# ALEXANDRIA: DEVELOPMENT CHALLENGES OF A COASTAL SECOND CITY

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#### 1. Introduction

Many Mediterranean cities entered the new millennium facing challenges due to the changing needs of urban demographics and housing demand, the requirements of industrial and commercial activities, and the technological innovations of the new century. Added to these challenges are those brought about by globalisation. The impact of globalisation on cities has been as vast as it has been varied. The liberalisation of trade and the free flow of capital have in global terms put cities rather than nations at the forefront of economic competition (DPU, 2002). We see cities from the same countries competing with each other, such as Dubai and Abu Dhabi. The problem is whether cities can identify problems accurately and then set priorities wisely. Another issue is who sets these priorities and who takes decisions, especially if such cities are second cities.

Every country has a capital city, the seat of government. The second-largest city or second metropolitan area is usually called a second city and often has a distinct economic dynamic and sense of cultural identity. In some cases the second city might be more populous than the capital, as in India where Calcutta is bigger than the capital Delhi. Many second cities, especially in the Mediterranean basin, are ports. The second city in Spain, after the capital Madrid, is Barcelona, a port. In France it is Marseille, also a port. Second cities change over time. Sometimes when countries change their capitals the old capital becomes the second city, losing some of its purposes and glamour, but still maintaining a large population by comparison with other cities. This is the case with Alexandria, which was Egypt's capital for almost a thousand years until the Muslim conquest in 641. The first city, the capital, usually gets all the attention, the projects and a bigger share of the budget. As a consequence, second cities often face special challenges that result from their relationships with their respective states.

This chapter reviews the challenges second cities like Alexandria face. First, it sets the stage by giving the background and the potential of the city. Second, it suggests means of dealing with such challenges on the basis of some new indices that identify socioeconomic and physical strengths and weaknesses. Third, the paper identifies the actors that

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must participate in the future setting of priorities and the appropriate tools for implementing projects with positive outcomes.

### 2. The context: The city of Alexandria

Alexandria, known as "The Pearl of the Mediterranean", bears the name of its founder, Alexander the Great, who built it in 331 BC, and it was the capital of Egypt for almost a thousand years. It became the second city afterwards, which it remains to this day. It is enclosed by the Mediterranean Sea to the north and Lake Mariout to the south. Its total area covers about 2.818 km² today and its population is 5.1 million (CAPMAS, 2017).

In a city like Alexandria, with its extraordinary layering of history, where streets and land plots have existed for hundreds of years, any changes are worth studying. Its contemporary urban development began in the 19<sup>th</sup> century. It may be divided into six distinct phases, as follows.

# 2.1. The 19th and early 20th centuries: The development of the cosmopolitan Alexandria

In 1819 Mohamed Ali dug El Mahmoudia Canal, which linked the Nile River with the western harbour. In 1854, the city witnessed the building of Egypt's first railway, which marked the beginning of Egypt's industrial revolution, the consolidation of the western harbour and the maritime base, which led to its rapid development. In 1863 the tramway was constructed to connect the newly established eastern section with the city centre and its western part. Alexandria also hosted the first municipality, which commissioned the British planner, McLean, to carry out an extensive town-planning scheme for the city (see Fig. 1). In 1934, the El Corniche route was constructed to link the western harbour with the newly established suburb of El Ramel, which stimulated eastward suburban growth for the next two decades (Soliman, 2007).



Source: Archi/ Maps, http://archimaps.tumblr.com/post/25178065074/map-of-alexandria-egypt

The waterfront of Alexandria boasts many beautiful buildings from the 19th and 20th centuries characterised by their decorative motifs, definite lines of architectural structure and the unity of their skyline. Greek and Italian architects built many of these buildings, proof of Alexandria's Mediterranean roots.

Nominally Ottoman, Alexandria, a liberal city, the symbol of an open Mediterranean, was not only cosmopolitan, but the multiplicity of various nationalities living and interacting in it. Alexandria, at that time, could serve as a reference point in the debate that flares up in Europe nowadays over the position of "foreign" communities and their integration (Hassoun, 1992).

2.2. The 1950s and 1960s: Alexandria during the early revolution era

The nationalisation measures after the 1952 revolution led to a change in the ownerships of most of the estates on the southern edge of the city. They fell under public control. The 1958 plan introduced a new east-west axis of growth into the desert. It facilitated the conversion of adjacent agricultural land to urban uses in the west and the development of new industrial areas and public housing projects along El Mahmoudia Canal on the southern edge of the city (Soliman, 2007).

2.3. The late 1960s and early 1970s: The break and the rush

Between the 1967 war with Israel and 1973's October War the formal development of the whole country was brought to a halt. However, the demographic growth of Alexandria and Cairo continued due to migration in search of work. The urban fabric changed from formal to informal development. Informal development is the unplanned development of land and construction of buildings, usually on urban fringes, mainly on agricultural land without getting official approval for land subdivision and building licenses. In Arabic it is called *Ashwaiyyat*, meaning random construction, disordered or haphazard. It is characterised by narrow streets, very high density, insufficient infrastructure and services.

# 2.4. The late 1970s and 1980s: The Open Door Policy and migration to the Gulf

After the war of October 1973, Egypt adopted a liberal, market-based economy. The Open Door/ *infitah* policy sought to increase the role of the private sector and encourage international investment. Moreover, during this period many Egyptians migrated to the Gulf and came back with money and a different culture. In the mid-1980s the first study of informal areas was conducted. It revealed that between 60% and 70% of additions to Alexandria's housing stock over the previous ten years had been informal (Soliman, 2007).

In 1981, when President Mubarak took over, a new era of socioeconomic and political readjustment programmes began. As a consequence, informal areas grew.

## 2.5 The 1990s and 2000s: Alexandria and the new frontiers on the north coast

In 1981, when President Mubarak took over, a new era of socioeconomic and political readjustment programmes began. As a consequence, informal areas grew. In 1992 terrorist attacks by radical Islamists drew attention to these areas as these groups used them as a refuge. In response, the government began a national programme to upgrade these areas, which continued to the mid-1990s. At the end of this period the city started facing another threat, namely the demolition of significant buildings and the development of suburban areas around Lake Mariout.

The famous waterfront cafés, restaurants and public beaches were demolished to give way to prestigious hotels and private beaches in the modern Dubai style.



Source: Author's own production, based on GOPP map.

# 2.6. The new millennium: Duplicating the Dubai experience – competition and despair

In 2000 the central government and the city began a huge project to revitalise Alexandria. Almost at the same time the new Alexandria library was opened. The aggressive neoliberal economic policies implemented in Egypt and the growth of the culture of globalisation had negative effects on Alexandria. The older areas and even the waterfront witnessed the pulling down of old villas and heritage buildings, such as the Villa Aghion, a modernist villa built in 1928 by the renowned French architect Auguste Perret, whose works in France are protected by UNESCO (*Guardian*, 2014).

The famous waterfront cafés, restaurants and public beaches were demolished to give way to prestigious hotels and private beaches in the modern Dubai style. Many commercial malls and entertainment centres were established in Alexandria's new development areas in the south and southwest near Lake Mariout, even encroaching on the lake (Sirry & Shemais, 2005).

During the past 15 years developments of second-home tourist villages on the north coast have gained momentum, besides the scheme to develop El Alamein City into a million-inhabitant city.

Since the beginning of the 21th century, several plans following the traditional approach to planning have been adopted by Alexandria, but these were inadequate to face the challenges. Thus, the city

management adopted several sectorial projects aiming at improving one or several of the city's development challenges. Although some of the projects were suggested in previous plans, it was mainly the governor who had to choose between many projects. Thus the overall direction of projects was changed with the change of governors or with the change of ministers in Cairo who would be co-partners in the implementation of these projects.



The most recent plan for Alexandria is the participatory Strategic Urban Plan (SUP) for Alexandria City. It has a time horizon of 2032.

Source: Hussien, 2017.

The most recent plan for Alexandria is the participatory Strategic Urban Plan (SUP) for Alexandria City. It has a time horizon of 2032 and is being prepared through a partnership between the General Organization for Physical Planning (GOPP) and UNDP. This time the plan has adopted a strategic and participatory approach. The planning studies started in 2010 and end in 2018. It will develop an urban management strategy and guidelines to ensure sustainable long-term city development and direct the implementation of the proposed projects. The SUP has identified some priority areas that include: the master plan for the medical city, the area behind Carrefour, the Matar Lake area at the airport and the governorate's informal areas. The plan seeks to improve the city's connection with the new Borg El Arab industrial city. It also includes a detailed plan for the establishment of an Olympic City and the introduction of a Geographical Information System (GIS) as a monitoring and decisionmaking tool (UNDP, 2016).

It is important to note that in 2015 Egypt had also developed a Sustainable Development Vision for 2030. This vision has identified several mega-projects that include: (1) developing the Suez Canal region with a new international city; (2) reclaiming one million feddans of desert land; (3) constructing one million social housing units; (4) constructing 4500 km of new road networks; (5) developing the golden mining triangle which will stretch from Qena and Sohag in upper Egypt along the Nile and across the mountains to the Red Sea ports of Safaga and Ras Gharib; and (6) developing the north coast (MOP, 2015).

The failure of the neoliberal economic policy to produce equitable economic development has been a challenge for cities. Social inequalities, urban sprawl, the spread of informal areas and the informal economy and the lack of adequate services and infrastructure are widespread.

Vision 2030 acknowledges that the development of the Suez Canal region with the new international city and the development of the north coast might have negative as well as positive impacts on the development of Alexandria. Egypt with its limited resources will allocate huge funds to these new projects. Thus fewer resources will be available for old existing cities such as Alexandria. Moreover, the development of the north coast might attract wealthy citizens and tourists away from Alexandria.

### 3. Urban challenges

### 3.1. National urban challenges

Egypt and its cities have undergone many political, social and economic changes since the 1952 revolution, ranging from political crises and the toppling of two presidents over the last few years to structural economic weaknesses. According to the national report, the main challenges Egypt faces today are the ever-growing urban population, high primacy and spatial concentration of population in big cities such as Cairo and Alexandria and the increasing youth population (GOE, 2015).

Another challenge is the maintenance of a balance between cities and unpopulated areas, which represent 94% of Egypt's total land. A balance also needs to be maintained between the sizes of cities. Despite the total increase in the number of cities from 188 in 1986 to 231 in 2014, there is still inconsistency in the distribution of cities of different sizes. The country's population is still heavily concentrated in a few large cities. Egypt has built new cities in the desert, but these new cities were unable to attract the target population of 8.5 million inhabitants. In more than 40 years they have only attracted 1.5 million inhabitants, 17.6% of the target (GOE, 2015).

The failure of the neoliberal economic policy to produce equitable economic development has been a challenge for cities. Social inequalities, urban sprawl, the spread of informal areas and the informal economy and the lack of adequate services and infrastructure are widespread. Most of the urban growth has occurred on agricultural land. About 700,000 *feddans* of high-quality agricultural lands have been lost to urbanisation. All these problems combined caused the deterioration of both the urban and the rural environment. The lack of good governance, centralisation of decision-making and the lack of citizen participation contributed to these problems in no minor way (GOE, 2015).

Vacant residential units are another pressing urban issue. There is a correlation between the three socioeconomic phenomena of unemployment, exclusion and the high percentage of vacant housing units on the one hand and unrest in the country on the other. Compared to the number of families, many more units have been built in Egypt than is needed. The number of vacant units rose between 2006 and 2017 from about 8 million to 13 million units and their prices have doubled. Spain saw a similar phenomenon when 7 million units

were built between 2001 and 2009, while the population increased by only 5.2 million. As housing units are usually for families and thus more than one person this resulted in 3–6 million vacant units. Yet housing prices more than doubled during this period, making it unaffordable for many and causing hardship for mortgage holders once housing prices corrected after 2009 (UN-Habitat, 2012: 6). This highlights the importance of governments' endeavours to find new ways to measure the success of their development plans, policies and programmes in order to identify problems before citizens take to the streets to make their voices heard.

#### 3.2. Urban challenges of Alexandria

Alexandria faces several challenges. Some it has in common with the rest of the country while others are due to its status as a second city. Almost 40% of Alexandria's inhabitants live in informal settlements. Only 25% of its population is active in the labour market (although formal unemployment is no more than 7–10%). An estimated 59% of its inhabitants are under twenty- five (UNDP, 2009). The city has a very high population growth rate. The total number of its inhabitants was projected to grow to 4.94 million by 2021, yet already reached 5.1 million in 2017 according to the recent census (CAPMAS, 2017).

Alexandria's harbour plays an important role in the Egyptian economy. Its capacity represents 75% of the total capacity of the Egyptian Mediterranean ports. It accommodates 40% of the total Egyptian industry and 56% of the petroleum industries. It faces the challenge of providing both services and infrastructure for all those facilities.

Alexandria's urban pattern has become divided. The historical buildings are at risk of being demolished, while the number of informal areas is growing. The city has the highest number of unsafe buildings in Egypt. At the same time it is witnessing a new phenomenon of high-income gated compounds in the suburbs.

Mobility in the city is a major challenge as it is a linear city with a few streets mainly parallel to the sea, with a few others perpendicular to them. The existence of several barriers complicates things. The challenge is how to provide efficient mobility for the residents all year round and for three million summer visitors.

The pollution of El Mahmoudia Canal, Lake Mariout and sea water due to the discharge of untreated waste water and industrial waste is another issue, which is exacerbated by the growth of informal areas that lack infrastructure around canals and proper sewage systems (UNDP, 2009).

Another environmental challenge is the rising sea level. An assessment of the vulnerability of Alexandria suggested that with a sea-level rise of 50 cm, more than two million people would have to abandon their homes, 214,000 jobs would be lost and the cost of lost property and tourism income would be over \$35 billion, which does not include the immeasurable loss of world famous historical, cultural and archaeological sites (UNDP, 2009).

Although the challenges have been identified by many local, national and international entities the problem is setting priorities, proposing plans and determining who takes the decision and who finances. Thus there is a need to study the different stakeholders and their current and proposed roles.

# 4. Stakeholders, city administration and institutions

#### 4.1. The central government and the city

Dealing with the relationship between the central government and the cities in Egypt is a difficult task. First, there is no tradition in this respect. Egyptian administrations have been top heavy, as life in Egypt has always been totally dependent on the Nile River and the need for a central authority to distribute the water. Second, the relationship between the city and the central government is subject to the personality of the governor of the governorate or head of the city (Sirry, 2007).

It is only in modern history and under foreign rule that some Egyptian cities have experienced some kind of self-rule when foreign rulers introduced aspects of their systems of government and set up some municipalities in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. Alexandria municipality was only created in 1890. Each of these municipalities was headed by a director general who was responsible for all public utilities and services, infrastructure, planning, building regulations and land uses, as well as supervising other aspects of urban development. The members of the municipal council were directly elected, and each municipality had its own resources provided through local taxes and levies (Rageh, 1992).

But this system did not last long. Soon after the 1952 revolution, the state regained all its authority and power by virtue of a law enacted in 1960. Ironically enough, it was named the Law of Local Administration. Alexandria municipality soon became one of 24 governorates that were created by that law. Since its enactment and its amendments there has been no real local administration. The relationship between the central government and the contemporary Egyptian city is not limited to the administration, but as Rageh suggests "it often exceeds it to almost full domination" (Rageh, 1992).

Starting in the new millennium some decentralisation policies have been implemented, especially those dealing with budget lines and planning, but still with limited effect. Large projects in the cities are usually carried out by the central ministries with no significant participation or consultation of cities, in spite of the fact that such projects affect their future.

In Alexandria, for example, the following pivotal projects were planned and executed by different central agencies and ministries, without the participation of the city: the decision to enlarge the waterfront road, the decision on where to discard waste water (in the sea or inland), the decision on the location of the solid waste landfills and the decisions on the routes of the international coastal road and the ring road that was planned to control the growth of Alexandria and facilitate transportation (Sirry, 2007). The decisions on the sites of the first nuclear power plant in Daba and the new one–million-person city in El Alamein were also taken centrally in Cairo, although both will have a direct effect on the city and the Governorate of Alexandria.

#### 4.2. The city administration and the governor

Almost 15 years ago, under an active governor, the city started a huge project to revitalise the city, concentrating on waterfront projects, designing a new Corniche and opening the new Alexandria Library. The decision to build the library and to widen the Corniche was taken in Cairo and implemented by the Ministry of Housing through its agency for north coast development, but the decision on revitalising many Corniche palaces and theatres on the waterfront was taken by the governor. Unfortunately, the Corniche took more than its fair share of allocated investments. But this experience has demonstrated that an active governor can take decisions for the city and can negotiate with central government and the local businessmen for the benefit of the development of the city.

As a second city, the administration structure also includes a representative of each one of the central ministries. Although based in Alexandria those representatives cannot take any decision without consulting the headquarters in Cairo.

#### 4.3. Alex Med/ Bibliotheca Alexandrina

The new library plays an enormous role in the revitalisation of Alexandria, nationally and internationally. The Alexandria and Mediterranean Research Center (Alex Med) has been established within the library to document and implement research on the tangible and intangible heritage of Alexandria and the Mediterranean and promote dialogue and exchange in the region. It seeks both to preserve the past and to promote the future development of the city of Alexandria by conducting research on its heritage and holding conferences and exhibitions.

Alex Med coordinates the work of the committees established by the governor to identify the historical buildings. It has also created digital maps and databases of the buildings, streets, districts and art works in Geographic Information System (GIS) form. In 2008, the resulting Alexandria Heritage Catalogue was approved through Declaration No. 278 of 2008 (Alex Med, 2018).

#### 4.4. Local associations and societies

Alexandria has several associations that work as partners and help develop Alexandria. Among the most important is the Alexandria Business Association (ABA). This non-profit association founded in 1983 promotes the interests of the business community through the Alexandria Chamber of Commerce. ABA's primary goals are to develop and promote existing small and micro-enterprises, raise the income of SMEs and help the transformation of SMEs from the informal sector to the formal sector. ABA's SME Project is based in Alexandria and works in five other governorates through 80 branches, serving 243,000 active small and micro-entrepreneurs. The SME Project works with UNDP to replicate the experiences in Yemen and Bahrain. ABA has also helped to finance many Alexandrian development projects (ABA, 2017).

#### 4.5. Donors/international entities

Many international entities have participated in efforts to develop Alexandria by identifying the challenges, developing physical plans, implementing development pilot projects including the Cities Alliance, UN-Habitat, GIZ/PDP, USAID and others.

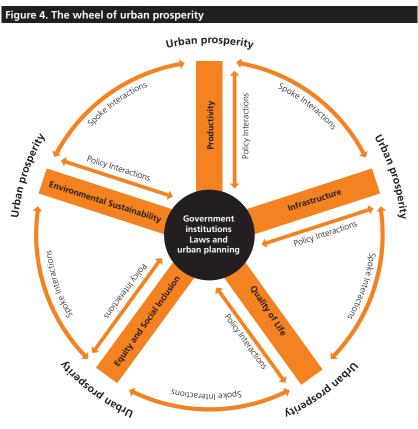
UNDP has collaborated with other national and international agencies in the different efforts to prepare plans for the city. Through these plans problems were identified and priority projects for intervention were developed that would be implemented through other donors and local NGOs. USAID worked with the Water General Authority, which has existed for more than 100 years, during its transition to a corporate company in line with the national neoliberal reforms. It helped in improving water quality, coverage and management. The Swedish Institute Alexandria (SwedAlex) has been working on documenting and providing descriptions of Alexandria's diverse cultural heritage, its streets, buildings and areas. This project includes maps, photos, and other materials (SwedAlex).

GIZ/PDP has been working on the participatory upgrading of informal areas in Egypt. It has implemented five projects in informal areas, two in Cairo and three in Alexandria. The informal areas in Alexandria are Amrawy, Hadara El Gedida and Nag' El Arab (2002–2006). This project includes the provision of basic infrastructure, services and tenure security using participatory means of identifying priorities. Although there are many different national and international donor entities working in the development of Alexandria, coordination among them is lacing.

#### 5. Measuring the success of development plans

In recent years most cities in the world have faced several crises, among them the financial crisis of 2008, the democratic crisis of the Arab Spring of 2011 and political identity crises in many EU countries. Last but not least there is the environmental crisis caused by the current pattern of urbanisation, especially in developing countries (UN-Habitat, 2012: 5). This highlights the fact that economic growth is necessary for the achievement of prosperity, though insufficient on its own. There are several indices for measuring the development of nations and cities, including GDP (gross domestic product) and other indices of social and economic development, yet I would argue in favour of using the City Prosperity Index (CPI) to measure urban development. The CPI is a balanced and resilient type of development that combines tangible

and more intangible aspects (UN-Habitat, 2012: xi). The CPI includes five dimensions like the spokes of a wheel. They are productivity, infrastructure development, quality of life, equity and social inclusion and environmental sustainability (UN-Habitat, 2012).



The City Prosperity Index (CPI) is a balanced and resilient type of development that combines tangible and more intangible aspects.

Source: UN-Habitat (2012: 12).

Egypt created an urban observatory in 1999 under the General Organization for Physical Planning (GOPP) as an entity to measure the effects of development plans. However, the observatory has only collected data on basic urban indicators. In a big project in 2008 the observatory took a sample of seven Egyptian cities, including Alexandria. The data covered the physical aspects of urban development and also conducted a survey of the people's overall satisfaction with different public services, the infrastructure and the environment of the city.

In Alexandria between 80–100% of the sample were satisfied. Only a small portion of the sample was not satisfied with the recreation facilities (GOPP, 2012), although only three years later a revolution broke out that was huge in Alexandria. This suggests that the urban indicators on housing, infrastructure and services do not identify the social or equity problems or those relating to quality of life accurately. Other intangible indicators that are included in the prosperity index do a better job at that.

The GOPP observatory has recently applied the CPI to the city of Sohag in Upper Egypt. The city's administration and the central government agencies used the CPI results to identify and remedy negative aspects of

development plans through new programmes and projects. Thus, using the CPI for Alexandria is recommended to help the city management and central government take wise, informed decisions.

The main challenge to urban governance and legislation is the centralised government. More decentralisation measures and the strengthening of the local government in fields such as municipal local finance are in order.

#### 6. Conclusion and recommendations

The new vision of Alexandria should be a wise vision, one that would require negotiating many competing interests. It would need to settle longstanding conflicts between preservation and development, as historic preservation itself is undergoing a transformational redefinition internationally. It would also need to redefine the spheres of influence between Alexandria and the central government. This would require new planning approaches, innovative tools, diversified actors and better coordination of existing ones.

For a long time, historical preservation was seen primarily as an important end in itself, but in recent years, advocates have sought to defend preservation as a practice that serves a broader array of public interests. In 2010, for example, Econsult released a report showing that preservation projects in Pennsylvania had accounted for more than \$1 billion of investments, 9,800 jobs, and \$24 million in state tax revenue over a period of ten years. Preservation work had generated \$660 million in investment, 2,800 jobs, and \$6.6 million in tax revenue in Philadelphia alone, the report concluded (Brey, 2017)

Until now Alexandria has been using regulations to manage development, but has not used any incentives to protect the important places that reflect the values of its residents. Alexandria should create a task force that would include preservationists, historians and architects, but also archaeologists, developers, attorneys, economists, planners and community representatives to develop such incentives.

This article recommends that for restoring the image of Alexandria as a healthy, inclusive and open community, urban planners must take notice of good international practices. Alexandria has to restore its plazas, ensure the mixed uses of its areas and the walkability of its neighbourhoods and the openness of its beaches and cafes.

The main challenge to urban governance and legislation is the centralised government. More decentralisation measures and the strengthening of the local government in fields such as municipal local finance are in order. It could help to recognise the importance of community contribution to the sustainability of urban solutions.

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