

LESS IS BEAUTIFUL: TRANSFORMING METROPOLITAN DOHA INTO A GLOBAL RESILIENT URBAN VILLAGE

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Doha's evolution of skyline, 2009-14
(https://www.reddit.com/r/pics/comments/2jcbsevolution_of_doha_the_capital_of_qatar_over_the/)

INTRODUCTION

Unprecedented oil revenues and strategic geopolitical significance unambiguously positioned Gulf countries at the nexus of spatial, political, and societal transformations. Since all Gulf countries are city-state, their contemporary portal cities act as engines of growth in the Gulf.

However, the recent urban changes in Gulf cities suggests that the patterns of urban growth, as practiced during the height of oil economy, might come to an end. The popular slogan 'If you build it, they will come' has become irrelevant given current challenges and has become a threatening future situation for Gulf cities in a post-carbon world.





Figure 1: The skyline of Doha's West Bay high rise buildings, in Doha, Qatar.
Picture credits: Robert Ghement

CONCEPTUALIZATION OF RESILIENCE

Resilience is the ability of a system, community, or society exposed to hazards to resist, absorb, accommodate to, and recover from the effects of hazards in a timely and efficient manner¹. This concept initiated a discussion of how the definition might serve as a boundary object, with the acknowledgement that applying resilience in different contexts requires answering the following question: Resilience for whom, to what, when, where, and why?

It was also recognized that general terms and global concepts won't help in achieving any level of tangible change as long it is not coupled with a sincere attempt to fully understand the local condition and adopt the concept to the realities on the ground. In the work of great urban theorists such as Jane Jacobs, Christopher Alexander, and E. F. Schumacher, the main invitation for urban planners is to consider locality and value small actions and humble interventions.

After reviewing the scholarly literature on urban resilience, Meerow and el. (2016) concluded that the term was not well defined. Their justification was that existing definitions are inconsistent and underdeveloped with respect to the incorporation of crucial concepts found in both resilience theory and urban theory. Pizzo (2015) problematizes the introduction of the concept of resilience into the planning domain from three main starting points: 1. the nature of the events which are said to require resilience; 2. the different nuances in meaning that

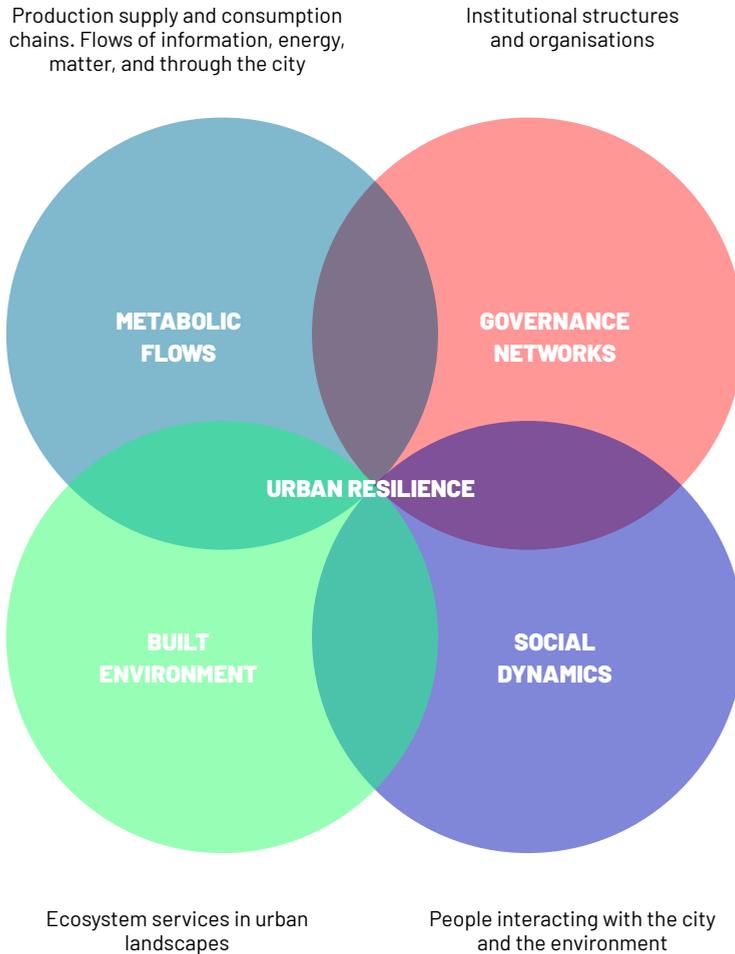


Figure 3: The holistic approach to urban resilience.

resilience assumes according to those different events, and 3. the theoretical and operational problems the concept entails. His paper argues that multiple sub-meanings are embedded within one interpretation of resilience that leave the concept open to rather large margins of ambiguity, which emerge considering its operationalization. His concept seems to fit and to be appropriate within different paradigms, planning traditions and policy frameworks. Its alleged 'neutrality' is one of the main reasons of its pervasiveness, but also noted is its ambiguity, showing latent controversial implications, which are progressively emerging in critical planning theory.

RESILIENCE IN URBANISM AND CITY PLANNING

The holistic understanding of urban resilience resonates with the UN-Habitat Sustainable Development Goals (SDG). Particularly, Goal 11 suggests the importance of creating inclusive, resilient, sustainable and safe cities.

This paper provides an overview of the development of the resilience concept in the domain of urban development and planning. Over the last two decades the concept of resilience has experienced escalating interest. However, due to a lack of consistency in defining and measuring this theoretical construct within and across disciplines, the recent explosion of literature on resilience has contributed more to confusion than clarity among researchers and policy makers. The notion of resilience is gaining increasing prominence across a diverse set of literatures on cities and climate change.

Although there is some disagreement about how to define and measure resilience, there is broad consensus that: (1) cities must become resilient to a wider range of shocks and stresses to be prepared for climate change; and, (2) efforts to foster climate change resilience must be bundled with efforts to promote urban development² and sustainability³. However, resilience has been closely associated with sustainability for more than a decade, although without precise meaning and often as an additional label attached to pre-existing research⁴. Urban resilience is a broad concept that is sometimes blurred and abstract.

Part of the effort to more clearly define the concept is to assert that Urban resilience addresses adaptation as well as mitigation. It is associated with spatial planning policy-making in the context of different levels and forms of uncertainties. Therefore, urban resilience provides a new way of framing and responding to uncertainty and vulnerability. Considering this interpretation, urban resilience offers an alternative paradigm for planning strategies.

With peak oil looming, governments in the region sought new ways to sustain their drive toward modernization without a dependence upon oil revenues. Therefore, all Gulf cities decided to plan for a radical economic diversification including investment in fields like tourism, art, education, and sports. Another shift was to focus on a new economic base founded on the rise and evolution of knowledge-based industries. It was hoped that by adopting such knowledge-based development and growth, Gulf cities would start to move into a new form of urbanity coined 'knowledge-based urban development'⁵.

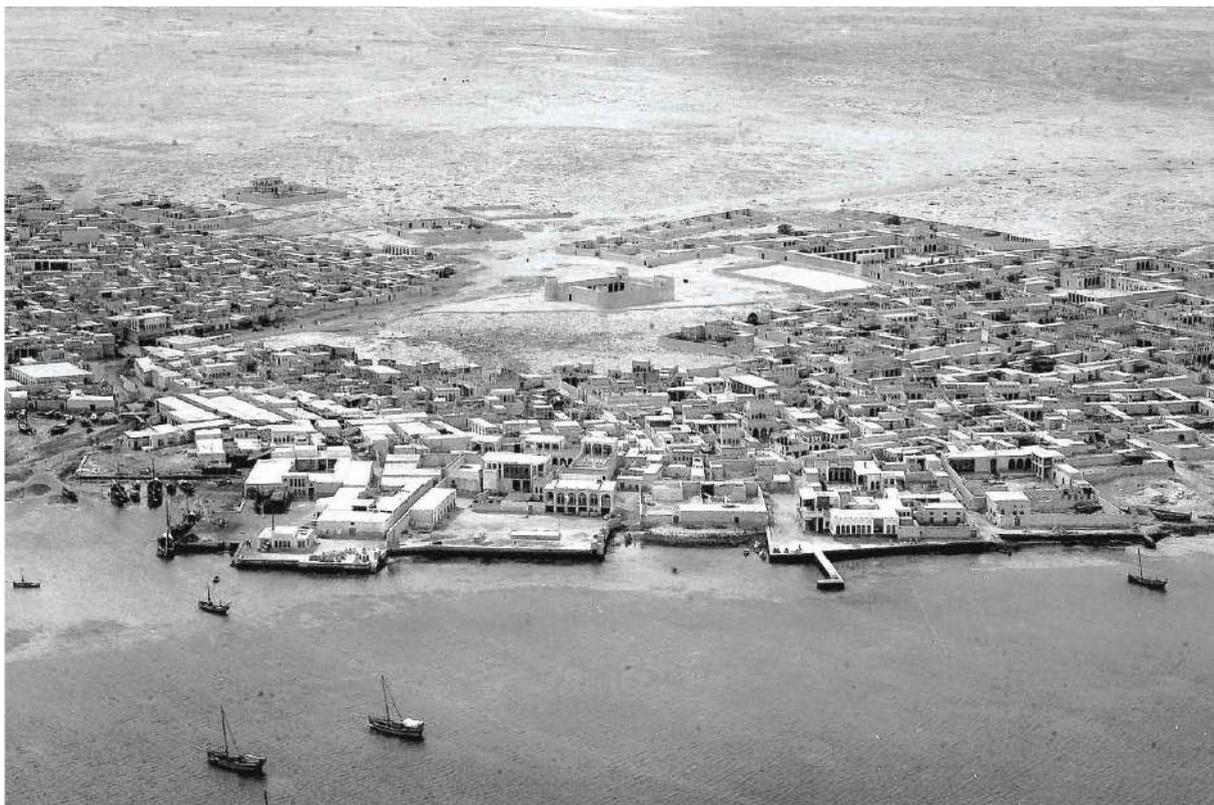


Figure 4: An aerial photo captured in mid-forties showing Doha's waterfront, AL Jessra Area, the cemetery and Al Khot Fort (Source: MME).

THE NARRATIVE OF QATAR: QATAR'S CONTEXT AND TERRITORIAL BACKGROUND

Qatar is a peninsula in the east of Arabian Desert. It covers an area of 11,437 km², has a coastline of 563 km. The country is mostly low-lying and flat stretching into the Gulf from the lands of Saudi Arabia. Until few decades ago, Qatar was dominated by nomadic people whose livelihood depended on fishing and pearling. Qatar was under the British Protectorate from the year 1916 and until it gained independence in 1971. However, the discovery of oil and gas has encouraged not only socio-economic changes, but urban and environmental changes as well. The newly acquired wealth and associated development have not come without challenges.

Since that discovery of oil and gas, the country has been going through tremendous growth in different sectors. The revenues have been used to streamline sectors such as health, construction, education, financial, and manufacturing.

Up to the mid-1960s, the majority of Doha's built environment was composed



Figure 5 & 6: Doha's Evolution from a humble traditional settlement to a metropolitan urbanity (Source: MME).

of traditional houses that represent local responses to the surrounding physical and socio-cultural conditions. During the 1970s and 1980s Doha was transformed into a modernized city as a result of extensive use of oil revenues to fund housing, infrastructure, roads and community facilities.

Since 1984 the population has grown from just under 350,000 to over 2.2 million in January 2015⁶. Qatar witnessed unprecedented overall population increase since 2010 after the declaration of the State's winning a bid to host the FIFA world cup 2022. The current population is 2.5 million, of which only around 15 percent are native Qataris. Today, the capital, Doha is home to more than 90% of the country's 2.7 million people, the majority of whom are professionals from all around the globe⁷.

Qatar is currently ranked among the highest GDP capita globally. The country has continuously experienced a high level of economic growth, averaging 25.4% between the years 2004 and 2012⁸. Conditions for doing business are friendly as there is no income tax or corporate tax for domestic firms, and foreign firms are only charged a 10% corporate tax⁹.

The economy in Qatar is diversified into various sectors, all of which contribute significantly towards achieving the growth of the country. Even tourism, especially in the last decade, is becoming one of the main platforms for diversifying Qatar's post-oil economy¹⁰. Over the past decade, Qatar has also become one of the major world producers and exporters of Liquefied Natural Gas (LNG). The wealth produced by Qatar's oil and gas exports has generated a construction development boom in the capital, Doha, and the surrounding vicinity. This resulted in significant growth at all levels from urban development and infrastructure provision to cultural, recreational, health and educational facilities.

MOVING TOWARDS A KNOWLEDGE AND CREATIVE ECONOMY: FROM OIL TO KNOWLEDGE

Qatar has embraced the idea of developing a knowledge-based economy and successful steps have been implemented. One example of this was the founding of the Qatar Foundation in 1995 with a fund of \$2 billion. By 2010 education accounted for 13% of all government expenditures. The Qatar Foundation also supports research, capacity building and open dialogue at all levels, supporting activities such as the Doha Debates and Al Jazeera television station. Al Jazeera, an overwhelmingly successful Arabic language news channel, has provided a forum for open discussion and criticism.

Another way forward was articulated through the wise insights of His Highness Sheikh Hamad Bin Khalifa Al-Thani, Father the Emir (AlAmir AlWaled). His National Vision decree¹¹ (QNV) set out the long-term direction for the country, to inspire its people and to develop a set of common goals related to their future.

“The National Vision aims at transforming Qatar into an advanced country by 2030, capable of sustaining its own development and providing for a high standard of living for its entire people for generations to come.” (QNV, 2008).

The Qatar National Vision 2030 articulated a roadmap for the alternative future of the State over the next twenty years. The QNV 2030 is based on four supporting themes: human development; social development; economic development; and, environmental development. In order to facilitate the realization of QNV, Qatar is positioning itself as a knowledge-based society, principally in the fields of education, research, energy and technology. Qatar is determined, due to its awareness of the swiftly arrival of the post carbon era, to diversify its economy and go beyond the total reliance on oil and gas. The plan is to educate and train nationals to pave the way to a global knowledge society. This proves that the willingness to pursue the status of a knowledge and creative city exists.

In terms of the QNV, the security of the peoples’ standard of living is paramount, but the government realized that this cannot be the main and only goal of a country. With the focus on its values, Qatar has to balance some further challenges: modernizing traditions while ensuring their preservation; serving the needs of this and future generations; managing the country’s growth and expansion; controlling the targeted size and the quality of the expatriate labor; going a path of development that is compatible to the vision; managing the economic growth, social development and protecting the environment¹².

TOWARDS A HOLISTIC URBAN PLANNING FRAMEWORK

In December 2006, Pacific Consultants International (PCI) was contracted to assist the government to develop a Qatar National Master Plan (QNMP), which was to serve as the spatial representation of the QNV 2030. The master plan was to guide urban development for the State over the next 25 years. The QNMP considered physical development and economic, social, cultural and environmental factors and challenges to guarantee the comprehensiveness of the proposed plan. A comprehensive development scheme is the main tool that will benefit all segments of society.

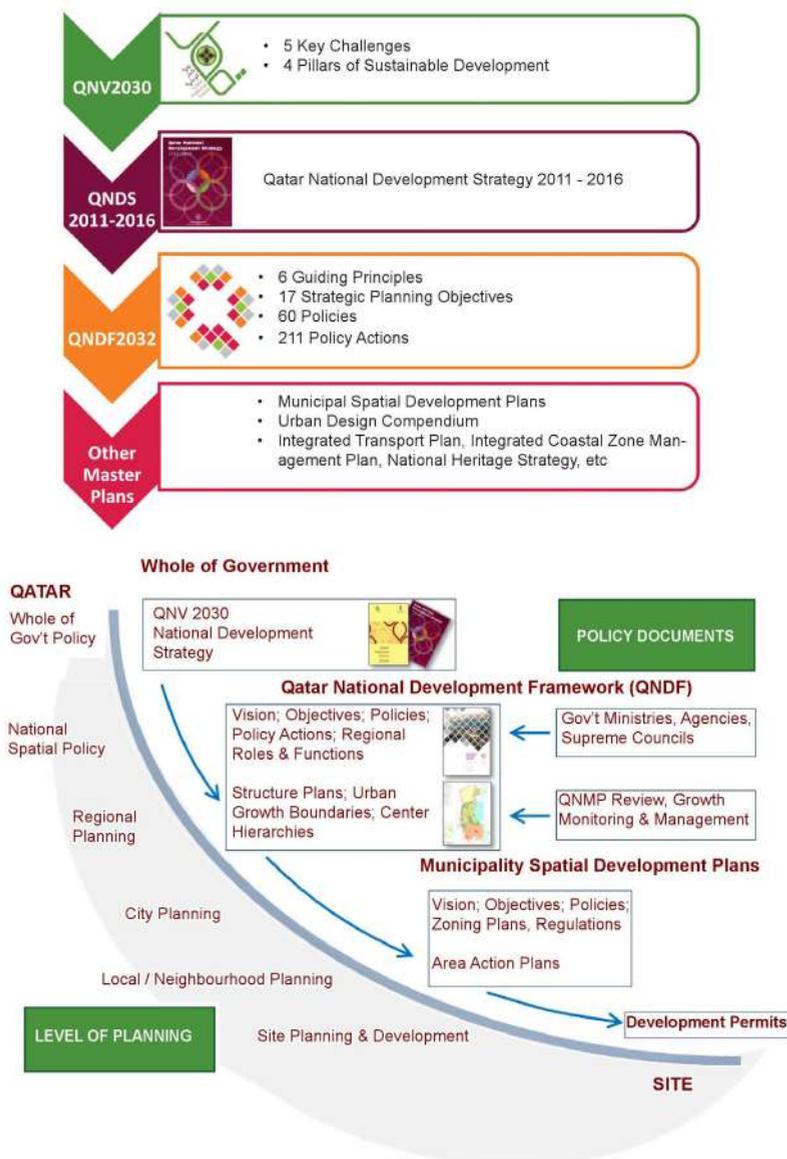


Figure 7: A Diagram showing Qatar National Development Framework hierarchy and the relation with QNV 2030 (Source: QNDF, 2016, p: 10).

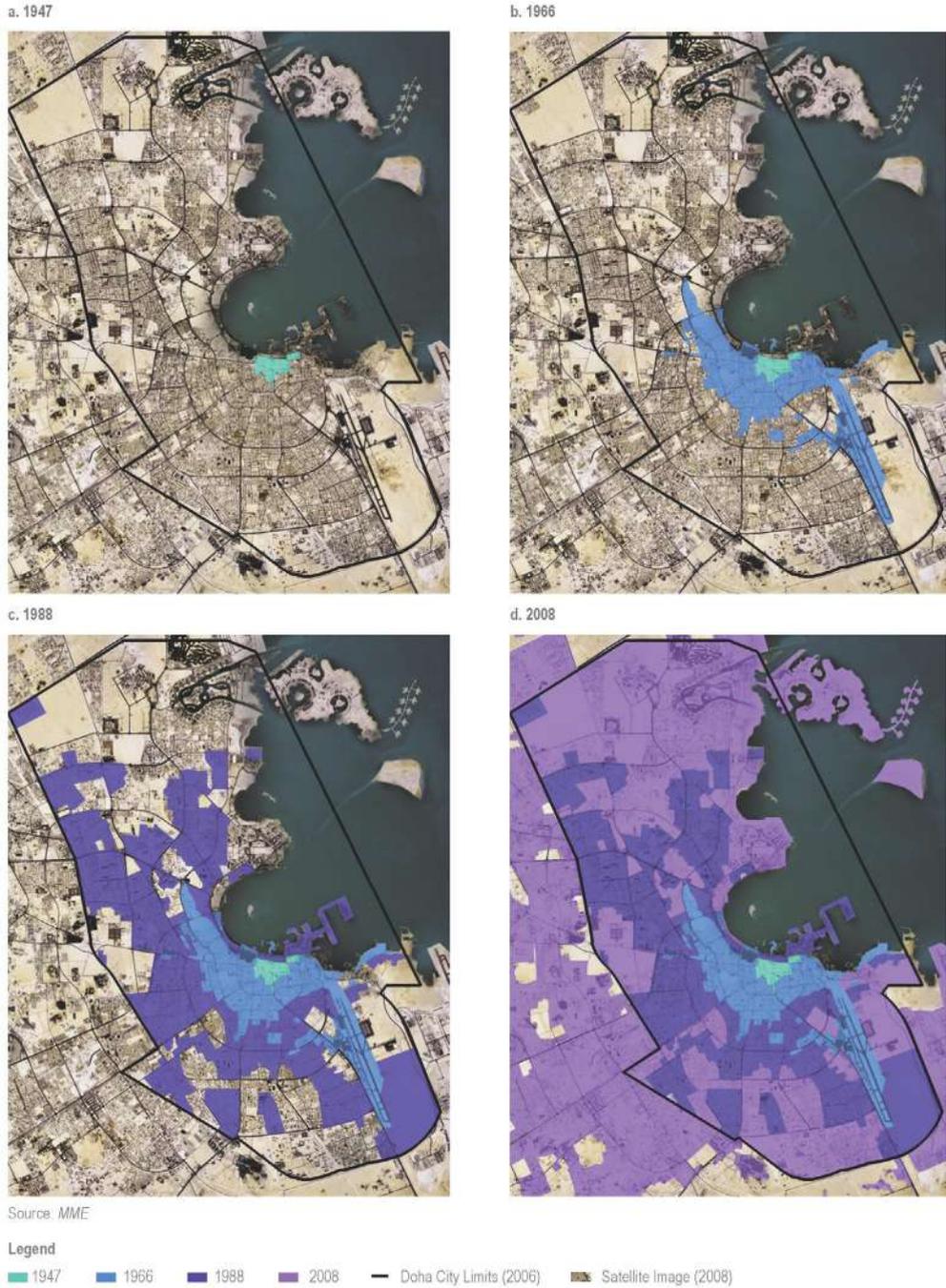


Figure 8: The highlighted area indicating the boundaries of Doha in 1947 in context with the current status of the city which is suggesting the unprecedented development within the last few decades.

On a strategic level another plan was developed, the Qatar National Development Framework (QNDF). It defines the structured process to implement the master plan. The QNDF provides the framework for managing growth, change, land use and development in Qatar to 2032. The QNDF sets the strategic framework for sustainable development and provides plans for the country, for Metropolitan Doha, and for the Municipalities that make up the nation's principal administrative structure (QNDF, 2016).

CONTESTING DOHA'S MODEL OF RESILIENCE

In this section, an analysis of the most dominant forces that challenged the development of Doha city in the last decade will be provided. Hence, all the strategies, processes and policies which were adopted by the city will be shared to illustrate the city's resilience model. Interestingly, some of these dominant forces were celebrated, for example winning the bid to host the 2022 FIFA World Cup¹³, while other were a substantial shock and have created a seismic impact on the city's people, economy and development. Doha was alert for the critical need for a flexible and dynamic approach to building resilience that goes beyond risk mitigation.

Therefore, in the coming sections, three main challenges will be narrated and Doha's answer to each of them will be illustrated. Three milestones, which are representing the most alarming challenges that Doha have faced in the last decade, are analyzed in a chronological order. The analysis illustrates the wider interpretation of the challenges which require a resilient plan. The notion of city challenge is also extended as it does not imply a negative response. Cities need resilience also to deal with positive challenges facing its development and progress. Therefore, the milestones analyzed go all the way from economical threats, hosting a global event to a comprehensive blockade.

THE INEVITABILITY OF THE POST-OIL PARADIGM AND THE URBAN PLANNING

With its unprecedented financial resources, creative strategic thinking and political commitment, Qatar is constructing a new dynamic development process and an urban brand; *Dohaization*¹⁴, which is structured upon the value of a knowledge economy and a knowledge-based urbanity.

By any measure, Qatar's growth is phenomenal. In the past decade the population has trebled, and the size of metropolitan Doha has increased fourfold. From its humble origins as fishing and pearling village, Doha has emerged as an expanding world city, where ambition and means are fueling exciting experiments in education, health, sports and culture¹⁵.

LESS IS BEAUTIFUL: STRATEGIES TO MOVE BEYOND THE METROPOLITAN DECONSTRUCTING THE METROPOLITAN: INTRODUCING HIERARCHICAL URBAN CENTERS

Doha's future urbanity is crystalized around the move from centric to polycentric urban planning. One of the most significant strategies adopted to deconstruct the metropolitan extended boundaries which was created during the years, is based on introducing the concept of hierarchical, vibrant and livable urban centers. The centers were planned to have certain common attributes such as: appropriate density; the distance between land uses and community needs; the diversity represented in the mixed use developments; and, the design and place making approach which would focus on public spaces, streetscapes and the ability to accommodate multiple forms of transportation. The significance of the previous attributes is manifested in the urban independence of such center in proportion with the relevant community it serves. More importantly, the use of centers facilitated the concept of transit-oriented development (TOD) and the move towards reliance on public transportation. Evidently, the future growth of Doha includes multi-urban centers. In addition to their strategic locations, the relationship of these centers to each other and to their service catchments in a hierarchy, and the mix of uses that exist or can be guided to each center in the future, are major elements of the QNDF National Spatial Strategy.

As clearly explained in the QNDF, the hierarchy of centers was identified using a sequential strategic assessment based on five key criteria:

- Level of existing population and employment density, economic investment and infrastructure.
- Level of existing Government/Municipality office and community facility provision.
- Potential accessibility to the future strategic transportation Network.
- Proximity of committed mega projects or other major Government developments including Qatari national housing schemes.
- Availability of vacant land and potential for regeneration or urban infill.

This hierarchical structure promotes mixed-use, mixed density centers and enables more efficient and equitable use of national level investment in transportation and utility infrastructure, which in combination, provide the sustainable development pattern that the QNV2030 strives to achieve¹⁶.

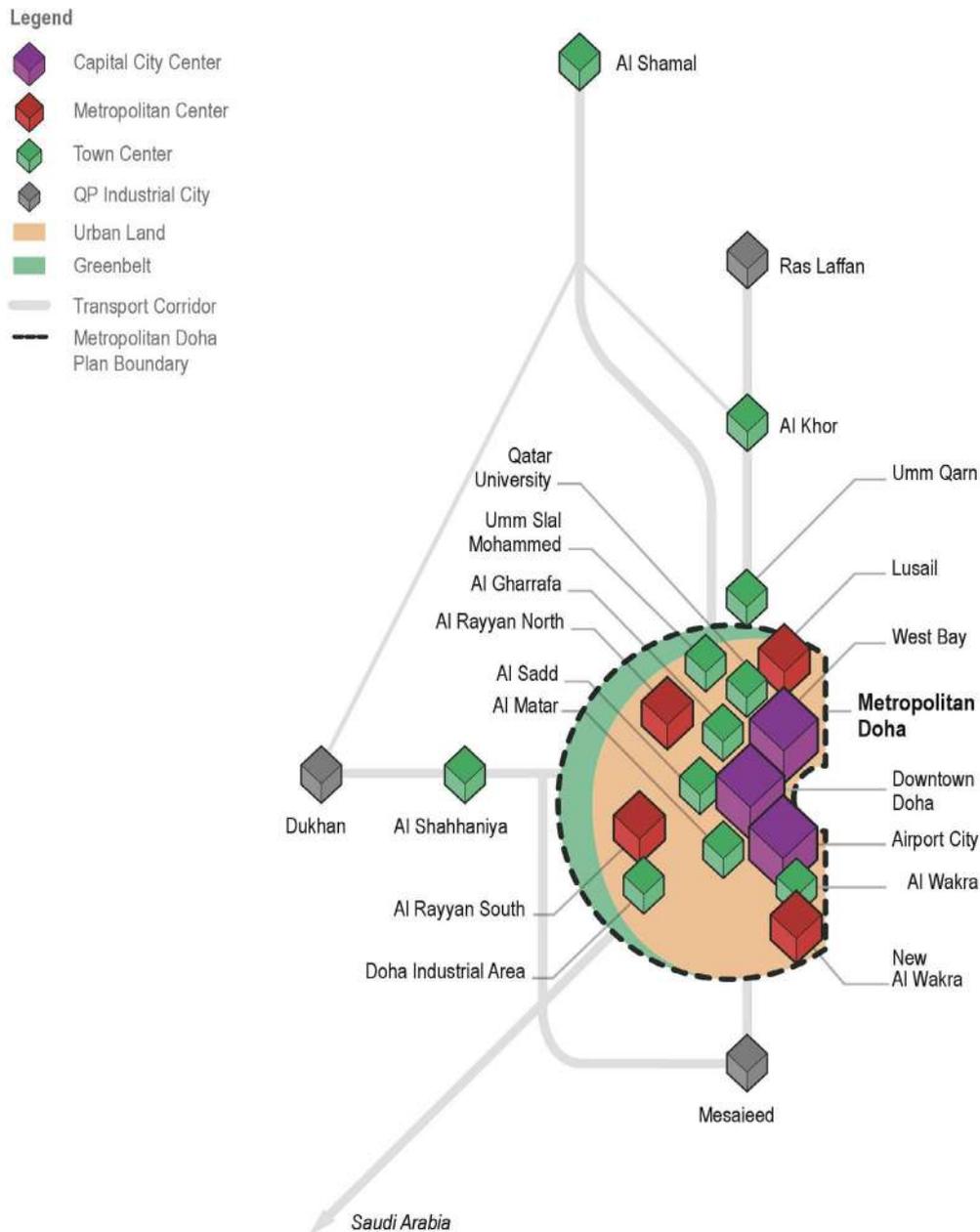


Figure 9: The Spatial Strategy Concept 2032 indicating the location and hierarchy of urban centres.

THE TRANSFORMATION FROM CAR-DEPENDENT SPRAWLED URBANITY TO TRANSIT ORIENTED DEVELOPMENT (TOD)

The Qatari society needs to move from a car-based development to a TOD urban development approach. Our adopted future plans gradually encourage the needed transformation. These policies include; Vibrant Metro Stations, Accessible Public Transportation, Streets for People not Cars, Water Transportation and Connected Bike Routes. The aim is to establish a high quality and integrated public transport network that results in a modal shift from private motor vehicles to public transport across Qatar. Additionally, radial public transit corridors are proposed to reduce private motor vehicle usage and environmental costs and promote orbital routes to aid the creation of balanced growth.

Our comprehensive plan also encourages bicycle riding. The Qatar Bicycle Master Plan suggested the proposed a Greater Doha bikeway network. Three categories of routes were suggested; green (Bicycle Paths) for recreational, blue (Cycle Tracks) for major transportation and red (Bicycle Lanes) for local transportation (see map below).

However, succeeding in the proposed transportation mode change will take a lot of encouragement. The existing form of urbanism, which was produced during the availability of lucrative oil revenues, is predominantly car-oriented urbanism. The whole process of Doha's recent development was characterized by unlimited urban sprawl and the dominance of a single-family house as the only form of housing for Qatari families. These patterns of urban growth facilitated the unprecedented investment in roads network which can connect all such scattered urbanism. Hence, singles or families, locals or expatriates consider private vehicles as the only form of transportation.



Figure 10, 11: The Future Development of Qatar's Transport System is based on introducing public transportation as the new alternative to achieve urban connectivity

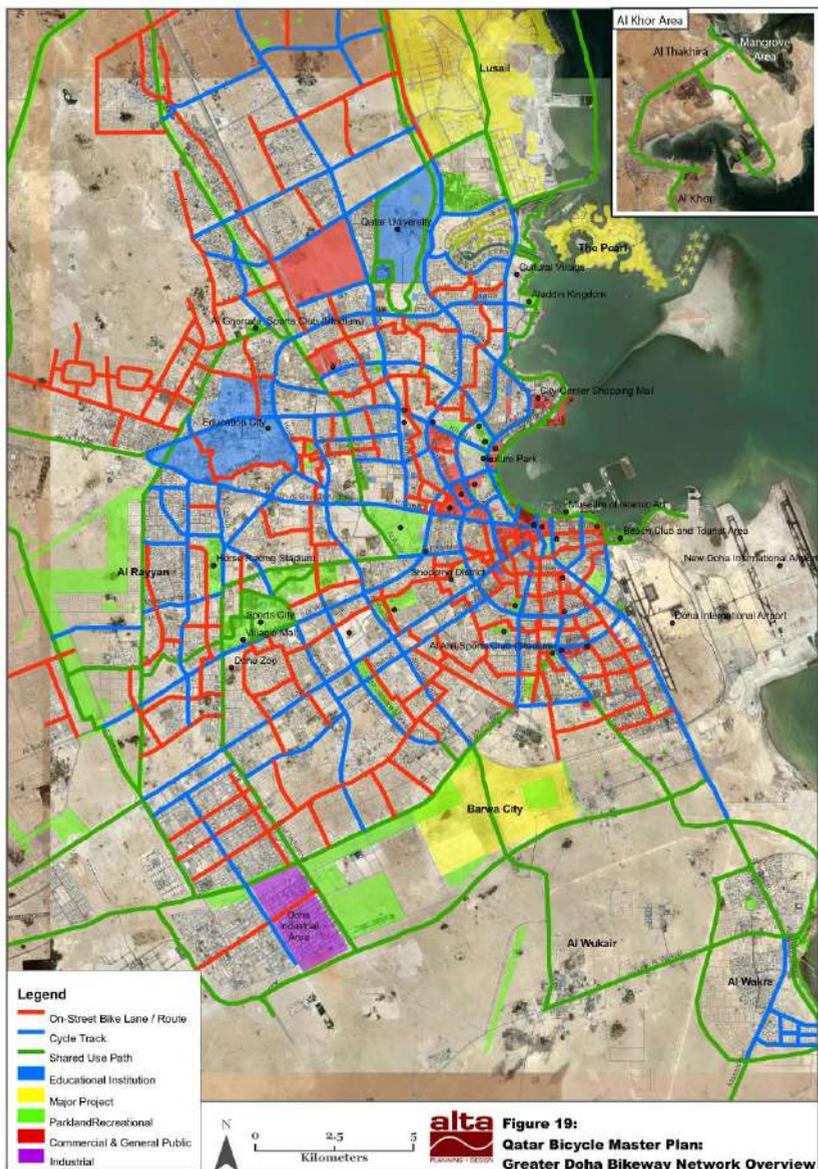


Figure 12: The Greater Doha Bicycle Network is based on three categories of Bicycle movement; Green: recreation, Blue: major street transportation and Red: local street transportation (Source: Ministry of Transportation)

While the local bus services company, Karwa, provides well-distributed routes all over the city but the availability of cars, the cheap gas, and the lack of positive culture of walkability means that people opt to use their cars in all their daily activities from going to work, dropping their kids at schools, buying groceries and recreation activities. More significantly is the social barrier towards public transportation as it becomes gradually associated with workers and low paid expatriates. Also, Qataris consider using public transportation, especially in the form of bus riding, as a social degradation and inappropriate behavior.



Figure 13: The relation between metro stations and mixed-use urban centres as a strategy to decentralize Doha and move towards small and compacted form of urbanity (Source: MME)



Figure 14: The post-oil urbanism suggests a paradigm shift towards walkability and transit-oriented development in Doha and hence Doha Metro is introduced as a main form of transportation in future Doha. (Source: MME)

With such background, the introduction of Doha's new metro will create a substantial change. The metro which is composed of four lines serving all of Doha's main employment destinations and connecting the city with the airport, universities, industrial area, cultural facilities, shopping centers and main residential areas. To encourage use by both locals and expatriate's particular effort were invested to create state of the art transportation experiences in the metro' stations, compartments and trains. The stations and trains are designed to accommodate the peculiarities of the cultural and social context of Qatar by providing privacy for families and women in designated sections of the trains.

ENCOURAGING WALKABILITY AND LIVABILITY

Walkability and Livability are two other principal values are being introduced to the city of Doha. Both values are interrelated and substantially support each other. To enhance livability, an emphasize on the social life in public space, through walking and design attention to public spaces, is becoming a priority. Public spaces -particularly lively streets and squares- among buildings enhance livability and help to animate the neighborhood. Open spaces have the role to make people passing near or stopping by and feel them welcome. Introducing the culture of walkability in Doha and doing the needed steps to have a truly walkable community, have required several actions. Among these actions are efforts to: encouraging people to walk in the city; provision of positive infrastructure which includes wide vibrant sidewalks, nodes of commercial and recreational side activities, footpaths, safe pedestrian crossings; the implementation of exciting and informative signage, creative street furniture and more importantly shaded areas resulted from landscape features like tress or artificial elements like wooden or textile pergolas.



Figure 15, 16: Suggested strategies to deal with existing road networks include rapid buses, pedestrian crossing, bicycle paths and vibrant sidewalks (Source: MME)



Figure 17, 18: Creating Pedestrian friendly environments to encourage the shift towards walkability and vibrant public spaces (Source: Msherib Properties)



Figure 19: The different levels of connectivity which allow for an integrated and not fragmented urbanism

The urban planning department in Qatar (UPD) is conducting several projects and studies to achieve these aspirations including the National Strategy for open and recreational Spaces, The National Urban Design Compendium, Streetscape Design Guidelines and National Landscape Guidelines for Vibrant Streets.



Figure 20, 21: The new cultural centres help Doha in establishing a new form of Knowledge-based Urban Development (KBUD); the case of Museum of Islamic Art and National Museum of Qatar

PROGRESS TO DATE

In a post carbon paradigm, Qatar's identity is articulated around the notions of knowledge, research and education. Qatar National Vision 2030 is a development strategy which outlines how Qatar will use the vast revenues from its hydrocarbon resources to transform itself into a modern knowledge-based economy. Within this understanding, the Doha's future was envisioned as a manifestation of the country's future vision. Hence the following actions were adhered: Engaging people in knowledge experiences, constructing an Urban Campus; a creative and inspiring urbanity and Establishing a Network of Museums, Galleries and Cultural Centers.

Currently, Doha is considered by many indicators as the most advanced city within the Middle East to adopt knowledge economy as a conceptual base for its 2030 vision. Qatar did a radical transformation to go beyond the typical image of

a Gulf city relying on presumably endless assets of oil and gas. A move towards being a regional center for education, knowledge and culture is the new aspired sense of identity for the Gulf State. A major investment in knowledge-based urban development characterizes major projects in the country during the last five years¹⁷. This new identity of Qatar paved the way for a new paradigm in Doha's urbanity which can be best described as the Knowledge-based urban Development Paradigm. Qatar has become a showplace for renowned architects, several U.S. universities have established campuses there, and it will host the FIFA World Cup in 2022. The quantity and the quality of architectural and urban projects which will be added to the city's urbanity to facilitate hosting the 2022 FIFA World Cup would make Doha a unique world destination. Significantly, Doha has gained global significance through the growth of knowledge economy related projects. The city's new urban development and its spatial qualities contribute to the global attractiveness of Doha for knowledge economy investments, firms and people. Such urbanism fulfills the requirements of Knowledge workers coming to the city from literally every spot of the globe anticipating an attractive smooth quality of life which would foster their creativity and innovation.

THE SOCIAL COHESION AS A CATALYST FOR CITY RESILIENCE INCLUSIVE URBANISM: CITIES FOR ALL

Many scholars in the field of urbanism have highlighted the importance of the human dimension in urbanism¹⁸ and offered insights into systematically studying environmental behavior¹⁹ through international studies in public life²⁰. Studying public life offers immense insights to urban environment professionals by bringing users back into focus when they may be overlooked in design²¹. The expected outcomes could play an essential role in achieving the needs of the visitors who are considered as tourists that would need to spend half of their day to explore the city. Baldwin and King (2018) emphasize that strong social networks and social cohesion can be more important for a community's resilience than the actual physical structures of a city. That what was exactly noticed in Doha after the activation of the blockade. More significantly, urban planning and design support these critical collective social strengths by stressing the necessity of creative spaces for all and enhance the inclusivity of the city's urbanity. In the process of realizing the goal of both sustainable and resilient development, we should see the dominant role of social factors such as urban governance in the process of urban adjustment and adaptation. The social aspect will be also addressed in the paper as Doha, similar to most Gulf cities, has a much-diversified population coming from all corners of the world.



Figure 22: The city spaces are planned to accommodate the different social groups and emphasize the social cohesion

The urban future of Doha is planned to encourage inclusivity and transcend the concept of gated development and isolated urbanism. Hence, the social and cultural diversity was perceived as an asset. Planning Places for People, The Heart of the City is for All and Inclusivity as a Fundamental Development Base for the Whole city. More significantly, the city is taking a number of measures to create better connections between expatriates and the city significantly sense of belonging and ownership which would radically help in inspiring the city's overall population of locals and expatriated to better defend the city and take a solidifying position towards realizing its future aspirations.

CONCLUSIONS

Doha's readiness for the post-oil paradigm can be perceived on three levels; strategically, urban planning and architecture. Doha is moving strategically towards a development vision articulated around the concept of a knowledge and creative economy. On an urban planning level, Doha is moving towards a compacted model of urbanism by relying on multicenter-city development to stop the unsustainable sprawl, which was the dominating pattern in the last three decades. In addition, the city is activating a solid transit-oriented development approach to consider public transportation as the main mode of transportation within the city. Finally, on the architectural level, both Qatar Green Building

Council (QGBC) and Gulf Organization for Research and Development (GORD) were established to produce, develop and monitor the implementation of green and sustainable architecture principles in the new buildings designed and built in Doha and all Qatari cities.

Our plans also call for a balanced social inclusion between major population sectors; the local citizens and working expatriates to create a sense of belonging, appreciation and recognition of mutual value and distinct roles of the country's rich human mosaic. Part of the city's success story stems from the fact that social cohesion was considered as a pillar in enhancing the resilience capabilities of the city. It describes and illustrates the ideas, tools, and tactics being used to help engaged citizens, civic leaders, and urban professionals to work together to build viable urban society.

Also, adopting the principles of sustainability and environmental compatibility as the main pillars of development for Qatar National Master Plan (QNMP). ONMP is based on a set of sustainable urban development values like transit-oriented development (TOD), sustainable urbanization, social balance and the preservation of the historical and cultural identity. More significantly, dealing schematically and planner with major cities especially Doha as a framework for knowledge-based urban development through a network of research centers, universities, museums and the knowledge forums and make it available to all sectors of society in a way which would stimulate citizen and resident alike in a balanced manner.

The Future plans of Doha as described and observing its comprehensive impact on the city dwellers and visitors, cemented a paradigm shift in Doha's urbanity. The shift is based on the success of the project to introduce qualitative changes and new perceptions about the role of the built environment, historical urban areas, mixed use development, car-free planning and knowledge based urban development. The Planning of future Doha manages to adopt comprehensive inclusivity, which made the city for all a reality in all of its connected spaces. The project successfully and sensitively activated the heart of Doha and connected its veins. It will continue as a success story, which resulted from adopting alternative planning approach, considering the environment, and more importantly allowing local communities and stakeholders to participate and gain an endless ownership.

Endnotes

- 1 Jha and al., 2013
- 2 Leichenko, 2011
- 3 Hence, this paper calls for a need to revisit the concept and its utility to the prosperity of cities.
- 4 Timon, 2014
- 5 Alraouf, 2018
- 6 Qatar Statistics Authority, 2015
- 7 QSA, 2015
- 8 World Bank, 2013
- 9 Almfraji, Almsafir, & Yao 2014
- 10 Phelps, 2013
- 11 Emir Decree No. 44 (2008)
- 12 J. Gremm et al., Transitioning Towards a Knowledge Society, 2018
- 13 According to Stephenson and Al-Hamarneh (2017), despite the fact that Qatar has been rapidly modernized, it has not enough developed to be considered an international tourism destination. Nevertheless, hosting mega events like the 2022 FIFA World Cup will motivate Qatar to work on developing different tourism types such as ecotourism. For this reason, Qatar has established and developed different ambitious goals of tourism development by adopting a strategy called Qatar National Tourism Sector Strategy 2030 in the year 2014.
- 14 The term Dohaization was coined and used for the first time in Gulf Research Meeting at Cambridge and later published in Alraouf, Ali. 2016. "Dohaization": An Emerging Interface between Knowledge, Creativity, and Gulf Urbanity. Pp.: 47-68. In Katodrytis, G. and Syed, S. Gulf Cities as Interfaces. Cambridge: Gulf Research Centre Cambridge.
- 15 Framherz, 2012; Jodido, 2014; Alraouf, 2016
- 16 QNDF, 2016 P.40
- 17 Alraouf, 2008; 2014
- 18 Jacobs, 1961; Gehl, 2013
- 19 Zeisel 2006
- 20 Whyte, 1980; Gehl, 2013
- 21 Gehl, 2013

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