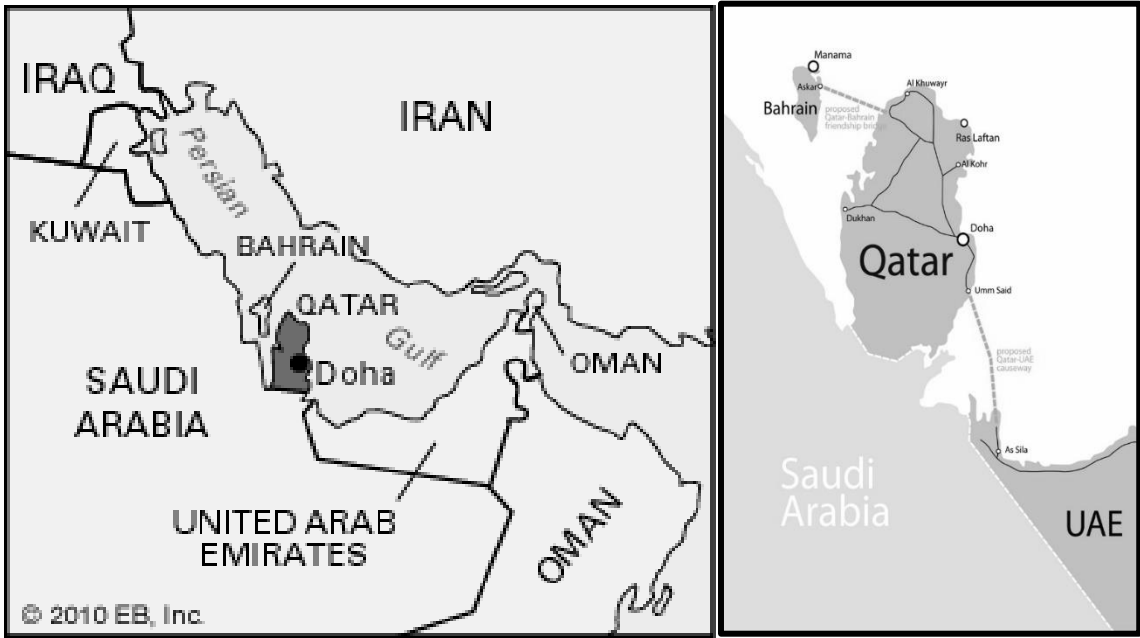


Figure 1: Qatar’s geographic location and connections to GCC countries.
Source: MME (n.d.).

Qatar’s growth is phenomenal, with the size of metropolitan Doha increasing fourfold and the total population tripling to 2.8 million (2.0 million men and 800,000 women) over the past decade (Qatar Planning and Statistics Authority, 2021). Rapid changes in land use associated with economic development, climate change, urbanization, increased demand for raw materials and the need to feed a

rapidly growing population are competing for use and hence good governance of land. The methodological and scientific confrontation of these emerging and lasting issues must therefore inform awareness-raising, knowledge dissemination and capacity building of local authorities.

From its humble origins as a fishing and pearling village (Zahlan, 1979), Doha has emerged as a global centre where ambition and resources are advancing experiments in education, health, sports and culture (Fromherz, 2012; Alraouf, 2017). Based on the Qatar National Vision (2030), the Ministry of Municipality and Urban Planning created a national spatial development strategy as a foundation to shape and regulate all planning and development in the country. This strategy is known as the Qatar National Development Framework (QNDF). Its main pillar is sustainable development and supporting a high-quality urban lifestyle, which it aims to achieve through several key objectives:

- Develop a number of high-quality mixed-use, mixed-density centres as transit-oriented development;
- Retain the cultural identity of rural/non-metropolitan communities;
- Establish a high-quality and integrated public transport network;
- Ensure megaprojects and other large-scale developments are integrated into the wider community;
- Promote equitable accessibility of public facilities and social amenities for all residents;
- Develop a unique and high-quality public realm, which is equitably accessible and permeates throughout Qatar's urban areas;
- Create high-quality residential neighbourhoods that accommodate the cultural identity and preferred lifestyles of Qataris;
- Maintain and enhance a distinctive identity for Doha, which supports a Qatar brand;
- Protect and enhance the natural, built, and cultural environment to avoid adverse impacts from land uses;
- Ensure risks from climate change impacts are evaluated, and mitigation measures are developed and implemented for land-use planning and infrastructure development;
- Establish urban growth boundaries around Metropolitan Doha and other urban areas to ensure the efficient use and timely release of land;
- Develop a plan-led system that supports and manages development change processes through appropriate institutional governance frameworks.

Objective

The objective of the paper is to provide an overview of the institutional and legal framework supporting the land administration system in Qatar, as well as key stakeholders in the land sector. It also provides a summary of the core land administration functions: land tenure, land value, land use, land development and land disputes resolution.

Methodology

Stakeholders and Sources - This paper is based on a review of key land-related documents published by the Government of Qatar, and supplemented by the expertise of land professionals, practitioners, academics and other stakeholders involved in various aspects of land governance via survey and

interviews. The paper also maps existing learning offers in Qatar and reviews the related curricula. Diversified categories of actors, stakeholders and sources were identified and consulted. The relevant stakeholders in Qatar's land sector consulted during the research can be divided into five main categories:

1) Leading governmental actors that are directly responsible for land management, land acquisition, future land uses (planning), the national land budget and other key aspects of land governance:

- Ministry of Municipality and Environment
- Ministry of Development Planning and Statistics
- Ministry of Transport and Communications
- Ministry of Education and Higher Education
- Ministry of Public Health
- Supreme Committee for Delivery and Legacy FIFA 2022
- Ministry of Administrative Development, Labor and Social Affairs
- Ministry of Culture and Sports

2) Additional governmental stakeholders which play a coordinating role in land administration and help developing and implementing holistic strategic plans (such as the Qatar National Master Plan) which touch on land issues:

- Ministry of Energy and Industry
- Ministry of Economy and Commerce
- Ministry of Finance
- Ministry of Interior
- Ministry of Endowment and Islamic Affairs

3) Other authorities and institutional bodies: Public Works Authority, Civil Aviation Authority, Qatar Tourism Authority, Qatar Museums, Qatar Petroleum, Qatar Railways Company, Qatar General Electricity and Water Corporation, and Private Engineering Office.

4) Real estate developers and coordinators of mega projects. These are principally private sector actors that invest in and implement the construction of large-scale developments across the country in line with national plans: Msheireb Properties; Qatar Diar Real Estate Company; United Group Developers; and Lusail City Development.

5) Academic and research institutions and universities: Qatar Foundation for Education, Science and Community Development; Hamad Bin Khalifa University; Gulf Organization for Research and Development; and Qatar University.

Time Frame and Schedule - The research was carried out over the course of three months, from March to May 2021. Research activities included a literature review and administering and analysing questionnaire and interview responses. Due to the strict COVID-19 protection measures in Qatar, virtual interviews were used extensively in addition to extended phone interviews. Once the lockdown was lifted, a considerable number of face-to-face interviews were conducted, particularly with senior officials and administrators as well as private sector managers. To overcome any language barriers, the survey was

conducted in Arabic or English according to the preference of the selected stakeholder to achieve the highest level of accuracy and clarity in comprehending the survey questions. In total, 24 people were interviewed for this study, either remotely or face-to-face.

Limitations - The COVID-19 pandemic was the main obstacle to conducting the survey and interview process. The stringent safeguards applied in Qatar by the Ministry of Health included moving 50 per cent of the Ministry staff to work from home. Hence, personal interviews were difficult to secure. Respondents also tended to prefer answering the survey via Zoom meetings, as they were unable to commit to completing the entire survey independently online due to the disruptions and distractions of the home office. Some of the interviewed academics were reluctant to share their course materials, which they considered to be the intellectual property of their university. Hence, more effort was needed during the interviews to document the course descriptions, objectives and desired learning outcomes.

2. LAND-RELATED LEGAL FRAMEWORK

The Qatar National Vision 2030 (QNV, 2030) is a working manual supported by guidance from the state's leadership. Launched in October 2008 and ratified under Emiri Decree No. 44 of 2008, the QNV 2030 aims to transform Qatar into an advanced country capable of sustaining its own development and ensuring high living standards for its people for future generations. The approach to achieve this aim relies on developing a diversified economy, reducing dependence on hydrocarbons, moving investment towards a knowledge-based economy and recognizing the growing importance of the private sector. The QNV 2030 provides a framework for national development strategies, trends and actions, reflecting the aspirations and culture of the Qatari people. It also aims to strike a balance between economic growth, social and human development, and environmental protection.

The release of the Qatar National Vision 2030 (QNV) was a milestone in the contemporary history of the country's development process. It aims to balance present and future needs, modernization and tradition, managed growth and uncontrolled expansion, the size and quality of the expatriate labour force and the intended developmental path, and economic and social development alongside environmental protection. One component of the strategy focuses on fostering Qatar's transition from a hydrocarbon-dependent to a knowledge-based economy through educational development and diversification. The General Secretariat for Planning developed the National Strategy 2010–2015 to achieve this aim. Qatar's National Vision rests on four main pillars:

- **Human development:** Support and enable all Qataris to sustain a prosperous society.
- **Social development:** Establish a just and caring society based on high moral standards, which is able play a significant role in the global partnership for development.
- **Economic development:** Foster a competitive and diversified economy capable of meeting the needs of and securing a high standard of living for all its people, now and in the future.
- **Environmental development:** Manage the environment to ensure harmony between economic growth, social development and environmental protection.



Figure 2: Doha's evolution from a humble traditional settlement (1940s) to a metropolis (2021).
Source: MME (n.d.).

Human development is another key component of the QNV 2030. It aims to enhance and develop the education system to align the country and its workforce with the changing demands of a knowledge-based and highly competitive global economy, to provide health care to ensure a physically and mentally healthy population and to align the educational system with developmental needs and labour market demand (Qatar Planning and Statistics Authority, 2010).

The QNV 2030 was followed by cycles of strategic studies. The second National Development Strategy 2018–2022 comes as a continuation of the series of national strategies aimed at achieving the goals and aspirations of Qatar National Vision 2030. In light of the national vision, each governmental authority or institution was invited to create its own complementary vision. Hence, the MME developed a national strategy for urban development – the Qatar National Development Framework (QNDF) (QPSA, 2010).

Urban populations, particularly in Doha, has seen immense growth in recent years, due in large part to both internal migration and a large influx of migrants from abroad, primarily South Asia (Al-Manni et al., 2007). With such rapid urbanization, it became clear that a governing mechanism for land management and administration was needed. While a building law was issued to control the construction process, gaps at the state and municipal level remained.

The drafting and finalization of the Qatar National Master Plan (QNMP), the spatial representation of the QNV 2030, was another important milestone in Qatar's planning guidelines. It provides a clear set of plans for each of the eight municipalities. Each set includes the municipality's vision, development strategy, land-use plan, zoning and planning regulations. The planning regulation of each municipality is certified by the Cabinet of Ministers and promulgated by an Emiri decree.

The Planning Law is a recent piece of legislation that formalizes the development planning system in Qatar. Administered by the Ministry of Municipality and Environment, the Planning Law aims to institute a clear, efficient and transparent planning system that benefits the public and private sectors and encourages responsible and sustainable development across Qatar. It establishes a legal basis for the development planning system and gives legal status to a range of planning processes, including plan-

making, planning assessment, decision-making and the involvement of various stakeholders. The Planning Law consolidates all these functions into a holistic and rational planning system (Richer, 2014).

Two additional documents were drafted to introduce regulations and precisely clarify the land development mechanisms in the real estate and housing sectors. The first is the Qatar Real Estate Market Analysis study, which aims to undertake a comprehensive assessment of the current and projected future real estate stock in Qatar, including the residential, commercial/retail, office, industrial and hospitality sectors. The study analyses the gap between supply and demand in each sector of the real estate market and identifies policy recommendations to address these gaps to guide decision makers in investment projects. A main output of the study is a GIS-based application for the real estate market.

The second document is the Qatar National Housing Strategy, which sets out a plan to meet the country's current and future housing needs. Its objective is to support the delivery of sustainable housing development while protecting the natural and historic environment for future generations. It also aims to encourage sustainable development by providing an implementation mechanism to deliver a diverse supply of housing that responds to the needs of both nationals and expats. This will allow service providers to ensure the timely provision of supporting infrastructure, services and amenities.

A third strategic study was conducted to address adaptation to and mitigation of climate change and to articulate a guiding principle for land development in zones along the Qatari coast that are threatened by sea level rise. The strategy is titled Climate Change Strategy for Urban Planning and Urban Development in the State of Qatar (CCS). Climate change poses a significant risk to Gulf countries, and the Government of Qatar thus recognizes that it is necessary to develop effective strategies and actions to mitigate climate change risks, especially since it is a signatory (or seriously considering becoming a signatory) to several global initiatives concerning climate change mitigation.

The Qatar National Master Plan (QNMP), prepared over the course of three years by Oriental Consultants on behalf of the Ministry of Municipality and Urban Planning, has a planning horizon of up to 2032. It outlines all of the planning and development management tools for Qatar, including the QNDF – the principal spatial planning strategy – branding and placemaking strategies, municipal spatial development plans, action area plans for key sites such as West Bay, various Downtown Doha zones, Al-Rayyan South Metropolitan Centre, plus town centre plans for Umm Qarn, Al-Shamal and Umm Slal Mohammed. The QNMP is seen as crucial for reaching the government's objectives and is the physical tool for realizing the QNV 2030. The suite of documents also included urban design codes, design regulations, streetscape and public realm guidelines, planning standards, training and capacity building, procedures and a set of plans, including transportation, infrastructure and full GIS capability.

The QNMP team at the Ministry of Municipality and Environment led the production of master plans for the development of 'centres' across Qatar that are intended to alleviate growth pressures and address transportation problems in the country. Several new centres were identified within the framework of the QNDF. A hierarchy of metropolitan, town and local centres was proposed and developed in key areas around transit stations. All centre plans were based on a comprehensive planning manual that encouraged sustainable planning and design principles, such as graded density towards centres, mixed use, a permeable network of pedestrian-dominated streets, and others. All principles aim to create centres that are walkable, active and complementary to its existing community. Smaller town and local centres in

coastal regions of the country harnessed a number of traditional environmental principles for cooling buildings naturally by channelling the sea breeze. Islamic principles of movement were reintroduced into smaller towns to create pedestrian-only spaces, centred around the walking patterns to mosques, schools and homes.

In larger metropolitan centres, the focus lies on creating new leisure and entertainment hubs at existing areas of attraction, further enhanced by new transit stations. In addition to Education City, home to a number of educational facilities, a new residential community was designed to provide the business and residential accommodation necessary to support the growth and aspirations of the educational campus. A major new sports and entertainment district was proposed at Al-Rayyan South, to complement existing retail facilities and address problems of movement between transit stations and stadiums for the World Cup 2022. All centre plans contain the necessary tools for effective implementation, including design and land-use regulations.

3. INSTITUTIONAL FRAMEWORK AND STAKEHOLDERS

The State of Qatar established the Urban Planning Authority as the body responsible for urban planning, land management and land governance. The Authority was later transformed into the Ministry of Municipality and Urban Planning. To facilitate a more integrated approach to development and the environment, particularly action on climate change, the Ministry of Municipality and Urban Planning was united with the Ministry of Environment into the new Ministry of Municipality and Environment. Within the structure of the Ministry, all urban planning tasks fall under the mandate of the Assistant Undersecretary for Urban Planning Affairs, who oversees the following technical departments:

- Urban Planning Department
- Lands and Survey Department
- Infrastructure Planning Department
- State Properties Department

The responsibilities and specialization of each department are designed to allow each department to complement the others. This allows them to achieve maximum oversight over land as a medium for development in a regulated, legitimate and sustainable manner.

The **Urban Planning Department** is tasked with the following competencies and responsibilities:

- Development of urban development strategy
- Preparation of planning studies and master plans
- Preparation of urban, structural and general plans related to cities, urban and rural communities and villages
- Preparation of detailed studies and projects for urban areas, neighbourhoods and communities
- Preparation of planning criteria and regulations for all planning patterns and land uses, in coordination with the concerned authorities

- Zoning to be acquired for the public interest, in line with the urban plans prepared by the Department of Land Acquisition
- Establishment of an integrated database to collect, store and update planning data and information
- Preparation of design rules, regulations and specifications for urban development projects
- Review of the major projects' applications and follow-up implementation procedures
- Participation in the preparation of building regulations and by-laws, and proposing revisions and modernisations of such regulations
- Monitoring and conducting field surveys on the urban structure of towns and urban communities
- Sorting, merging and subdivision of lands and defining sites required for services and public and utilities, in coordination with the concerned authorities

The **Land Acquisition Department** is tasked with the following competencies and responsibilities:

- Review of permanent or temporary land acquisition applications for the public interest received by the Ministry, and proposing the necessary draft legislative tools, in coordination with the concerned authorities
- Implementation of permanent or temporary land acquisition applications for the public interest received by the Ministry, in coordination with the concerned authorities
- Valuation of acquired properties and estimating due compensation value
- Follow-up procedures for transferring ownership of acquired properties to the state

The **Department of Lands and Survey** is tasked with the following competencies and responsibilities:

- Provision of residential plots to eligible citizens, as per applicable rules and regulations
- Keeping of registers for applications for housing, special offerings and Emiri grants
- Payment of monetary allowance for acquisition of private lands to be integrated into the housing system
- Coordination with the concerned authorities for stipulation of conditions for acquiring private lands and for lifting the on-hold condition on government lands
- Establishment of a database comprising ownership particulars, land survey, update and management
- Provision of the necessary data and information to the concerned authorities of the country, conducting a survey of lands and properties in all parts of the state, and issuance of instructions
- Inclusion of property plans on the digital map of Qatar
- Inventory, survey and registration of licensed lands occupied by beneficiaries and the concerned authorities

The Infrastructure Planning Department is tasked with the following competencies and responsibilities:

- Preparation of development plans for infrastructure, which includes water, electricity, storm water and sewage drainage, in direct coordination with the providers of these services
- Monitoring procedures related to requests for road corridors planning, infrastructure networks and planning sites
- Defining locations of service corridors and public utilities
- Review and follow up on applications for implementation of the approved plans in urban and rural areas, in coordination with the concerned authorities
- Preparation of plans, policies and development programmes for infrastructure, in coordination with the concerned authorities
- Development of strategies for establishing corridors for all infrastructure facilities of the country and its components at the national level
- Contributing to development of standards for the management, operation and maintenance of infrastructure services networks
- Proposing policies for development of infrastructure facilities at all levels of the country, in coordination with the concerned authorities.

The State Properties Department is tasked with the following competencies and responsibilities:

- Maintenance of lands and state properties and the registration of all land and properties acquired for the public interest in the state properties registry
- Maintenance and regulation of registries of public and private state properties
- Ensuring provision of lands required for ministries, government agencies, authorities and public institutions, and recommending purchase of lands required for these authorities and housing projects
- Preparation of draft sales and leases of lands and properties and following up on implementation
- Safeguarding public and private state properties from encroachment and removal of the same in the event of its occurrence, in coordination with the concerned authorities
- Survey and inventory of all private state properties, and registration and record-keeping in the specified register
- Issuance of title deeds for non-registered government lands, as per the provisions of the real estate registration law and its executive by-laws
- Management of private state properties, excluding those officially granted to a specific authority
- Taking actions on non-agricultural lands, whether vacant, built or occupied with permanent or temporary structures of its occupants or others, in accordance with applicable laws.

4. SUMMARY OF LAND MANAGEMENT AND ADMINISTRATION FUNCTIONS

4.1. Land Tenure

Many of the stakeholders interviewed highlighted the spatial segregation and divergent form that resulted in part from housing policy. While most migrant workers rely on employer-provided or rented housing, Qatari citizens are entitled to land allocations and an interest-free loan to finance the construction of a home. Furthermore, land-use regulations limit the development of rental properties in neighbourhoods selected for Qatari low-density housing. This led, as some researchers argue, to separate geographies and housing types, with Qataris often enjoying low-density villas outside congested urban areas while many workers reside in cramped dormitories (Nagy, 2006).

4.2. Land Value

Land value in Qatar is one of the highest in GCC countries and the whole Middle East. To coordinate the relationship between land value and real estate development, Emiri Decree No. 19 of 2019 was issued. The Cabinet of Ministers then established a committee for the real estate development strategy (Decision No. 10 of 2020). The objective is to create a strategy to promote and activate the real estate market. An essential part of the committee mandate is to conduct the needed analysis to assess the real estate promotion plan in light of the Cabinet of Ministers Decision No. 28 of 2020, which determines zones where non-Qataris can purchase and own real estate.

Additionally, the integrated urban mobility strategy, adopted in Qatar as a conclusion of the QNMP and the establishment of Qatar Rail (Q-Rail), resulted in an increase in land value for areas around metro stations, particularly within the city centre. More significantly, the move towards transit-oriented development in Qatar resulted in several opportunities to increase land value. As echoed in the stakeholder interviews, these include development adjacent to or integrated with the metro, mixed-use development, high-density areas, and optimizing the number of regular metro users.

4.3. Land Use

After decades of lack of clarity about land uses in Qatar, the efforts of the Urban Planning Authority, followed by the Ministry of Municipality and Environment, resulted in a major shift. The shift is the main product of the QNMP flagship project. The outcomes of the Master Plan are inclusive and holistic. A prime outcome is a land-use plan for each municipality in Qatar, where each lot is related to a planning zone and designated for a specific use. Furthermore, each lot has an identification number (PIN). By entering the PIN into the MME website, investors, landowners, developers and consultants can obtain all necessary technical details about a specific lot, including land use and all planning and building regulations associated with it.

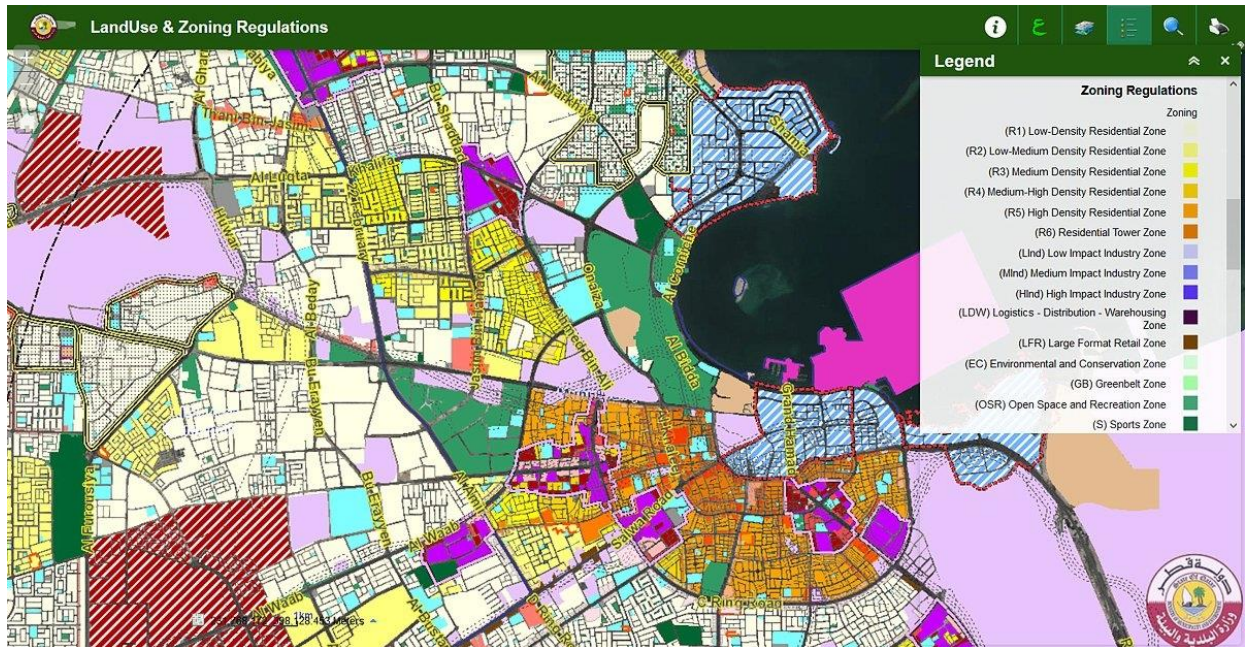


Figure 3: Land-use and zoning regulations in Doha.

4.4. Land Development

A variety of different patterns of land development can be traced in Qatar. Such patterns range from individuals developing privately owned properties all the way to mega projects affecting the whole urbanity of the city.

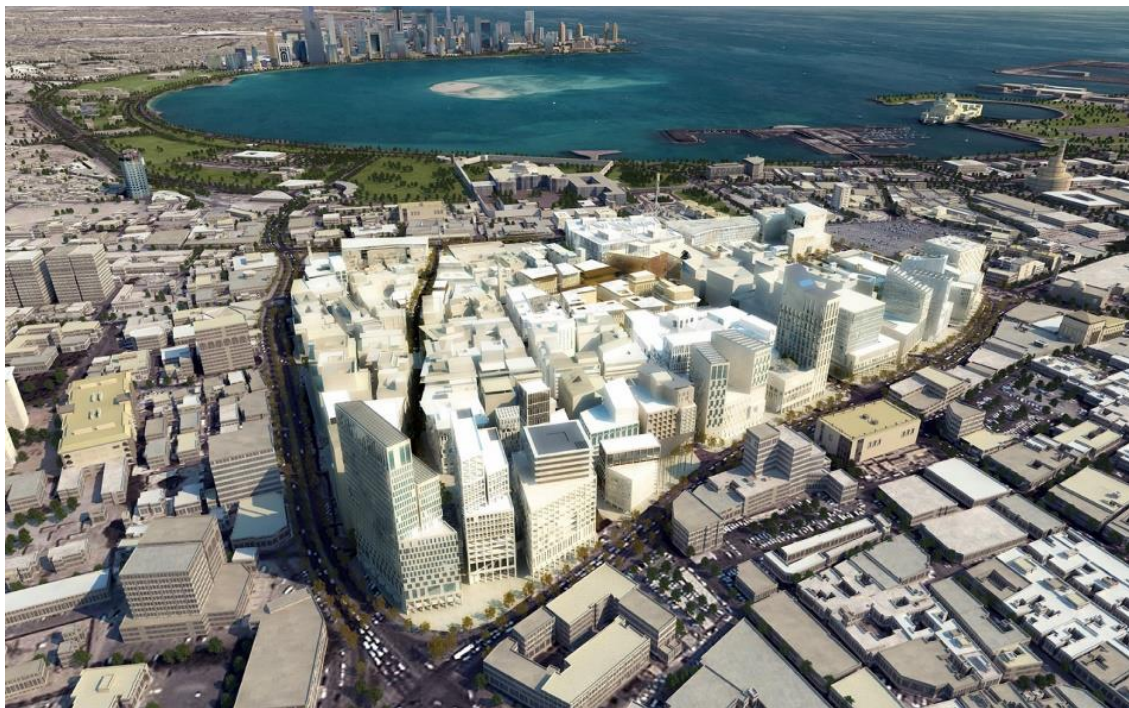


Figure 4: Msheireb project – a model example of large-scale, mixed-use, real estate development in Doha.



Figure 5: Lusail City – new residential, educational, commercial and recreation hub outside Doha.

4.5. Land Disputes Resolution

The mechanism to deal with disputes over land was developed from an informal process conducted by tribal leaders in what is known as Majlis – a communal space where a tribal meeting is assembled to discuss and achieve an agreement on different matters. After Qatar’s independence, a well-structured legal system was established, and several governing laws were issued to fully control land disputes.

5. EXISTING LEARNING OFFER AND RELATED CURRICULA

The education sector is key to meeting the development goals of Qatar, which is witnessing a quantitative and qualitative leap in all educational services. This has resulted in Qatar recently ranking in the top ten countries worldwide in educational services. The World Economic Forum’s Global Competitiveness Report 2019 also ranks Qatar 6th out of more than 140 developed and developing countries on “critical thinking in teaching”. Qatar ranked eighth in the world in the Graduate Skills Index, according to the 2019 World Economic Forum’s Competitiveness Reports. In 2021, Qatar topped the list of Arab countries in the Global Education Quality Index issued by the World Economic Forum 2021. According to the report, Qatar ranked fourth in the world and first in the Arab world in education quality (MEHE, 2021). The index scores are calculated by collecting general and special data related to 12 basic categories. These categories are institutions, innovation, macroeconomic environment, health, basic education, university education, training, commodity market efficiency, labour market efficiency, capital market development, technological readiness, market size and technology. According to the Ministry of Education (2021):

Qatar has a well-established system of higher education that continues to grow. The colleges and universities in Qatar serve not only its own citizens and residents, but are a regional hub. Qatar attracts students from all over the world, particularly the Gulf. Qatar University is the flagship

public research university in Qatar. Alongside Qatar University are 27 other private and public colleges and universities, including branches of world-renowned higher education institutions, supported by Qatar Foundation. The Ministry provides scholarships to qualified Qatari students to attend an approved list of colleges and universities both in Qatar and abroad.

A key state project in this area is Education City (EC), which is home to several top American universities, including Georgetown, Texas A&M, Carnegie-Mellon and Northwestern, among others. The Ministry of Education and Higher Education produced its guiding strategy with the aim of maintaining Qatar's position as one of the top countries worldwide in terms of quality of education, research and innovation. The state's constitution enshrines education as one of the main pillars of social progress (MEHE, 2021).

QNV 2030 aims to build the capacities of Qatari citizens by establishing a world-class education system that offers exceptional opportunities for quality education and training. In light of this, the Ministry plays a key role in implementing the Education and Training Sector Strategy 2011–2016. Building on the experience with this process, the Ministry used an outcome-based approach to develop the next strategy (2018–2022). The second strategy is currently being implemented, in coordination with other sectoral strategies, led by the Statistics and Planning Authority.

5.1. Existing Learning Offer

Three institutions currently provide learning offers in the domain of urban planning, urban and land governance and regulations and urban legislation: Qatar University (two programmes), Hamad Bin Khalifa University (one programme) and the Training Department at the Ministry of Municipality and Environment. In addition, the Society of Qatari Engineers, via its Architecture and Planning Unit provides some courses; however, they are not related to urban planning and urban and land governance.

The College of Arts and Science at Qatar University initially offered a programme titled "Urban Planning", provided through the geography section of the department of humanities. The programme was offered to both female and male students in separate facilities. Its graduates provide most of the local technical personnel working at the Urban Planning Dept in the Ministry of Municipality and Environment and in the technical departments of the different municipalities. In 2009, however, the geography-based programme was closed due to Qatar University's decision to open a Department of Architecture and Urban Planning (DAUP) at the College of Engineering (COE), taking the place of the initial programme. DAUP was inaugurated in 2009 but was made available only to female students. More than ten years later, the department is still accepting only female students. This has resulted in a substantial gap in the number of needed graduates in the field of urban planning in a country witnessing one of the fastest growing urban development and urban sprawl in the world.

In summary, learning offers in the field of urban planning are provided in a limited number of institutions, with the most prominent being Qatar University's College of Engineering, DAUP. Below follows an overview of the existing educational, diverse organizations and training institutions in Qatar with their respective learning offers related to land governance:

Qatar University

Programme 1: Department of Architecture and Urban Planning – College of Engineering

Graduate courses:

- MUPD 610: Urban Planning Legislation
- MUPD 620: Urban and Regional Land Use
- MUPD 611: Urban Economics
- MUPD 702: Housing Policies and Planning

Programme 2: Department of International Affairs – College of Arts and Sciences

- BA in Policy, Planning and Development

Degree in Urban Planning and Development:

- POPL 245: Introduction to the Theory and Practice of Urban planning
- POPL 353: Transportation and Transit-Oriented Development
- POPL 450: Urban and Regional Economics
- POPL 452: Urban Planning and Development
- POPL 350: Housing and Community development

Hamad Bin Khalifa University

Programme 1: Architecture and Urbanism Programme – College of Islamic Studies

- Master of Science in Islamic Art

Graduate courses:

- Contemporary Cities for Muslim Societies
- Globalization, Cities and Urban Policies

In addition, related courses, such as sustainable architecture and environmentally conscious conceptual design, are offered by Qatar Green Building Council (QGBC), “a non-profit, membership-driven organization providing leadership and encouraging collaboration in conducting environmentally sustainable practices for green building design and development in Qatar” (QGBC, 2020). The aim of such courses is to determine sustainability goals and objectives that need to be achieved at the neighbourhood scale by defining the framework that can balance social, economic and environmental demands. Focus is also placed on bioclimatic design in hot climates, based on urban design and architecture from climatic, passive and bioclimatic approaches.

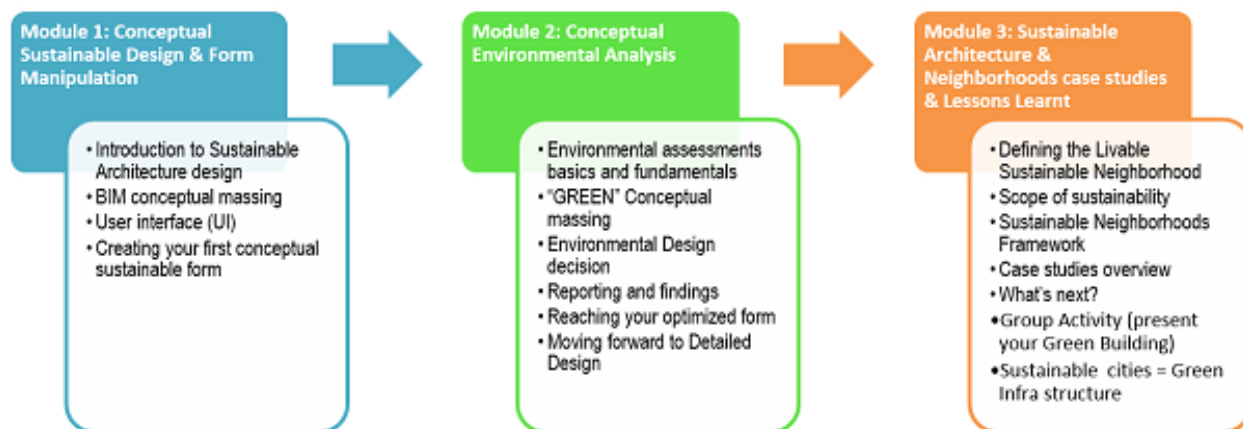


Figure 6: Sustainable architecture: environmentally conscious conceptual design (course structure).
Source: QGBC (2020).

5.2. Research

DAUP undertakes research and higher education in a variety of areas, including liveability, sustainable design and community development. QGBC also conducts research and provides learning offers in the field of sustainable development. The institution aims to support the overall health and sustainability of the environment, people and economic security. A member of the Qatar Foundation, it was formally established in 2009 by a decree signed by HH Sheikha Moza Bint Nasser to assist Qatar on its journey to establish a post-hydrocarbon, knowledge-based economy and progressive society. In addition to research and capacity building, the QGBC organizes conferences and seminars. From its first conference in September 2010, it has continued to organize an annual conference as well as several workshops and seminars per year. QGBC (2020) has been very active in research by partnering with renowned universities such as Texas A&M Qatar, Qatar University and College of the North Atlantic – Qatar. The institution has also offered support and supervision for a number of MSc and PhD students pursuing studies at Hamad Bin Khalifa University and the University of Liverpool. Student research topics supported by QGBC include “Passivhaus in hot, arid regions, facilities management contract procurement practices and their impact on the sustainability of the built environment, consumption-based carbon calculations, neighbourhood renewable energy strategies, and the impact of smart technology on sustainable neighbourhood planning” (QGBC, 2020).

Since 2013, QGBC has cooperated with academic and research institutions in Qatar and abroad on built environment research. These collaborations resulted in three major projects: developing a standard for high-performance buildings in Qatar (2013); towards an eco-districts strategy for sustainable urbanism in the Gulf region: Greater Doha as a case study (2016); and improving and enriching the human capital of Qatar through the identification and development of skills for sustainability and employability in the 21st century (2016).

Another essential component of urban-related research in Qatar is the Gulf Organization for Research and Development (GORD), a non-profit organization established at Qatar Science and Technology Park. The organization focuses on promoting sustainability best practices through the following:

- Developing sustainability and green buildings standards (GSAS Trust),
- Conducting multi-disciplinary applied research (GORD Institute),
- Engaging in education and outreach activities (Global Sustainability Academy).

In addition, the Global Carbon Council is dedicated to facilitating climate actions and carbon management in Qatar and the region for a greener, cleaner and safer world. The Global Sustainability Assessment System (GSAS), formerly known as Qatar Sustainability Assessment System, has also emerged as a new local initiative that aims to sustain existing and upcoming projects. GORD Institute's journal (*The International Journal of Sustainable Built Environment*) provides a platform for researchers and practitioners from all over the world to promote, share and discuss contemporary issues, innovation and developments. While the organization is active and creates a tangible impact on the sustainability scene in Qatar and the Gulf, its focus on urban development and land governance, land management or land development is minimal.

6. CONCLUSIONS

Given Qatar's rapid population growth, and in particular urban population growth and urban sprawl in the Doha metropolitan area, the country requires strong governing mechanisms and capacity for land management and administration. Qatar has largely succeeded in accomplishing this, as the institutional and legal system, financial resources and urban development plans have developed in a positive direction over the last 20 years. The introduction of key, comprehensive planning frameworks such as the Qatar National Vision 2030 (QNV), the Qatar National Master Plan (QNMP), the Planning Law, the Qatar National Housing Strategy and the Climate Change Strategy for Urban Planning and Urban Development in the State of Qatar (CCS) are examples of progress in the land sector.

There are also several challenges in the land and housing sector that should be addressed. Housing policy has resulted in some forms of spatial segregation in Qatar, with congested urban centres where foreign workers rely on rented housing and spacious low-density neighborhoods for Qataris that lack rental opportunities. Land value in Qatar is also one of the highest in the GCC countries and the whole of the Middle East, with limited options for non-Qataris to purchase and own land.

More efforts are also needed to enhance the quantity and quality of the technical personnel responsible for urban planning, spatial planning and development schemes. This capacity need may be directly linked to the limited options for learning offers on topics related to spatial planning and urban planning, which should be enhanced and improved. Such limitations hinder the ability of technical staff to build their capacity and receive the needed training and technical skills to help Qatar's land management and administration system function as efficiently and effectively as possible.

REFERENCES

- Al-Manni, A. Abdu, A., Mohammed, N. and Al-Sheeb. A. (2007). Urban growth and land use change detection in Using Remote Sensing and Geographic Information System Techniques in Doha City, State of Qatar. *Arab Gulf Journal of Scientific Research*, Vol. 25, No. 4, pp. 190–198. Available at <https://agjsr.agu.edu.bh/publications/paper/526>.
- Alraouf, A. (2017). Interrogating Qatar’s Urbanity as a Catalyst for Building Knowledge-Based Societies and Economies. In *Strategies of Knowledge Transfer for Economic Diversification in the Arab States of the Gulf*, Bertelsen, R., Noori, N., Rickli, J. M. (eds.), pp. 53–66. London: Gerlach Press.
- Department of Architecture and Urban Planning (DAUP) (2021). About DAUP. Webpage, Department of Architecture and Urban Planning, Qatar University. Available at <http://www.qu.edu.qa/engineering/architecture/research.php>.
- Fromherz, A. (2012). *Qatar: A Modern History*. Washington, DC: Georgetown University Press.
- _____ (2006). Making Room for Migrants, Making Sense of Difference: Spatial and Ideological Expression of Social Diversity in Urban Qatar. *Urban Studies Journal Limited*, Vol. 43, No. 1, pp. 119–137. Available at <https://doi.org/10.1080/00420980500409300>.
- Qatar Green Building Council (QGBC) (2020). Qatar Green Building Council – A 10-Year Journey. Brief, Qatar Green Building Council. Available at https://www.earthna.qa/sites/default/files/SodaPDF1-compressed-QGBC_reduce-2.pdf.
- Qatar Planning and Statistics Authority (2010). Census 2010. Permanent Population Committee. Available at <https://www.psa.gov.qa/en/statistics1/StatisticsSite/Census/census2010/Articles/pages/ppc.aspx>
- _____ (2018). Qatar Second National Development Strategy 2018–2022. Ministry of Development Planning and Statistics, Planning and Statistics Authority. Available at <https://www.psa.gov.qa/en/knowledge/Documents/NDS2Final.pdf>.
- _____ (2021). Qatar Statistics, March 2021. Ministry of Development Planning and Statistics, Planning and Statistics Authority. Available at <https://www.psa.gov.qa/en/Pages/default.aspx>.
- Qatar Ministry of Municipality and Environment (MME) (n.d.) Home. Website, Qatar Ministry of Municipality and Environment. Available at <https://www.mme.gov.qa/cui/index.dox?siteID=2>.
- Qatar Ministry of Education and Higher Education (MEHE) (2021). About Ministry. Webpage, Ministry of Education and Higher Education. Available at <https://www.edu.gov.qa/en/Pages/AboutMinistry/AboutMinistry.aspx?ItemID=72>.
- Richer, R. A. (2014). Sustainable development in Qatar: Challenges and opportunities. *QScience Connect*. Vol. 2014, No. 22. Available at <http://dx.doi.org/10.5339/connect.2014.22>.
- Shandas, V., Makido, Y., & Ferwati, S. (2017). Rapid urban growth and land use patterns in Doha, Qatar: Opportunities for sustainability. *European Journal of Sustainable Development Research*. Available at <https://doi.org/10.20897/ejosdr.201711> .
- World Bank (2020). Data: Qatar. Resource document, the World Bank. Available at <http://data.worldbank.org/country/qatar>.
- Zahlan, R. S. (1979). *The Creation of Qatar*. Oxfordshire: Routledge.