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1. Context

The implementation process of the UN 2030 Agenda¹ is being driven by two key principles: 1) the recognition of the endogenous needs and expectations of each territory; and 2) the capacity-building of local and sub-national governments to integrate the global agendas that have been approved since 2015 into their territorial development policies.² Similarly, the concept of "Wise City" formulated by CIDOB places citizenship, local governments and models of *glocal* development at the centre of global geopolitics as they can achieve greater impact on territorial sustainability (urban, rural and environmental).³

At a time when demographic projections show that six out of every ten people in the world will live in urban areas by 2030, the economies of agglomeration assume a dual role in global governance: the cities are the main engine of a nation's wealth and, at the same time, one of its most worrisome vulnerabilities. The Mediterranean Basin defines, in this sense, a scenario of maximum complexity: it integrates advanced, emerging and middle-income economies with urban polarities linked to international financial markets; but also contains low-income, failed and war-torn countries, with cities concentrating the highest rates of devastation and misery in the world. In this multifaceted scenario, cities face different challenges that involve rethinking and *territorialising* the inclusive meaning of "Wise City".

This chapter aims to *localise* "Wise Cities" in a specific area of the Mediterranean Basin: The Middle East and North Africa (MENA), including its neighbouring region in Eastern Africa. The MENA region can be defined in several ways,⁴ but this chapter maintains the sub-regional structure provided by the MENARA Project.⁵ These sub-regions are: the Maghreb/North Africa (integrated by Morocco, Algeria, Tunisia and Libya), the Mashreq/Levant (Jordan, Lebanon, Palestinian Territories Occupied, Israel, Syria, Iraq and Turkey), the Gulf (Oman, Yemen, Saudi Arabia, United Arab Emirates, Qatar, Bahrain and Kuwait) and the Egypt-Sudan sub-region. Iran, despite being part of western Asia is analysed in the Gulf economies context (McKee et

- "Localizing the SDGs" is an initiative supported by UCLG, UN-Habitat and UNDP. More information on this process: http://localizingthesdgs.org/
- 2. The main agendas are: the Addis Ababa Action Agenda on Financing for Development; the Paris Agreement on Climate Change (UNFCC); the Sendai Framework for Disaster Risk Reduction 2015-2030; the Vienna Program of Action for Landlocked Developing Countries 2014–2024; Accelerated Modalities of Action for Small Island Developing States (SAMOA Pathway); the Istanbul Declaration and Program of Action for the Least Developed Countries 2011–2020 and the New Urban Agenda approved at HABITAT III (UN-Habitat).
- More information about the "Wise Cities" initiative: https://www.cidob. org/en/projects/wise_cities
- More information on the different definitions used for the MENA region: http://www.menaraproject. eu/infographics/
- More information on the MENARA Project -The Middle East and North Africa Regional Architecture: Mapping geopolitical shifts, regional order and domestic transformations: http://www.menaraproject.eu/ menara-project/

al., 2017:4). This chapter also considers it necessary to broaden the territorial analysis towards Eastern Africa, incorporating the urban system in the Horn of Africa (Eritrea, Djibouti, Somaliland region) and Ethiopia, given their emerging role in the maritime trade flow in the Gulf of Aden and in the development of one of the most vulnerable regions in the world.

On the other hand, it has not been considered appropriate to incorporate Mauritania (Maghreb, North Africa) into the analysis, as this country articulates its relations on the West African Atlantic coast. At the time of making a more detailed approach to MENA's urbanisation process, this article leaves out of the analysis cities located in armed conflict contexts such as Iraq and Syria. Limiting the inclusion of the cities of the State of Israel has also been considered due to the fact that its policies and expansive urban growth dynamics must be explained in a context of political land occupation.

Beyond the paradigm of the European city – identified by its financial strength and the quality of its socio-environmental governance – the chapter highlights the recent experience of many cities in the Maghreb/ North Africa, Mashreq /Levant, the Gulf (plus Iran) and Egypt-Sudan sub-regions that have made significant progress in their economic, social, economic and environmental governance. This task has not been easy: qualitative and quantitative information on many of these cities is limited and the length of the chapter has not facilitated a deeper analysis.⁶

This chapter is structured in two parts: the first analyses the Mediterranean urban system, identifying the 60 cities that have experienced the highest urban growth since 2000, showing, *a priori*, the existence of a vibrant and attractive local economy. The second part focuses on the nine cities that have led the urbanisation process in MENA, analysing some key aspects of their multilevel governance. In the conclusion of the chapter the identification of these cities as "Wise Cities" is evaluated. The chapter uses figures and graphs to reinforce the narrative.

2. Wise urban systems in MENA

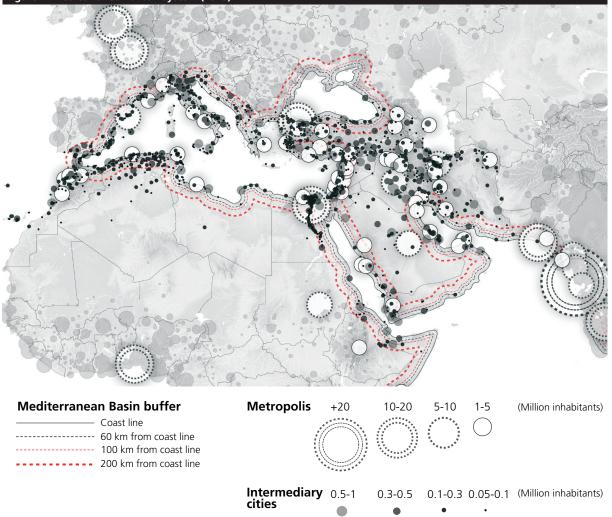
A "Wise City" generates competitive advantages by its physical integration in a territory and is able to redistribute – over time – a significant part of its captured wealth towards its population's welfare. Most of the cities in the world have evolved into complex urban systems, driving progress on a regional scale. In a far-reaching process of global urban transition, metropolitan areas, intermediary cities, small cities and rural areas cooperate and compete with each other, generating polycentric urban systems that stimulate the emergence of decentralised multilevel governance frameworks (local, sub-national, central).⁷ To localise a Wise City it is first necessary to analyse its relevance in a regional framework.

In the Mediterranean Basin, three urban systems can be observed:⁸ 1) coastal and inland regional corridors; 2) metropolitan clusters; and 3) enclave economies integrated in international networks (see Figure 1).

In a far-reaching process of global urban transition, metropolitan areas, intermediary cities, small cities and rural areas cooperate and compete with each other, generating polycentric urban systems that stimulate the emergence of decentralised multilevel governance frameworks (local, subnational, central).

- Data used comes from geospatial database built by the author of this paper for the Fourth Global Report on Decentralization and Local Democracy (GOLD IV) (UCLG, 2017).
- 7. Author's note: A metropolitan area or metropolis is considered an urban agglomeration of more than 1 million inhabitants; an intermediary city, an agglomeration of between 50,000 and 1 million inhabitants; and small city is considered to be one with fewer than 50,000 inhabitants. For a more detailed analysis see GOLD IV (UCLG, 2017).
- For an approach to the different categories of urban systems, see: UCLG, 2017, pp. 138–140. Also, for Africa, Europe and MEWA (Middle East and west Asia) regions see: *Ibid*: pp. 167–173, pp. 186–192, pp. 199–203.

Figure 1. Mediterranean urban system (2015)



Source: UCLG and UNESCO-CIMES. Author: Borja M. Iglesias.

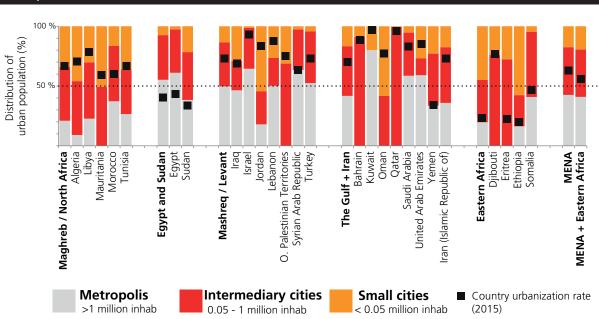
As for regional corridors, southern European, North African and Levantine economies concentrate most of their cities in a 200-kilometre-wide strip along the coast, limited by mountain range systems to the north and drylands to the south and east. On the other hand, the larger inland urban corridors are visible in a significant proportion of the Fertile Crescent - in the rural regions of the Nile Valle (EGY) and Tigris and Euphrates river basins (IRQ) - or in the Zagros Mountains (IRN) have been fostering trade relations between intermediary and small cities for centuries. As for metropolitan clusters, mega-cities such as Istanbul (TUR) and Cairo (EGY) stand out, together with small metropolises, such as Tangier (MAR) or Sfax (TUN) that have emerged in recent decades as important international logistics hubs. Finally, intermediary cities appear as enclave economies, geographically isolated, but with expansive strategic infrastructures (especially ports and airports in the Gulf of Aden and the Red Sea) that allow them to distribute commodities to international markets quickly.

The Mediterranean Basin is a geographical area with a high urban population rate, led by the Mashreq/Levant (73.2%), the Gulf plus Iran (70.6%), southern Europe (70%) and the Maghreb/North Africa (66.7%). By contrast, in Egypt-Sudan (40.7%) and the Eastern African economies included in this analysis (23.3%) the rural population predominates. In the case of Ethiopia – the second most populous economy in Africa after Nigeria – the urbanisation process is expected to increase its urban population to 50 million inhabitants by 2050, a moment in which people living in cities will reach 37. 6% of a total country population estimated at 187 million inhabitants (UN-DESA, 2015).

The MENA region has an approximate population of 540 million inhabitants (343 million living in cities), 658 million if the Eastern African countries of the Horn of Africa are added. Focusing the analysis on the MENA region, the urban population lives in 49 metropolitan areas (146 million inhabitants and 42.5% of the urban population), 833 intermediary cities (137 million inhabitants and 40% of the urban population) and an undetermined number of small cities and towns (60 million inhabitants and 17.5% of the urban population). This data illustrates the relevance of the cities of fewer than 1 million inhabitants in which 60% of MENA's urban population lives (see Graph 1).

Taking Europe as a reference – as a model of a region shaped by the territorial cohesion of its polycentric system of intermediary cities -60.4% of Europe's urban population lives in cities of fewer than 300,000 inhabitants. This polycentric structure is also present in some of MENA's emerging economies. In the Maghreb, Morocco concentrates 46.4% of its urban population in 62 intermediary cities and in Algeria 45.1% of its urban population lives in 100 intermediary cities (90% if cities with fewer than 50,000 inhabitants are added). In the Mashreq/Levant, Turkey stands out as an economy that forms part of the MINTs,⁹ and which concentrates 43.3% of its urban population in 155 intermediary cities uniformly distributed by geography. In Iran (in the Gulf hinterland) 46.6% of the urban population lives in 169 intermediary cities and 35.6% lives in the eight larger provincial capitals, most of them located on the Iraq-Turkey border and in the Caspian Sea basin. By contrast, the urban system of many Gulf economies is determined by the size of their population, climatic conditions and the small number of cities. Countries with a high rural population such as Yemen have a strong macrocephaly in their metropolitan areas: 33.5% of Yemen's urban population is concentrated in Sana'a. Something similar occurs in the small states in the Gulf, where the entire urban population lives in the capital cities – Kuwait City (KWT), Doha (QAT), Dubai, Sharjah and Abu Dhabi (UAE).

A Wise City exercises strong territorial attraction through its ability to generate expectations of economic, social and cultural progress among people. The dynamism and competitiveness of a city's economy are key indicators for understanding the urbanisation process throughout the 19th century (in Europe), the 20th century (in Latin America), and the beginning of the 21st century (in Asia and China). A reading of the sample of 60 cities that experienced the highest demographic growth in the Mediterranean Basin from 2000 to 2015 (see Graph 2) reveals two significant issues: 1) the 60 cities contained in the sample are located in the MENA region and the neighbouring Horn of Africa region, and 2) 90% of them are intermediary cities.



Graph 1. Distribution of the urban population by city size (%) and urbanisation rate by country and sub-regions (%) in MENA plus Eastern Africa (2015)

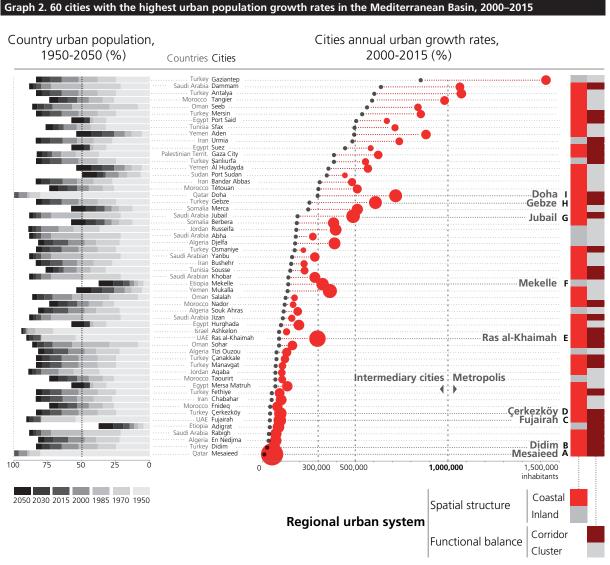
In this geography the following urban systems can be distinguished (see Figure 2): 1) the *Turkish corridor* of Çanakkale-Izmir-Antalya-Gaziantep, which links cities that have thrived as logistics and tourist hubs; 2) the *port cities* located in the Red Sea connected with the Mediterranean Basin through the Suez-Port Said Canal; 3) the *Gulf coastal corridor* that concentrates the cities with the highest GDP per capita in the world; 4) the enclave economies located in the Gulf of Aden basin, which open landlocked rural economies, such as Ethiopia, to the sea; and 5) the *Maghreb coastal corridor* delimited by Sfax (TUN) and Tétouan (MAR), as the main industrial and logistics area linked to southern Europe.

This classification explains the high urban population growth in Mediterranean cities in the 2000–2015 period. In this sense, it should be noted that some regions of the analysed southern European countries have growth rates below 1% for the same period, and in many cases negative rates; this is a common phenomenon in Greece, Italy and Spain, explained, among other reasons, by the low birth rate and strong demographic aging. But this threat remains a long way from eastern Europe's *shrinking cities*.

From this regional approach, this chapter focuses its analysis on the nine cities with the highest urban growth rates (see Figure 3 on the right). Eight of these cities are located in the MENA region: Didim, Çerkezköy and Gebze in Turkey; Ras al-Khaimah and Fujairah in the United Arab Emirates; Mesaieed and Doha in Qatar; and Jubail in Saudi Arabia. Although Mekelle (Ethiopia) is not part of the MENA region, the chapter considers its analysis necessary due to its geographical and economic linkages to the Red Sea, and its key role in the development of a rural economy such as Ethiopia, which is called to be an emerging actor in the stabilisation of one of the most vulnerable regions in the world as is the Horn of Africa.

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Source: UCLG and UNESCO-CIMES. Author: Borja M. Iglesias.



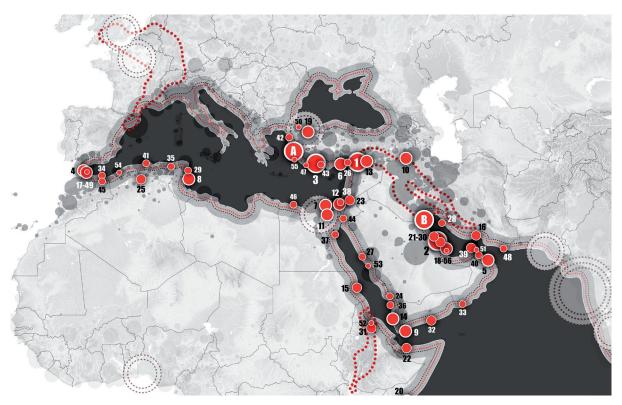
Source: UCLG and UNESCO-CIMES. Author: Borja M. Iglesias.

The objective of this research is to assess the categorisation of these cities as Wise Cities. To this end, the interactions between urban and demographic growth in the 2000–2015 period will be analysed below (see Figure 5), suggesting an approach to the environmental, social, economic or institutional policies that have been boosted by their multilevel governments in the past years.

3. Localising the next Wise Cities in MENA

A Wise City can boost the competitiveness of its local economy and, at the same time, guarantee the "Right to the City" for its entire population, leaving no one behind; it is a resilient and solidary city that emerges reinforced after the impact of crisis and integrates citizenship into decision-making (Coll, 2016).

Figure 2. Map of the 60 cities with the highest urban population growth rates in the Mediterranean Basin, 2000–2015

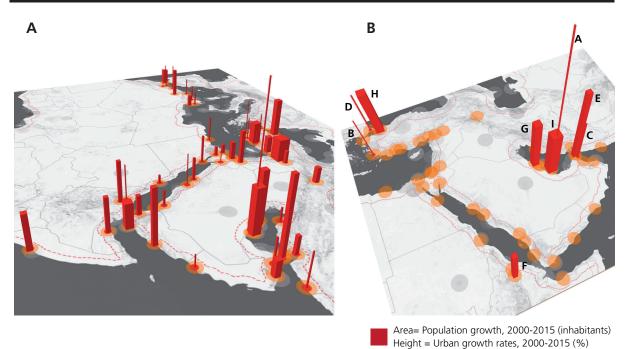


[metropolis in 2000-2015] A Izmir (TUR); B Hawalli -Governorate inside Kuwait metropolitan area (KWT) [intermediary cities in 2000, metropolis in 2015] 1 Gaziantep (TUR); 2 Dammam (SAU); 3 Antalya (TUR); [intermediary cities in 2000-2015] 4 Tangier (MAR); 5 Seeb (OMN); 6 Mersin (TUR); 7 Port Said (EGY); 8 Sfax (TUN); 9 Aden (YEM); 10 Urmia (IRN); 11 Suez (EGY); 12 Gaza City (PSE); 13 Sanlurfa (TUR); 14 Al Hudayda (YEM); 15 Port Sudan (SDN); 16 Bandar Abbas (IRN); 17 Tétouan (MAR); 18 Doha (QAT); 19 Gebze (TUR); 20 Merca (SOM); 21 Jubail (SAU); 22 Berbera (SOM); 23 Russeifa (JOR); 24 Abba (SAU); 25 Djelfa (DZA); 26 Osmaniye (TUR); 27 Yanbu (SAU); 28 Bushehr (IRN); 29 Sousse (TUN); 30 Khobar (SAU); 31 Mekelle (ETH); 32 Mukalla (YEM); 33 Salalah (OMN); 34 Nador -incl. Touima (MAR); 35 Souk Ahras (DZA); 36 Jizan (SAU); 37 Hurghada (EGY); 38 Ashkelon (ISR); 39 Ras al-Khaimah (ARE); 40 Sohar (OMN); 41 Tizi Ouzou (DZA); 42 Çanakkale (TUR); 43 Manavgat (TUR); 44 Aqaba (JOR); 45 Taourirt (MAR); 46 Mersa Matruh (EGY); 47 Fethiye (TUR); 48 Chabahar (IRN); 49 Fnideq (MAR); 50 Çerkezköy (TUR); 51 Fujairah (ARE); 52 Adigrat (ETH); 53 Rabigh (SAU); 54 En Nedjma (DZA); 55 Didim (TUR); 56 Mesaieed (QAT).

Source: UCLG and UNESCO-CIMES. Author: Borja M. Iglesias.

The concept of a Wise City implies thinking about the urban and demographic scale of the city and about its social, economic and environmental interactions with its hinterland. A Wise City promotes the *human scale* of the urban fabric and adds value to the local economy through its compactness, density and mixed land use, avoiding the urban sprawl and mono-functional segregation of space. A *compact city* consumes less economic and energy resources than sprawling cities and does not pose a threat to the maintenance of the productive activity of the rural hinterland. In addition, the proximity between local government and citizenship facilitates the design and implementation of effective policies of sustainable mobility and social cohesion. With fewer resources, a Wise City can, on a human scale, have a greater impact on the welfare of its citizenship than a metropolitan area.



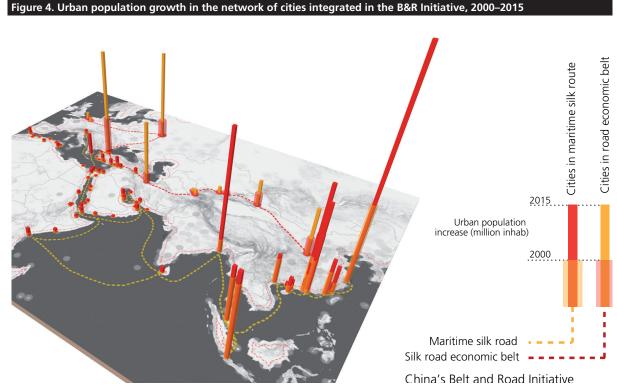


Source: UCLG and UNESCO-CIMES. Author: Borja M. Iglesias.

These issues are becoming increasingly relevant, especially when taking the world urbanisation process into account: there is a similar-sized population living in 503 metropolitan areas (41.2% of the total urban population) as in 8,923 intermediary cities (36% of the total urban population). This last figure is even higher if cities of fewer than 50,000 inhabitants (22.7% of the urban population) are added. The MENA is an important part of the Global South, which faces big challenges: The heterogeneous region contains emerging, medium and low-income economies. Many of its countries still have sizable shares of rural population, yet the Global South already concentrates 83% of the metropolitan areas in the world - eight of them with a population of over 20 million inhabitants - with significant multilevel deficits in their peri-urban boundaries. These urban agglomerations can also constitute the main threat to the sustainability of rural-urban linkages on which depend, for example, the water and food sovereignty of many of these nations.

The first approach to the territorial analysis of the nine cities that have led the urbanisation process in MENA (see Figure 3, right-hand image) reveals two important urban systems: 1) the Gulf regional corridor, which is integrated in the main trade route with Asia (Ras al-Khaimah and Fujairah in the United Arab Emirates, Mesaieed and Doha in Qatar, Jubail in Saudi Arabia); and 2) the Marmara region, in the hinterland of Greater Istanbul (Çerkezköy and Gebze), a megacity consolidated as an *emerging gateway* between Asia and Europe.¹⁰ The other two remaining cities – Didim in Turkey and Mekelle in Ethiopia – are also integrated into urban corridors, although in the analysis they assume greater relevance as enclave economies. Their urbanisation process will be analysed in detail for the 2000–2015 period (see Figure 5).

 See: https://www.brookings.edu/ research/redefining-global-cities/



Source: PWC, UCLG and UNESCO-CIMES. Author: Borja M. Iglesias.

3.1. The Gulf regional corridor

The high-income economies of the Gulf (Saudi Arabia, Qatar and the United Arab Emirates) concentrate some of the cities with the highest GDP per capita in the world. Many of them have diversified the benefits of their hydrocarbon industries towards sectors related to logistics, the knowledge economy, finance, sports and tourism. However, in all of them, large-scale urban development (real estate and infrastructure) is used as a strategy to position their main metropolitan areas – Doha, Abu Dhabi and Dubai – as the most attractive global cities for foreign investment. In many cases, these land transformations have had a devastating impact on the environment and have contributed to the widening inequality between the local population and expatriates from neighbouring regions.

In the case of cities such as Mesaieed (QAT), Fujairah (UAE) and Jubail (SAU), the urbanisation process has focused on the expansion of industrial land and port infrastructure. In this context, the "Belt and Road Initiative" (B&R or BRI) (PwC, 2016) promoted by China since 2013 to strengthen its presence in the European market (see Figure 4), takes advantage of the strategic position of many MENA's coastal cities as potential trading hubs between Asia and Europe (Rudolf, 2017), but also, to strengthen China's role as key actor in the *diplomatic labyrinth* of the Middle East region. Can these cities be considered Wise Cities?

The industrial city of **Mesaieed** (QAT), located 40 kilometres south of Doha, tripled the extension of Hamad Port (from 9 km² in 2000 to 43 km² in 2015) within the framework of the "Qatar National Vision 2030".

A Wise City promotes the *human scale* of the urban fabric and adds value to the local economy through its compactness, density and mixed land use, avoiding the urban sprawl and monofunctional segregation of space. This critical infrastructure has two goals: removing the petrochemical industry from Doha and developing the most important aluminium cluster in the world: Qatalum. Once the construction of this new port infrastructure is completed, Qatar will be able to control 35% of regional trade (*The Peninsula*, 2017) in a context of *buoyant* trade relations with China and, on the other hand, of a drastic reduction in the dependency on the port infrastructures of its Saudi neighbours, amid growing hostility since 2017. This port will also host the new Qatar Emiri Naval Forces and the Qatar Economic Zone 3 (QEZ3). In this city the residential land use area represents a third of the industrial area, and assumes the function of a dormitory town for the expatriates working close to Qatar Petrochemical Company, Qatar Steel, and Qatalum among others.

The industrial city of **Jubail** (SAU) – located at the heart of oil deposits and close to the Gulf's deep waters (Al-But'hie and Eben , 2002) – occupies a central position on the Kuwait City-Doha axis. The construction of the industrial cities of Jubail in the Gulf and Yanbu in the Red Sea in the 1970s was framed within the Saudi strategy of diversification of its industrial economy and reduction of dependence on oil revenues. At present, Jubail is one of the largest and most polluted industrial cities in the world: in 2016, it ranked 8th in the world, with the highest concentration of heavy particles in the air (WHO, 2016). In the 2000 to 2015 period the city doubled its population (from 189,000 to 488,000 inhabitants), and increased its industrial area by 100 km² to a total of 160 km.² This area is equivalent to the urban area of cities such as Montpellier (FRA), Belfast (IRL), or Sheffield (GBR). Among the most necessary infrastructure are the desalination plants.

Fujairah (UAE), capital of the only emirate located in the Gulf of Oman, is one of the least industrialised cities in the Gulf. In the 2000 to 2015 period the city promoted the development of the Port of Fujairah, multiplying its industrial area by ten (from 2.11 km² to 23.94 km²). This infrastructure is part of a regional strategy aimed at complementing the neighbouring ports of Khalifa and Zayed (Abu Dhabi), and strengthening the logistical capacity of Port Jebel Ali (Dubai), the 9th most important port in the world. The secondary role of Fujairah in the industrial economy of the emirates allowed the government to foster tourism, cultural and environmental policies. In contrast to the ambitious "Dubai Plan 2021" and the "Abu Dhabi 2030 Plan", the "Fujairah 2040 Plan" is much more limited: the primary feature of the plan is the construction of 8,800 new housing units and 1,500 hotel rooms. The city is positioned as a tourist traditional heritage and a human scale in its urban fabric.

In the cities of Ras al-Khaimah (UAE) and Doha (QAT), by contrast, the urbanisation process has been concentrated mainly in residential land use. The city of **Ras al-Khaimah** (UAE), located 100 km north of Dubai in the hinterland of the Strait of Hormuz, is the capital of a minor oil-producing emirate whose main sources of income come from agriculture, mining and the *tiny* RAK Economic Zone. Its status as the capital of a *poor* and subsidised emirate (in relation to neighbouring Dubai and Abu Dhabi) is evidenced by the relative insignificance of its industrial areas (1.91 km² in 2016) and the limited opulence of its real estate developments. In the 2000 to 2015 period, the city experienced

significant growth: it tripled its population (from 90,000 to 296,000 inhabitants) and its urban footprint (from 37km² to 97 km²). Unlike other Gulf cities, Ras al-Khaimah has a high rate of informal urbanisation in its peri-urban boundaries. These areas concentrate a significant part of the immigrant population employed in the construction and domestic work sectors in the neighbouring emirates. The city faces the challenge of correcting the informal urban sprawl.

The city of **Doha** (QAT), the capital of Qatar, is undoubtedly the most well-known city analysed in this chapter. With a population of 717,000 inhabitants, it reaches 1.6 million in the whole of its metropolitan area (including Ar Rayan and the industrial district of Doha). In the 2000 to 2015 period, the city increased its population by 355,000 inhabitants and expanded its residential urban area by 100 km². Positioned as a global tourist centre, the city has tried to make the diversification of its economy towards knowledge, finance and events compatible with the boosting of its hydrocarbon industry. For this reason, industrial activity has shifted out of the city: toward the port of Hamad in Mesaieed in the south and to the metropolitan boundary. The only logistics infrastructure that remains in the city is the Hamad International Airport. With an area of 33 km² – equivalent to a fifth of the city's surface area – it occupies 11th position among airports with the highest international cargo capacity and is the only airport, alongside Singapore, whose position has risen in recent years in this airport category. The Doha development pattern is part of a process of land liberalisation initiated in the 1990s aimed at leading the urbanisation process in the Gulf. Once this goal has been achieved, the development strategy, albeit aligned with the pragmatic "Qatar National Vision 2030", continues to bet on the construction sector. Educational infrastructure such as Qatar University, the Aspire Zone and the Education City – boosted by the Qatar Foundation – share a narrative with opulent real estate operations such as The Pearl and Lusail Smart City and the sports infrastructure that will host the 2022 FIFA World Cup.

3.2. The Greater Istanbul cluster

The Greater Istanbul metropolitan area defines a logistics and industrial cluster that covers the Marmara region, shaping one of the most important regional-scale urban systems in the Mediterranean Basin. As a transcontinental gateway between Europe and Asia, Istanbul is a megacity with a population of over14 million inhabitants, which has contributed to positioning Turkey as an emerging economy within the MINTs. This chapter analyses two intermediary cities – Çerkezköy and Gebze – that have taken advantage of their strategic positions in the industrial belt of Greater Istanbul to strengthen their urban governance.

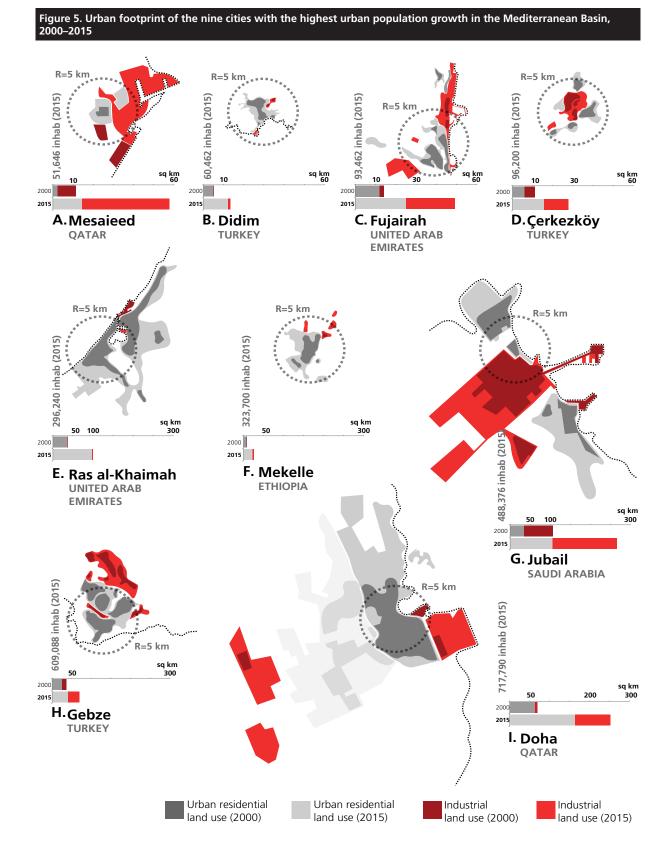
The city of Çerkezköy (TUR) – located 100 km east of Istanbul – is one of the most representative examples of an intermediary city integrated into a metropolitan cluster. The construction of the Bosphorus Bridge in the 1970s favoured population displacements and industrial decentralisations from the Istanbul urban area, and in 1975 it acquired the status of industrial region (Çerkezköy Organized Industrial Region). Çerkezköy, together with the neighbouring cities of Veliköy and Kapaklı, is one of the largest industrial areas in Turkey and employs more than 80,000 people in the textile, pharmaceutical and plastic sectors. Linked to Istanbul and southern Europe through the Trans-European Motorway (TEM), the city has progressed at the same rate as the national economy. In the 2000 to 2015 period the city doubled its population (from 41,000 to 96,000 inhabitants). It experienced a similar growth in the extension of the residential land use (from 6 km² to 15 km²) and industrial land use (from 5 km² to 12 km²). Despite this, the city maintains the compactness of its residential urban area and, as in many of Turkey's intermediary cities, public housing policies are addressed to implement high-density models. It contrasts with the permissiveness in the land occupation for industrial activity that tends to extend it along the trade routes, threatening the rich peri-urban environmental ecosystems.

The city of Gebze - located at the western end of Greater Istanbul is a good example of an intermediary city absorbed by metropolitan expansion. As in the case of Çerkezköy, Gebze developed its own industrial area in the mid-1980s (Gebze Organized Industrial Zone, GOIZ), and now concentrates most of the industry in the province of Kocaeli and represents 15% of total Turkish industry. In the 2000 to 2015 period the city doubled its population (from 253,000 to 609,000 inhabitants), with the greatest urban growth in residential land use (from 25 km² to 40km²), despite being limited by the lack of space for industrial extension (10 km² to 28 km²). The GOIZ hosts more than 820 firms in nine areas of industrial activity, employs 69,000 people and contributes 6.8% of Turkey's exports and 7.8% of its imports. Gebze is a highly dense and compact intermediary city. Delimited to the north by the TEM and to the south by the Sea of Marmara, it faces one of the highest annual urban growth rates in Turkey (3.74% between 2011 and 2017). The recent inauguration of the Gebze-Izmir Motorway will help to reduce the pressure on Gebze and open land expansion to other areas of the province, although it will also contribute to the extension of the Greater Istanbul urban footprint.

3.3. Enclave economies

This analysis of the nine most dynamic cities of the Mediterranean concludes with two cities that work as enclave economies and provide services to a large territorial area: the city of Didim (on the Turkish Aegean coast) and the city of Mekelle (in the main Ethiopian inland urban corridor).

As noted previously in the chapter, Mekelle is the only city analysed not integrated in the MENA region. The chapter considers justified the extension of the territorial analysis of the MENA urban systems in both margins of the Red Sea, Mandeb Strait and the Gulf of Aden beyond *geopolitical boundaries* to incorporate an approach to the Horn of Africa. The inclusion of Mekelle (a city closer to the coast than to Addis Ababa) highlights the potential geostrategic role of many similar cities located along the Horn of Africa's coast such as Djibouti (DJI), Assad and Massaua (ERI) or Berbera (in the Somaliland region, SOM) for the coming years. The city of Port Said (SDN), although integrated into the MENA region, shares with these cities the fact of being the unique urban areas in its country with the minimum logistical infrastructure to channel imports and exports to international markets, but also – as in the case of Sudan and Ethiopia – to structure the internal development of vast and low-income economies.



Source: Geodata built from Google Earth Pro. Author: Borja M. Iglesias.

The intermediary city of Didim (TUR) - located on the Turkish coast of the Aegean, in the Izmir-Antalya corridor - is one of the main tourist attractions in the country. Previously a small city (25,000 inhabitants in 2000), its population increased to 60,000 inhabitants by 2015, tripled the extension of residential land use (from 4.8 km² to 12 km²), a significant part of which was for the holiday residences of British pensioners (Nudrali, 2007). Beyond hotel facilities, the city hosts one of the largest marinas for superyachts in the eastern Mediterranean, with a capacity for 500 large vessels. The city is a good example of an intermediary city despite its sprawl: it serves a large and lightly populated region and generates strong linkages with the natural environment on which its tourism economy depends. The city has improved its competitiveness, helped by regional road infrastructure and its proximity to the international airports of Izmir and Antalya. The city faces the challenge of losing its human scale due to projected annual urban growth of close to 6%.

Mekelle (ETH) is the only city of a low-income country analysed in this chapter. Located in the urban corridor Addis Ababa-Asmara near the Eritrean border, it is the capital of Tigray, one of the most dynamic industrial regions in East Africa. The city has been the subject of several studies conducted by the United Nations Industrial Development Organization (UNIDO), most of which focused on the wood and metal clusters. Mekelle has become the second largest cluster in Ethiopia after Addis Ababa, and contains between 6% and 8% of the country's active population (UNIDO, 2010; 2016). In the 2000 to 2015 period the city increased its population from 139,000 to 323,000 inhabitants in a general context of national migratory displacements from rural areas. In this period, the residential urban area tripled (from 8 km² to 23 km²) and the first industrial areas in the north of the city were developed. In 2016, Mekelle-based Mesfin Industrial Engineering (MIE), together with Peugeot, inaugurated the most important automotive plant in the country in Addis Ababa, in a strategy to position the region as one of the main automotive clusters in Africa. In 2017, the Mekelle Industrial Park opened with the objective of employing more than 20,000 people and playing a key role in the technological transformation of the city and the region. Like many Sub-Saharan cities conditioned by low-income urbanisation, the city presents an incipient informal periurbanisation process.

4. Remarks

This chapter has been developed as an exercise aimed at *localising the next Wise Cities* in a context in which qualitative, quantitative and historical urban data is scarcely available: intermediary cities in the Global South, in particular in the MENA region. Some issues that have been highlighted in this research:

Think about Wise Cities integrated into wise urban systems. Cities are not autonomous territorial units. Their progress, as has been seen in the Mediterranean and MENA sub-regions, depends on their strategic relevance within urban corridors, metropolitan clusters and international city networks. This is a key issue that allows understanding, for example, of the increasing tensions between the state and the city, between central and local governments: The Global South is generating lowincome *meta-cities* (potential *city-states*) that are far more populated than many high-income countries. The concept of a wise urban system also highlights the relevance of rural-urban linkages on which the sustainability of nations depends.

Associate the intermediary city as a Wise City. Intermediary cities play a key role in regional integration and cohesion; they link the population living in rural areas and small towns to the larger networks of primary and metropolitan areas. Despite their limited resources when compared to metropolises, most intermediary cities have welfare scenarios in which the human scale of the city allows sustainable and inclusive policies to be promoted using fewer resources and generating greater impact among citizens than in a metropolitan area.

Territorialise and *localise* the multilevel challenges faced by cities. The brief analysis of nine MENA cities shows some issues in making urban growth, economic development, sustainability and inclusion compatible. Since the end of the 19th century, industry has been the engine in the urbanisation process, transforming cities into regional employment poles. While post-industrial and aging European cities are facing challenges related to the consumption and maintenance of the welfare state, the cities analysed face environmental degradation as a minor effect in their progress. In this regard, the concept of the Wise City must be shaped to the local context.

Fight against the lack of qualitative, quantitative and historical data about governance in intermediary and small cities in the Global South. This research has itself experienced the difficulty in analysing the urbanisation process, urban policies and initiatives boosted by MENA municipalities in recent years. This is an important issue that limits the assessment of progress in many lesser-known cities, some of which may be the next Wise Cities.

Are there Wise Cities in the Mediterranean, particularly in the MENA region?

Beyond the brief analysis provided by this chapter the answer must be affirmative. Some of the cities analysed have aroused some interest in the way they have managed their progress. Mekelle, Didim and Çerkezköy are cities that we could find in many regions in Europe. By contrast, most cities in the Gulf – despite wanting to be wise – show social, economic and environmental vulnerabilities that are difficult to manage in a context of geopolitical uncertainty. In the essence of the concept of Wise City lie the ideas of *good living* and quality of life, welfare, social progress and innovation. All of these sustained over time and experiences that allow the city to strengthen its economic, social and environmental governance.

Finally, the chapter leaves many cities unanalysed. The research has driven the analysis on the recent urbanisation process in the Mediterranean Basin, specifically in the cities that had the highest population growth; but the list could have been longer. Maghreb coastal cities such as En Nedjma, in the Oran hinterland (DZA), the clusters in Tétouan-Tanger (MAR) and Sfax (TUN) have experienced important demographic growth Despite their limited resources when compared to metropolises, most intermediary cities have welfare scenarios in which the human scale of the city allows sustainable and inclusive policies to be promoted using fewer resources and generating greater impact among citizens than in a metropolitan area.

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in parallel to the attraction of investments for logistics infrastructure linked to southern European countries (for example: TangerMed, the Trans-Maghreb motorway inside the Trans-Mediterranean Transport Network, etc.) or have generated innovation clusters such as the *Pôle de compétitivité Monastir-El Fejja* (Mfcpole) in the textile industry. The chapter has not analysed southern European cities due to the low relevance of their population growth, despite their economic role and the quality of their governance and influence in the Mediterranean and global geopolitics. All of these cities deserve a detailed analysis of their urban reality and their aspirations and expectations on a local, regional and international scale. Wisdom is an attribute linked to experience, to the ability to learn from the environment and to return more than what has been learned, and in this sense, there are many cities in the region that may be identified as Wise Cities.

References

Al-But'hiE, Ibrahim and Eben, Mohammad. "Urban and industrial development planning as an approach for Saudi Arabia: the case study of Jubail and Yanbu". *Habitat International*, no. 26 (2002), pp. 1–20.

Coll, Josep Maria. "Why wise cities? Conceptual framework", in: Coll, J.M. (coord.) *Wise Cities. A New Paradigm for Urban Resilience, Sustainability and Well-Being.* CIDOB, 2016. (online) https://www. cidob.org/en/articulos/monografias/wise_cities/why_wise_cities_ conceptual_framework

Mckee, Musa *et al.* "Demographic and economic material factors in the MENA region". *MENARA Working Papers*, no. 3, (October 2017), p. 4. (online) https://www.cidob.org/en/publications/publication_series/ menara_papers/working_papers/demographic_and_economic_material_factors_in_the_mena_region

Nudrali, F. Özlem. *The experiences of British citizens in Didim a coastal town in Turkey: a case of lifestyle migration*. Thesis submitted to the Graduate School of Social Sciences of Middle East Technical University. 2007.

PWC. "China's new silk route. The long and winding road". *PwC's Growth Markets Centre* (February 2016). (online). https://www.pwc. com/gx/en/growth-markets-center/assets/pdf/china-new-silk-route.pdf

RUDOLF, Moritz. "China's security strategy towards the Middle East", in: *China and the Mediterranean: open for business?*. *China Analysis* (June 2017). European Council on Foreign Relations, pp.10–12. (online) http://www.ecfr.eu/page/-/China_Analysis_June_2017.pdf

The Peninsula. "Hamad Port handles 27% of regional trade: Al Sulaiti". *The Peninsula* (6 September 2017) (online) https://www. thepeninsulaqatar.com/article/06/09/2017/Hamad-Port-handles-27-of-regional-trade-Al-Sulaiti

UCLG. "Co-Creating the Urban Future. The Agenda of Metropolises, Cities and Territories". *GOLD* - *Global Report on Decentralization and Local Democracy*, no. 4 (2017).

UN-DESA. "World Urbanization Prospects: The 2014 Revision". New York: United Nations' Department of Economic and Social Affairs (UN-DESA), 2015. (online) https://esa.un.org/unpd/wup/CD-ROM/

UNIDO. Cluster development for pro-poor growth: the UNIDO approach. 2010.

UNIDO. Cluster Development Programs in Ethiopia: Evidence and Policy Implications. 2016.

WHO. Global Health Observatory Data Repository, Exposure City level Database, 2016.

Support bibliography

Rimmer, Peter and DICK, Howard. "Appropriate Economic Space for Transnational Infrastructural Projects: Gateways, Multimodal Corridors, and Special Economic Zones". *ADBI Working Paper Series*, no 237 (2010). Tokyo. Asian Development Bank Institute. (online) https://www. adb.org/sites/default/files/publication/156092/adbi-wp237.pdf

AfDB, OECD and UNDP. *African Economic Outlook 2017*. *Entrepreneurship and Industrialisation*. OECD Publishing, 2017.

McGranahan, Gordon and Satterthwaite, David. "Urbanisation: Concepts and Trends". *IIED Working Paper* (June 2014). (online) http:// pubs.iied.org/pdfs/10709IIED.pdf

National reports submitted for Habitat III (United Nations, 2016): Turkey, Yemen, Egypt, Morocco, Sudan, Iran, Israel, Jordan, Lebanon, Palestine, Saudi Arabia, Turkey and Yemen. (online) Available at: http://habitat3. org/the-new-urban-agenda/documents/national-reports/

Menara Working Papers (07/2016 -11/2017), CIDOB. (online). http:// www.menaraproject.eu/publications/

Sait, Siraj and LIM, Hilary. *Land, Law and Islam: Property and Human Rights in the Muslim World*. UN-Habitat. London: Zed Books Ltd, 2006.

Shandas, Vivek et al. "Rapid Urban Growth and Land Use Patterns in Doha, Qatar: Opportunities for Sustainability?". *European Journal of Sustainable Development Research*, no 1:2 (2017), 11. (online) http://www.lectitopublishing.nl/viewpdf/FHMMVF1E

Tacoli, Cecilia et al. "Rural-Urban Migration and Urban Poverty". *IIED Working Paper* (March 2015). (online) http://pubs.iied.org/ pdfs/10725IIED.pdf

UCLG-Learning and Iglesias, Borja M. "The Sustainable Development Goals –SDGs in the municipal map", 2017. (online) https://www.uclg. org/sites/default/files/the_sdgs_in_the_municipal_map.pdf

UN-HABITAT, (ed.) *The State of Arab Cities 2012: Challenges of Urban Transition*. Nairobi: UN-Habitat, 2012.

UN-HABITAT, (ed.) Urbanization and Development, Emerging Futures, World Cities Report 2016, Nairobi, Kenya: UN-Habitat, 2016.

UN-HABITAT, (ed.) Implementing the New Urban Agenda by Strengthening Urban-Rural Linkages - Leave No One And No Space Behind. Nairobi, Kenya: UN-Habitat, 2017.

Yousef, Tarik M. "Development, Growth and Policy Reform in the Middle East and North Africa since 1950". *Journal of Economic Perspectives* 18, no. 3 (September 2004), pp. 91–116. (online) https://pdfs.semanticscholar. org/a0b5/1e1e820ad01af22c24dc6c951694a6310dc3.pdf