



# ALEXANDRIA: REGENERATING THE CITY

A CONTRIBUTION BASED ON AFD EXPERIENCES



# ALEXANDRIA: REGENERATING THE CITY

CONTEXT AND OBJECTIVES	4
<b>PART 1: THE EMERGING METROPOLIS</b>	6
<b>Alexandria: strong environmental assets, but some vulnerabilities too</b>	7
A unique environment threatened by urbanisation	7
Climate change: increasing risks for Alexandria	8
A large linear metropolis: rapid urban growth and massive informality	8
Congested urban transport system and contested public realm	10
The deterioration in Alexandria's rich multiform heritage	12
<b>From state to Alexandria Governorate: the evolving urban planning</b>	14
Multi-level urban governance in Egypt: a quick overview of a centralised system	14
Coordinating numerous players in the real estate market	16
<b>"SUP Alex 2032": an ambitious comprehensive approach</b>	16
A comprehensive urban strategy under construction	16
Key challenges for implementation of SUP Alex 2032	19
<b>PART 2: IMPROVING LOCAL INSTITUTIONAL GOVERNANCE</b>	20
<b>A City Planning Agency: a monitoring tool for the Governorate</b>	20
City Planning Agency: a role as a catalyst for supporting local authorities in urban planning	20
Bamako and Addis Ababa: two examples of AFD support for the creation of agencies	21
Setting up the Alexandria Development Agency	22
<b>Project implementation bodies: an efficient tool in the hands of the Governorate</b>	22
The roles of specialised implementing bodies	22
Special local authority coordinating urban transport	23
Special entities implementing urban projects	24
<b>PART 3: A PROJECT-BASED APPROACH TO STIMULATE URBAN DEVELOPMENT</b>	26
<b>Transit-Oriented Development (TOD): a catalyst for urban transformation</b>	27
Foreign examples supported by AFD to improve sustainable urban development	28
TOD potential for Alexandria urban development	28
<b>Brownfield regeneration: optimising land, diversifying the city</b>	30
Brownfield development projects: a variety of programmes and objectives (France, UAE, Belgium)	30
A unique opportunity for Alexandria: Minat El Bassal and Kafr Ashry	31
<b>Urban renewal in historical core area as economic leverage for the local population</b>	32
Lebanese Cultural Heritage and Urban Development Programme through AFD and World Bank funding	32
Urban renewal, economic revitalisation and social inclusion: the challenges facing Alexandria	32
<b>Safeguarding natural assets: the blue and green corridors</b>	36
Mexico City: preservation of wetlands programme financed by FFEM and AFD	36
A gradual approach to "green" and "blue" in Alexandria	36
<b>ALEXANDRIA AT A TURNING POINT</b>	39
BIBLIOGRAPHY	40
APPENDIX	42

# CONTEXT AND OBJECTIVES

Alexandria, the second biggest city in Egypt has throughout the ages shown its magnificence. Its recent development and rapid growth have, however, created urban constraints and weaknesses.

The ongoing impressive work of the Strategic Urban Plan of Alexandria City 2032, led by the GOPP (General Organisation for Physical Planning) of the Arab Republic of Egypt and its Regional Planning Centre in Alexandria in close collaboration with the Governorate of Alexandria, highlights the weaknesses of the territory (urban growth putting stress on the environment) but also its many assets (heritage, powerful industry linked to port activities, environmental assets, tourism potential, strong academic population, etc.), which sets a vision to address the development challenges of the metropolitan area.

The Strategic Urban Plan 2032 (SUP Alex 2032) Phase 1, which was officially presented in 2014 with no less than 1,400 pages of analysis covering all fields of urban planning expertise, proposed a City Vision for Alexandria (2013) based on a new Geographic Information System (GIS) encompassing all Alexandrian districts and covering 120 sq. km.

The Governorate of Alexandria has not waited for the outcome of SUP Alex 2032 to tackle congestion and promote

city development with projects such as an international tourist centre on the Corniche waterfront, the Alexandria Port Development plan and new neighbourhoods mixing residential and commercial activities.

The City with its potential as the second largest city in the country, together with the opportunity for public debate created during the design of the urban strategy, have encouraged the AFD (French Development Agency) and Bibalex (Bibliotheca Alexandrina) to sign a protocol agreement on April 15th, 2013, to organise an international workshop on sustainable urban development issues in the Mediterranean. This partnership between AFD and Bibalex was expanded to the Marseille Centre for Mediterranean Integration (CMI).

This workshop, held in the Bibliotheca Alexandrina on June 18, 2014, gave the floor to Alexandrian academics and researchers to present the first results of feasibility studies of a dozen urban projects. More than 100 participants attended the workshop, including Mr. Tarek Mahdi, then Governor of Alexandria, Mrs. Dominique Waag, General Consul of France in Alexandria, members of the Egyptian administration, representatives of the cities of Marrakech (Morocco), Sfax (Tunisia) and Saïda (Lebanon), several international and national experts, aca-

demics and researchers from Alexandrian universities, together with civil society and private sector stakeholders.

The workshop highlighted a real urban development dynamic taking place in Egypt. The creation of a new Ministry for Urban Renewal and Informal Settlements (MURIS), which took place the day before the workshop, as one of the first measures taken by the Mehleb second government, shows a strong political movement and the importance of the ongoing dynamic. The workshop was also an opportunity to remind people of how discussion with central authorities was relevant and necessary.

This publication, as a follow-up to the international workshop, is also a contribution to the current debate and reflections on the future of the city, and is closely linked to the elaboration of SUP 2032. The challenge is to build upon the work done on these projects, reflecting the interests of civil society, represented by its academic elite, in order to encourage reflection on the transformation of Alexandria, and to show investors the opportunities for urban and regional development.

The objective is not to list all urban proposals in Alexandria, but to formalise some guidelines and recommendations based on the presentations and discussions during the workshop. This publication aims also to draw the attention of decision makers to the opportunities revealed

by the studies and, in particular, to draw the attention to this of the Alexandria Governorate, on the one hand, and the ministries in charge of urban development (Ministry of Housing, Utilities and Urban Communities, Ministry of Urban Renewal and Informal Settlements) and the national agencies such as NUCA (New Urban Communities Authority) and NOUH (National Organisation for Urban Harmony), on the other hand.

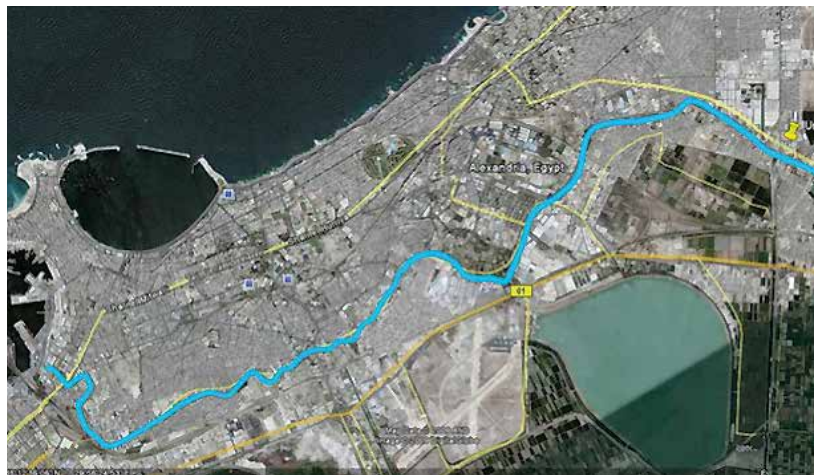
This publication should be seen as an illustration of the legitimate ambition of Alexandria to remain master of its future development and to find in its natural, social, cultural and human assets, reasons for an economically, socially equitable, ecologically sustainable strong future. It also marks the path towards regaining a position of influence in the regional, Mediterranean and Arab context.

Some of these guidelines and recommendations are based on reflections produced by the French Platform for Cities and Territorial Development (PFVT) created in 2011, which is the vehicle for exchange and promotion of French expertise in urban development at the international level. Some of them have been directly drafted in this publication. Lastly, this document aims to give some examples of good practices and examples in Mediterranean cities, some of them being funded by the AFD.



PART 1

# THE EMERGING METROPOLIS



Alexandria from the sky (NASA - 23 July 2003). Dr. Abdelfatah el Mousli

Alexandria is a Mediterranean city more than 2,000 years old. It is the second largest city in Egypt after Cairo, with a population of about 4.7 million people (Latest CAPMAS estimation 1/1/2014). It was once home to the ancient Pharos Lighthouse, one of the legendary Seven Wonders of the Ancient World, and home to the great Library of Alexandria, attracting scien-

tists, philosophers, mathematicians, artists and historians of ancient times.

Founded in 331 BC by Alexander the Great, Alexandria was the capital of Egypt for over 1,000 years. It is currently the main port of Egypt and its territory is spread on a peninsula and a strip of land separating the Mediterranean from Lake Maryut.



*Mahmoudieh Canal in Alexandria.* PA Barthel, AFD, 2015



*Lack of solid waste management in the city centre.* Ahmad Badr, AFD Egypt

From the beginning of the Mohammed Ali era (1805), there was a continuous growth of population. In 1905, 370,000 inhabitants were living on a 4 sq. km. territory between the two harbours (Sharaf El Din, Ragheb, 2013). Since then, the city has expanded rapidly, eastwards and westwards. Alexandria's surface area is currently around 300 sq. km. with a population of 4.7 million, with a density of around 30,000 inhabitants per sq. km. (Alexandria fact sheet, SUP Alex 2032 – Vol 1, Sept 2013). The growth rate is estimated at nearly 1.7% per year (Sharaf El Din, Ragheb, 2013).

Although Alexandria benefits from most of the services that can be found in Cairo, the attractiveness and national and international prestige of Cairo is much greater and Alexandria suffers from a brain drain in favour of the capital city. A disproportionate concentration of resources benefiting Cairo at the expense of other urban areas in the country has been magnified since the 1950s and has led to a higher concentration of educational, health, cultural, recreational and commercial amenities in Cairo.

Alexandria has recognised the challenges and the need to move slowly out of Cairo's shadow and assert its own strategic vision as a major Egyptian, Mediterranean and Arab metropolis.

The idea is not to compete with the capital city, but to find better complementarities and synergies between the two large cities.

### **Alexandria: strong environmental assets, but some vulnerabilities too**

Compared to Cairo, Alexandria benefits from greater environmental assets but is more vulnerable.

#### **A unique environment threatened by urbanisation**

Sited on the sea and close to a number of lakes and canals, Alexandria has a sea-board ideal for tourism, fishing and port activities, and has a fresh water reserve for agriculture and urban population needs that should be preserved.

As many Mediterranean cities, Alexandria is facing increasing water needs to service a rapidly growing population, increased urbanisation, higher standards of living and an agricultural policy that emphasises expanded production. Moreover, almost half of Egyptian industrial activity is located in and around Alexandria, which is a major water consumer. In the last ten years, there has been a 50% rise in water demand (World Bank, 2011).

Despite being located in an arid zone, natural and green spaces are numerous,

thanks in particular to agricultural activities. However, this green environment that could balance the mineral environment of the dense urban area is at risk with informal urban growth and poor waste management invading green and blue (canal) spaces. Today, the city of Alexandria is expanding along a high-density corridor between the sea and the desert, so very few green spaces are available for recreational areas or for providing shade.

Most areas suffer from a lack of basic services such as solid waste collection. Wastewater collection might be efficient enough in some areas, the discharge capacity is low (equivalent to a 2-year flood event), so overflows at manholes or pumping stations during winter storms (squalls) are frequent (World Bank, 2011).

Agriculture around the Matar Lake has slowly disappeared under urban pressure; informal residential buildings are encroaching on areas where zoning should have protected green space for agricultural activities. The water network remains largely inefficient, with distribution losses accounting for a third of the water produced.

The Mahmoudieh Canal, a major source of clear water in the governorate, is currently being invaded by solid waste and industrial waste.

**Climate change:  
increasing risks for Alexandria**

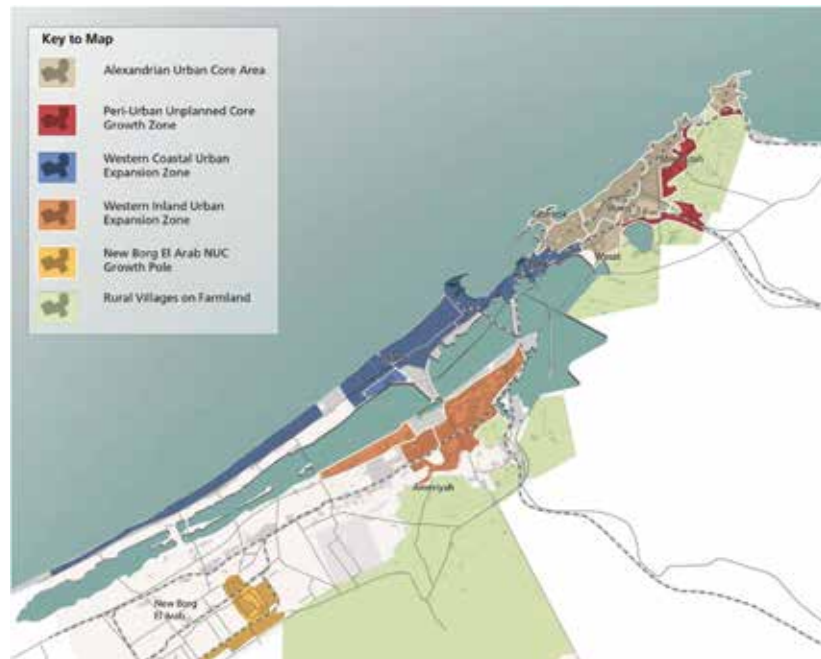
The city is built on a T-shaped peninsula, a land strip caught between the sea, lagoons and former lakes. Large parts of the city lie below sea level, which makes flood and drainage a critical issue. This geographical situation and the urban pattern make the City highly vulnerable to ecological hazards.

According to SUP Alex 2032, the City is expected to grow from 4.1m to 6.8m by 2030 (65% population growth rate) putting pressure on the site. Physical constraints coupled with environmental risks call for future urban development away from low-lying areas.

According to a report by the World Bank (2011) the situation should worsen by 2030: the city is built on a narrow and partially elevated coastal ridge facing the sea and is exposed to marine submersion, coastal erosion, earthquakes, flooding and water scarcity risks.

Informal areas, which house one third of Alexandria's total population, with deteriorating buildings and infrastructure in the old and dense parts of the city, and fast urbanisation of surrounding areas over reclaimed wetlands and other low-lying areas make the city particularly vulnerable to these risks. After the Egyptian January "revolution" in 2011, the development of buildings in unplanned and illegal areas has increased together with the seismic risk as their foundations are no longer sound and are particularly susceptible to earthquake and land subsidence.

Moreover, the city may face higher marine submersion as storm surges in association with spring tides (high tides) raise water levels by 60cm above normal, and can submerge the shoreline. Despite protection by natural ridges or sea walls, low-lying areas expan-



*Residential land-use patterns of the Alexandrian cityscape. SUP Alex 2032, vol. 1. Page 20*

ding around Lake Maryut and South of Abu Quir are not fully protected. As of today, the beaches of Alexandria, from Mandara to El Silcila, are experiencing chronic long-term erosion of ~20 cm/yr. and water scarcity risks, along with an increase in seismic, land subsidence, and flooding risks.

Alexandria city is also affected by terrain deformation such as subsidence and uplift. Between 5 to 9% of the measured points correspond to negative movement or land subsidence. The natural (i.e. not tectonic) rate of subsidence is estimated to stand at about 0.04 cm/year. The most affected areas within Alexandria city are along the northern border of Lake Maryut, and in the southern part of the city between Gharb and Abu Quir districts.

The annually averaged variations of water level (tide-gauge records) measured at Alexandria Western Harbour from 1944 to 2006 (60 years) and the data measured at Abu Quir Harbour (1992 through 2005; 14 years) shows

that the mean sea level at Alexandria and Abu Quir has risen 1.8 and 3.4 mm/yr, respectively. The highest risk of flooding, in the event of either a storm or general sea level rise, is mostly at Abu Qir Bay and would flood the urban core from inland rather than a direct hit from the sea.

While disaster risks are growing due to climate change and continuing urban expansion in new sites exposed to natural hazards, the institutional capacity in Alexandria to manage these risks and prepare communities for potential future disasters and climate change impact is limited. The current organisational set-up of the emergency response systems remain highly centralised with limited horizontal and vertical coordination between agencies down to the level of local communities.

**A large linear metropolis:  
rapid urban growth and massive informality**

Today, the city stretches along the coast for 85 kilometres (as far as the new



## THE CHALLENGE OF IMPLEMENTING A NEW CITY PROJECT IN THE SUBURB OF ALEXANDRIA:



*Borg Al Arab seen from above.* Angus Hamilton Haywood, Flickr

The New Borg El Arab New Urban Community is a new town close to the industrial factories and the Borg El Arab airport. The New Town was planned to reduce commuting between Alexandria's core city and industrial areas, prevent urban sprawl on agricultural land and absorb current and future population increases. However, New Borg El Arab is still underdeveloped (NUCA estimation of current population is 150,000 for a target population of 570,000 inhabitants) due to a lack of services and of urban transport.

Except for this major urban development project, the natural growth trend is both to densify and to spread East of the city centre inside the hinterland. One of the city's future challenges is to direct and formalise this growth pattern

border of the governorate at the Marqua sea resort area in the west) where the industrial sector (accounting for 40 percent of Egypt's industry) coexists with prosperous tourism services for national tourists with more than 3.0 million visitors a year. The diversified economy therefore offers jobs to a growing population, the product of natural increases and migration.

The city more than doubled its built-up area during the last quarter century. During this period, waves of development resulted in a shift from the old central districts of Wassat, Gomrok and Gharb to the north-eastern (Montazah, Sharq) and south-western (Al Ameriyah) parts of Alexandria City with a sprawling suburban pattern leading to a considerable consumption of agricultural land without adequate urban infrastructure, as can be observed in New Borg el Arab and Lake Maryut.

### **SUP Alex 2032 analysis identified 5 urban patterns in Alexandria:**

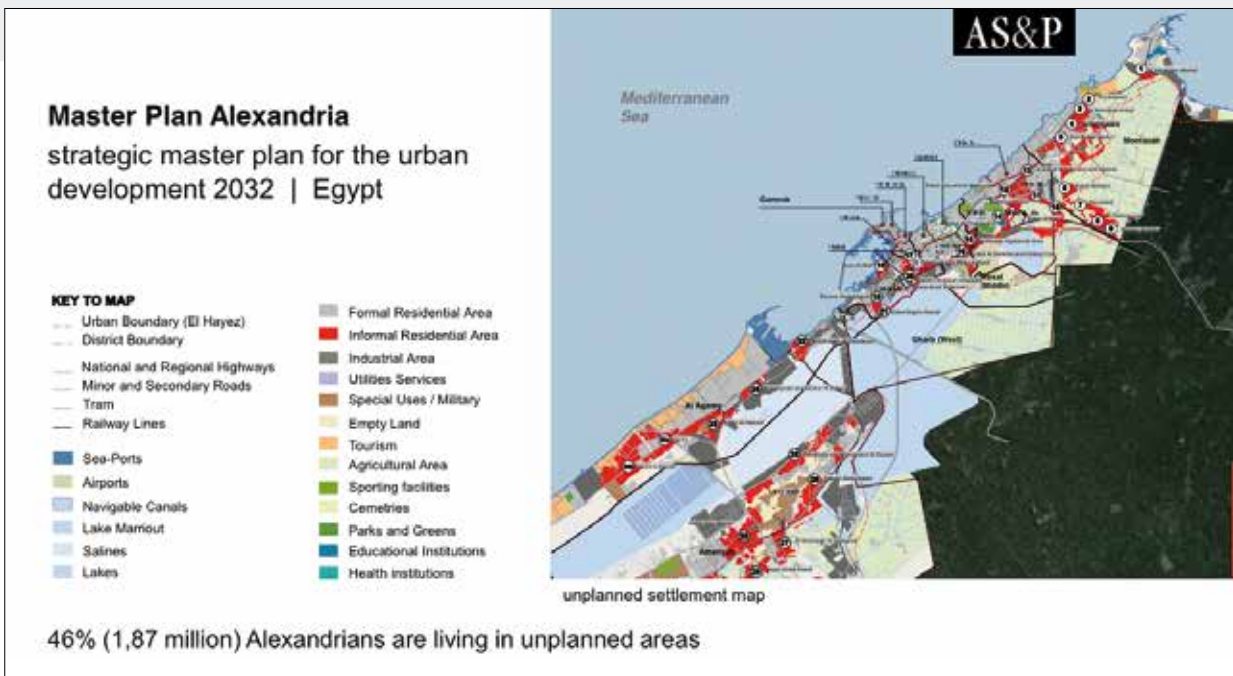
- Alexandria urban core area (high density with multi-storey buildings with a hierarchical road structure, in the area along the waterfront and going up to Matar Lake);
- Periurban unplanned growth zone (high density and tall buildings, less planned road structure, close to the urban core area and along the South-East rail tracks);
- Western coastal urban expansion zone (new urbanisation for medium to high class residents, projects juxtaposing lower density developments with villa subdivision or small 2-storey buildings, resorts, in the area along the beach towards West);
- Western inland expansion zone (less planned development featuring a lower density than the core urban zone,

but with development possibilities on wastelands);

- New Borg El Arab New urban community, a highly planned area, with hierarchical road structure and mid-rise buildings.

In these urban patterns, the population is split according to their income profiles. The city is longitudinal with the highest-class residential areas close to and parallel to the coast. South of this area are the middle-class districts, and behind the railway track and south of Mahmoudieh Canal are the low-income areas, usually informal. Nearby are some of the city's unplanned and informal areas, multi-storey residential buildings erected out of necessity, without permission or compliance with design regulations, and already threatening to collapse.

Informality is the key feature of the



Unplanned areas in Alexandria. Albert Speer & Partners for Alexandria Governate

Alexandrian housing market. Most transactions are arranged by word-of-mouth (84%) and non-market exchanges represent up to 40% of housing transactions. The population of the informal housing areas amounts to over 1,584,000 persons, which represents over 40% of the total population of the city and makes up 17.2% of the urbanised area. 46.5% of the population is still living in unplanned high density areas, with poor streets and road conditions and lack of community services and utilities (unpaved streets, inadequate access to healthcare, education and community facilities).



Conflict and congestion between tram and cars. Lise Breuil, AFD, 2014

The diagnosis of SUP Alex 2032 estimated that 8,500 hectares are needed for future residential developments. Only a fraction of this is available inside the urban boundaries and, due to its scarcity, formal residential building land is quite expensive.

### Congested urban transport system and contested public realm

Urban growth has generated an unbalanced distribution between working places and residential areas with increasing commuting times, congestion and pollution. At the same time, central areas have been growing vertically causing more congestion and higher demand for services that the city cannot

deliver. The level of service of roads is currently very low. The transport system is inadequate to meet current long-distance commuting needs. Due to the linear shape of the city, commuter flows and traffic congestion are concentrated in the few east-west corridors, and the city is not pedestrian-friendly - even short-distance trips can be a hassle, especially in the urban core (36% of trips completed on foot).

The public mass transit system does not provide sufficient coverage and capacity and suffers from a serious deterioration in the quality of the fleet. As a result, private vehicles and priva-

tely operated minibuses care for part of the passenger flow on shared roads, which increases traffic congestion. Taxis substitute for public transport for local trips, even though it is not a financially satisfactory solution for passengers.

Total public transport volume in 2010 was estimated to be 220 million passengers a year, i.e. 603,000 passengers a day. Total privately operated minibuses in 2010 conveyed about 1.5 million passengers a day, i.e. 547.5 million passengers a year (AS&P, 2013, vol. 6. p. 18). The volume of public passenger traffic has been decreasing significantly over the years.



Tamway (Raml Tram) in Alexandria. Lise Breuil, AFD, 2014

### DAILY MOBILITY PATTERN AND MODAL BREAKDOWN AT 2032 HORIZON, ALONG LONG-TERM URBAN TRANSPORT SCENARIO

	2014 – Base year		2032 – Master Plan		Evolution
Nb. Inhabitants (M)	4.6		6.9		50%
Total motorised mobility/inhab. <sup>1</sup>	1.3		1.3		-
Daily car trips/inhab.	0.6		0.5		-
Cars and taxis <sup>2</sup>	3 000 000	39%	3 300 000	30%	10%
Collective taxis <sup>2</sup>	4 100 000	53%	5 500 000	50%	34%
Public transport <sup>2</sup>	600 000	8%	2 100 000	19%	250%
Total motorised mobility/day <sup>2</sup>	7 700 000	100%	10 900 000	100%	42%

Source: Egis, 2014, Alexandria Urban Transport Study, AFD

1. This figure is computed by taking the number of trips made by the people living in Alexandria within its borders (i.e. the total of the matrix without the external zones) and dividing it by the total population. The

total number of internal trips amounted to 6.2 million in 2014 and should amount to 8.7 million in 2032.

2. Including the trips made to and from the external zones.

Besides, no transport authority regulates public transport in Alexandria. In this context, transport operators are running their own service without coordination between the different services (bus, train, minibus, etc.).

Street vendors occupying the public space usually come into conflict with the transit system. Very few green spaces are available for citizens who lack recreational areas. The Corniche is not pedestrian-friendly.



Street vendors occupying public space. Fabio, Flickr



### The deterioration in Alexandria's rich multiform heritage

Alexandria is an ancient city made up of layered spatial configurations and architectural styles ranging from the Ptolemaic era, followed by the Hellenistic City with a grid spatial pattern to the Imperial Roman town and the Islamic city. The city came under European influence between the 19th and mid-20th centuries (economics, culture, architectural style, CBD and Corniche) (Mohareb & Kronenburg, 2012). Alexandria has a

very rich heritage that has been forsaken (architectural treasures in the colonial district and the Medina) due to a lack of public investment or of incentives for private owners who cannot afford refurbishment costs. Rent control has left many owners of protected historical structures without the financial resources to preserve their buildings and building collapses are happening all too frequently.

The city should recover its prestige and greatness by emphasising its architec-

tural landmarks and the Corniche road transformed into an attractive waterfront rather than the motorway it is today. The challenge is that the historic layers of development create a complex urban situation that cannot be addressed with conventional regeneration instruments such as the demolition and reconstruction of buildings. Each periodic layer has its own value and constraints to be taken into account when deciding to regenerate a site or district.

## URBAN FABRIC TYPOLOGY IN ALEXANDRIA

PERIOD	2014 – BASE YEAR
Ptolemaic area – 4th Century B.C.	Few elements remain dating from the founders of Alexandria, but they are considered as the most valuable
Hellenistic City	Grid spatial configuration, new civic monuments
Imperial Roman City	Villas, public buildings, monuments, harbour
Islamic City	Qaitbay Citadel, traditional markets
Ottoman then Colonial City	Major infrastructures: Mahmoudieh canal, first railway and tram lines (connection between eastern section, city centre & western parts) Many heritage buildings from the period in the core city (public buildings, banks, hotels, city villas, shops, etc.) and privately owned buildings in bad shape. Multi-ownership properties make major revitalisation projects difficult.
Industrial City	Production units and warehouses along transport routes and road infrastructures. Many brownfield sites on the fringes of the city offer development opportunities. Out-of-town major industrial sites, new settlements, new roads for truck traffic.
Contemporary City	Major cultural facilities (BibAlex), resurrection of archaeological sites (Pharos), new shopping malls in the city outskirts, regeneration of iconic buildings such as hotels, markets, informal housing





*New Bibliotheca Alexandrina, architect: Snøhetta, opening 2002. Ahmad Badr, AFD Egypt*



*Industrial heritage, Minett El Bassal neighbourhood. Ahmad Badr, AFD Egypt*



*Buildings on the Corniche. Stéphane Gallay, Flickr*



*British colonial heritage, Misr train station. David Stanley, Flickr*



*Citadel of Qaitbay, Eastern harbour. Ahmad Badr, AFD Egypt*

## **From state to Alexandria Governorate: the evolving urban planning**

A policy shift at the national level has started in Egypt for the last 10 years. First, the General Organization for Physical Planning (GOPP) reviewed all the existing urban plans. Strategic planning is therefore the approach promoted by the central level that was tested even in small cities in the country at the end of 2000s. This strategic “turn” is accompanied by the willingness to redesign the existing or future new cities which suffer from zoning and lack of urban mass transportation. Therefore, the New Urban Communities Authority, in partnership with GOPP, launched new strategic plans for a set of new cities with the ambition of densification, functional mixity, environmental criteria for the design and management of public spaces and buildings that are created from scratch in desert areas. Secondly, another shift is related to unplanned and “informal” areas. The Informal Settlements Development Fund (ISDF) was created by the government in 2008 with the mandate to secure “unsafe” informal neighborhoods. This new entity merged in a new Ministry

of Urban Renewal and Informal Settlements (MURIS) in 2014 which gave a positive signal and a shift of paradigm after decades of lack of recognition. Since the central level is strengthening its role through new national operational and political entities, the next step is to build up capacities, partner with the local governments on common objectives and roadmap, and open the door to participative approaches with the population and the civil society.

### **Multi-level urban governance in Egypt: a quick overview of a centralised system**

Centralised decision-making is one of the major challenges facing urban and community development in Egypt. There is a lack of coordination between central urban development organisations and local entities. Consequently, many decisions, laws, policies and procedures are not locally rooted enough to meet the needs of local communities.

In short, four main national institutions within the central government are directly involved in territorial governance: the line Ministries; the

General Organisation for Physical Planning (GOPP); the National Centre for Planning State Land Usage (NCPSLU); and the Supreme Council for Planning and Urban Development (SCPUD) headed by the Prime Minister.

According to Article 1 of the Law on Local Government no. 43/1979, local government units include the governorates, administrative districts, towns, quarters and villages. Each of these units is considered as a legal entity. The local units are responsible - each in their area of competence- for the management and operating of public utilities and the enforcement of the laws and regulations relating to organisational matters. The regulations apply as follows: each local unit is assigned to a certain level of the service it provides in other fields such as social affairs, logistics, agriculture, land reclamation and irrigation, etc. (Zaker and Mahmoud, 2012).

The executive regulations specify the utilities to be entrusted to the governorates for their establishment and management, and those whose establishment and management will be entrusted to other local government units.

## **THE LEGAL FRAMEWORK: THE KEY ROLE OF THE GOVERNOR IN EGYPT**

Appointed by the President of the country, the Governor, as President of the Governorate, has complete authority over all services, utilities, and production within the scope of the governorate with respect to all public utilities that enter within the competence of the Local government units. (Article 2 of law n° 43/1979).

The Governor shall have the stated power of the minister with regard to resolutions issued by the public authorities' boards of directors, who take charge of the provision of public utility services within the scope of the governorate.

The Governor shall take charge of the supervision of national utilities within the boundaries of the governorate and also of all the branches of the ministries, whose powers have not yet been transferred to local units (this has only been enacted for the ministry of housing), except for the judicial authorities and their assisting bodies. (Articles 26-29, Law 43/1979).

In the field of housing, urban affairs and municipal utilities, the governorate's authority shall propose the urban planning projects in its area and shall approve the plans and the projects related to housing, construction and utilities.

The governorate, according to the regulations set by the council of ministers, will be responsible for financing and constructing the economical housing projects and dealing with land designated as constructible and owned by the state and the local government units.

### THE PARADIGM SHIFT OF LAW NO. (119) OF 2008

Law No. (119) of 2008 provides that there shall be a public department for urban development in each governorate. Local Government units, rather than taking sole responsibility for preparing general and detailed plans for cities and villages or for working with consultancies or regional universities, can rely on the establishment of a planning committee in each governorate, consisting of experts in the fields of urban planning, architecture, public utilities, transport and roads, social, economic, agricultural, industrial, tourist, environmental and legal affairs, including people who are interested in urban planning representing different classes of the community. (Zaker and Mahmoud, 2012)

### DISTRIBUTION OF PLANNING AND DEVELOPMENT POWERS BETWEEN GOVERNANCE LEVELS

SECTOR	NATIONAL LEVEL	LOCAL BRANCH OF MINISTRIES	GOVERNORATE	PRIVATE SECTOR, NGOS
Planning and Urban Strategy				
Land management and building permits				
Urban Transport				
Housing				
Heritage				
Waste Management				
Water and sanitation				
Slum upgrading				
Environment				
Tourism and Culture				

Source: Committee of the Regions, Egypt Fact Sheet, Division of Powers by Policy Area, 2014 and [www.tadamun.info](http://www.tadamun.info)



Governorate of Alexandria's Port Development Project. Governorate of Alexandria

### Coordinating numerous players in the real estate market

The Governorate of Alexandria currently supports many ambitious development projects that require private investments to be made:

- an international tourism centre (Selsela to Mustafa Kamel) along the beach with 50 touristic buildings including 15,000 hotel rooms and a marina. Estimated cost: US\$200 million including road infrastructure and maritime protection;
- Alexandria Port Development (cruise terminal, world trade centre, logistics and tourism development);
- palace renovation;
- a recreational city with a full range of leisure activities or a medical city (behind Carrefour shopping centre) on 350 acres;
- many tourism development projects with the creation of high class hotels;

- a new residential complex (12.3 acres) next to Ghait El Enab, with 1,768 housing units and services for a population estimated at 8,840 persons.

The Governorate is therefore in close interaction with many public and private stakeholders at various levels. In addition to the traditional players such as the state agencies (i.e.: the NUCA developing the New Borg El Arab Urban Community) national ministries and other key players such as landowners, service operators and providers (water, transport, waste management etc.), one could mention the ancient trading companies, which own a large part of the built land around major infrastructures such as the railway lines or the commercial harbour, the banking sector, which manages a large real estate portfolio, especially in and around the central business district, and the armed forces, which occupy a major site on the bay

for which difficult negotiations are under way.

Finally, every landowner intends to become a property developer, thus inflating the already excessive informal and unsafe housing sector.

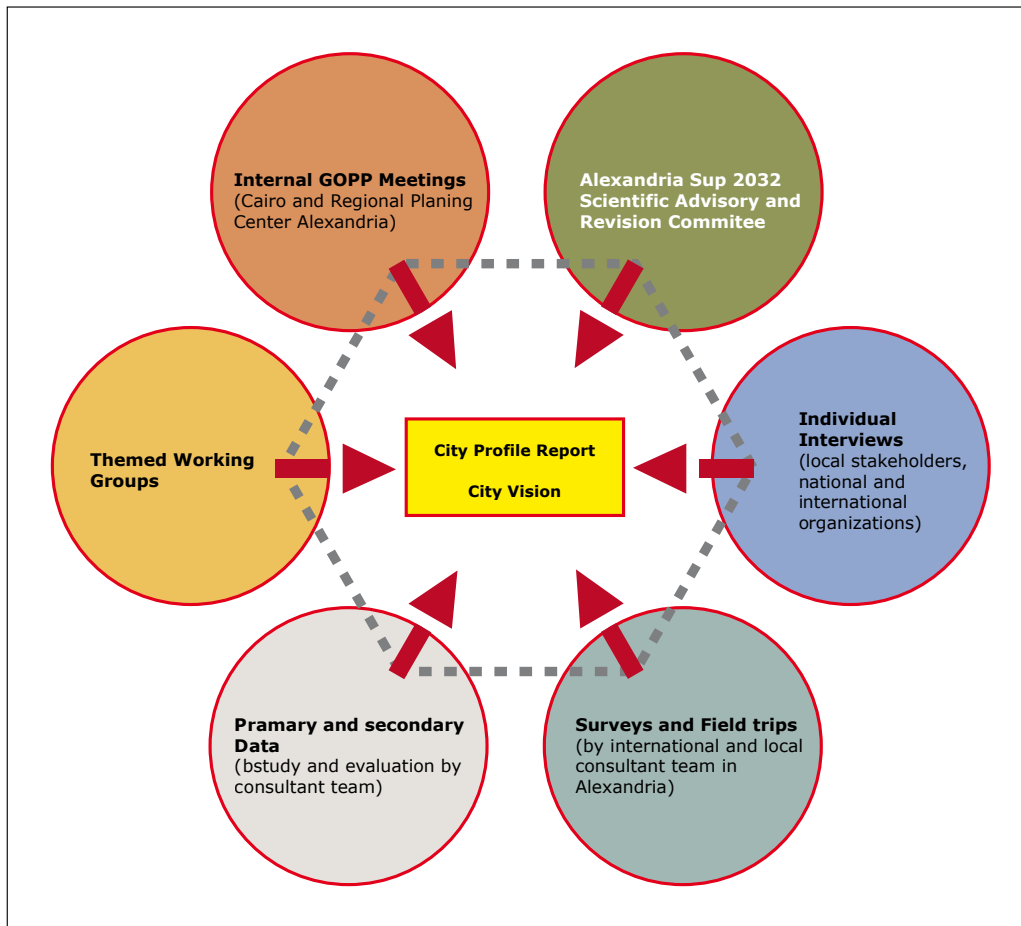
### “SUP Alex 2032”: an ambitious comprehensive approach

#### A comprehensive urban strategy under construction

The Unified Building Law of 2008 led to the drawing up of the Alexandria Strategic Urban Plan 2032 (SUP Alex 2032). By law, all governorates need to have their own strategic and detailed plan from which their own regulations emanate.

Strategic urban planning is a political process for the future of Alexandria, laying down both its content and its development and steering process. The challenge to make Alexandria a





Methodology for the Strategic Urban Plan of Alexandria 2032. AS&P, Alex SUP Report 1, 2013

Mediterranean metropolis calls for new forms of cooperation between urban, suburban, and rural areas to foster a comprehensive approach to metropolitan planning and new governance arrangements. Strategic planning is not limited to the scale of the city, but also applies to the territorial and inter-regional levels and implies a more integrated approach featuring:

- a coherent set of sectoral policies and a cross-cutting approach, taking into account housing and informal activities, and the transversal nature of environmental issues;
- “multi-layer” integration, meaning implementing territorial development policies formulated on different scales;
- “temporal” integration: strategic

urban planning is an iterative and evolving process that involves moving back and forth between strategic formulation and operational implementation.

Strategic Urban Plan Alexandria 2032 is managed and supervised by the national GOPP (with its Regional Planning Centre in Alexandria) and prepared by AS&P (a Germany-based consulting firm) and partners in Egypt. The German firm, together with local architecture offices, had worked from 2011-2014 on the diagnosis phase leading to a vision for Alexandria 2032. The consultants are currently drawing up a vision implementation plan.

According to AS&P, “the key goals and ambitions of the Alexandria Strategic Urban Plan for 2032 are not just to develop a physical plan, but also to

introduce new methodologies in planning that encourage the participation of citizens, thus ensuring sustainable long-term city development in the future” (AS&P, Report 1, p.11, 2013). As recalled in the introduction to the SUP Alex 2032 Phase 1 Report, the recent strategy has been designed to be at once a physical plan, a participatory process, and the result of consensus-building and, last but not least, a capacity-building tool to improve the capabilities of the local administration (AS&P, Report 1, 2013, p.11).

For the diagnosis phase, the scope of work included literature reviews, participatory meetings, data analysis and field surveys – resulting in over 1,000 pages of analysis and a new GIS system for the Alexandria Governorate.



Alexandria the Great, vision for Alexandria 2032. AS&P, SUP Alex 2032, Vol 1, p.67, 2013

## STRATEGIC URBAN PLAN ALEXANDRIA 2032 PROCESS

A participatory process was largely used in the diagnosis phase from 2011 to 2013, and the AS&P agency in charge of the Strategic Urban Plan for Alexandria 2032 highlighted six sectoral diagnoses that were presented and discussed with the Governorate of Alexandria:

- Strategic Matrix for Sectoral Analyses
- Urban Planning and Housing Sector
- Local Economic Development Sector

- Transport Sector
- Utilities and Infrastructure Sector
- Environment Sector

Source:

AS&P, 2013-2014 Reports

Phase 1 proposed a vision for Alexandria 2032 that embraces all dimensions of a Mediterranean metropolis: Alexandria The Great



*Alexandria corniche, San Stefano Sector, Flickr, bassem jarkas*



*Heritage in Alexandria, Flickr, Daln Sandoval*

### Key challenges for implementation of SUP Alex 2032

The implementation of SUP Alex 2032 requires a series of empowerment measures to ensure that all stakeholders are aligned with the process, and able to assume their responsibilities in the coproduction of the plan and its implementation.

Acquiring the planning and development capabilities is usually done by the state transferring human, technical and financial resources through the establishment of appropriate local institutional frameworks on various territorial scales. It requires:

- giving local authorities more manoeuvring room in public contracting management;
- strengthening the capacity of all stakeholders to participate in strategic urban

planning through training and professional skills development;

- developers or contracting authorities to provide the political, technical and financial steering of strategic urban planning;
- project managers or prime contractors to provide programme design and monitoring of the implementation of public policies;
- the economic and business sector to offer technical solutions and financial packages;
- “Local stakeholders” (residents, workers, users) to help the contracting authority and the contractor with their local and customary expertise in the framework of consultation mechanisms.

In short, there is a need for a common, shared, realistic and carefully phased

metropolitan strategy based on several small and manageable projects able to initiate a step-by-step virtuous development process. There is also a need for strong, efficient governance around the Governorate able to connect the local challenges with the central government’s vision and plans.

Four major challenges are developed in the next sections:

- dedicated mechanisms for the rapid implementation of urban projects;
- good land management including protection of urban agriculture and natural assets;
- climate change as a driver to deal with the resilience issue (improving disaster prevention in response to climate change, natural hazards);
- the urban renewal agenda, as it offers various opportunities for the future.



## PART 2

# IMPROVING LOCAL INSTITUTIONAL GOVERNANCE

Alexandria needs strong institutional governance to be able to implement a set of actions and projects defined within the Alexandria 2032 Strategic urban plan in order to create an attractive, equitable and sustainable large metropolis.

Three initiatives are being proposed here based on the French experience to strengthen the urban governance of a metropolis over the various phases of its development:

- a City Planning Agency: the monitoring and planning tool
- a Project implementation body; an operational tool in the hands of the Governorate
- an enhanced partnership between the governorate and major national public and private operators.

This will serve to implement projects that are suggested in the Part 3 of this publication.

### **A City Planning Agency: a monitoring tool for the Governorate**

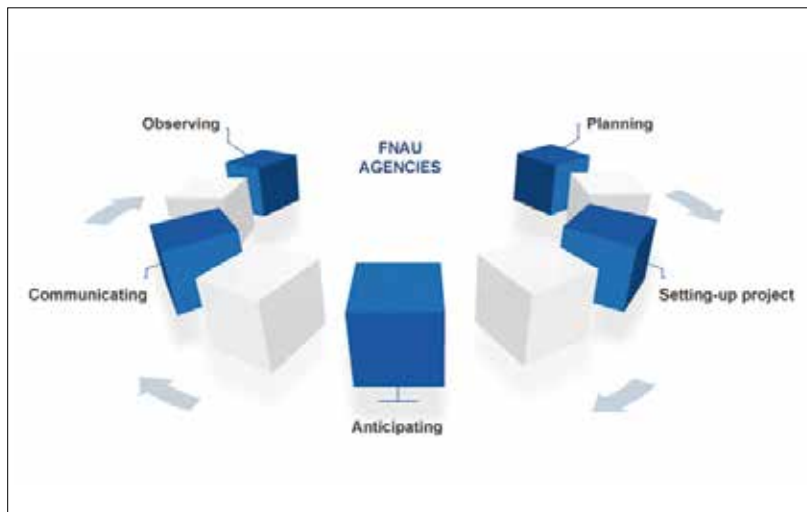
The creation of the planning committee composed of both experts and public officials from various departments in the 2008 Urban Law reflected the willingness of the Egyptian authorities to enhance the participatory approach to the urban planning process.

The question, however, is to know whether such a consulting body can deliver plans, projects and programmes faster than the previous organisational system. Can other mechanisms be put in place to encourage the different administrations to work together towards a more integrated approach?

### **City Planning Agency: a role as a catalyst for supporting local authorities in urban planning**

A city planning agency should be created on the initiative of the local





*The five missions of the French urban planning agencies. FNAU - French National Federation of Urban Planning Agencies*

authorities of the territory concerned, institutionalised or not through an inter-municipal structure and having a close relationship with the Local Government. They also involve the other local bodies (counties, provinces or regions) as much as possible in their board and budget as well as existing inter-communal structures.

The City Planning Agencies could have several objectives, in line with those of the French National Federation of Urban Planning Agencies:

- Observing: collecting data and analysing the facts and trends in urban areas.
- Planning: setting up the framework for programming and implementing the local urban development policy through the various planning documents.
- Setting-up projects: the projects may concern an urban area, a city or just a ward. The decision-making process usually associates the inhabitants and the institutional partners of the agency, to which it brings all its know-how.
- Anticipating: developing a range of new practices with the aim of improving the vision of the future supported by the local communities and their repre-

sentatives (lessons from statistical studies, questions about futurology, and monitoring processes on the impact of new technologies or on social and urban transformations).

- Communicating: a large part of the production of urban agencies is made up of surveys, studies, preliminary files, pre-operational proposals, etc., most of them being published. These aim to inform the public about the policy and projects driven by the local community, and sometimes also to play an active part in a debate among professionals.

Whatever the mechanisms retained, both the Local authorities (Governorate) and National authorities (Ministries) might consider reinforcing the urban engineering capacity at local levels both in terms of planning and implementation. This capacity-building does not necessarily imply the immediate establishment of such instruments (an observatory, a planning agency, a local development council, etc.). A step-by-step process seems preferable, starting with increasing the efficient use of local resources, then moving to additional supporting mechanisms.

## **Bamako and Addis Ababa: two examples of AFD support for the creation of agencies**

### *Bamako: phasing the creation of the Planning agency*

To implement a strong political project for the capital and to fully exercise its powers in urban development, the Council of the Municipality of the District of Bamako has developed a participation strategy to improve and legitimise its priority programme structured around Sanitation, Mobility, Land Use and the Mobilisation of financial resources. The District Council called upon its cooperation partners, Greater Lyon (the second largest city in France) and AFD to support the establishment of a Planning Agency. The overall objective of the Bamako Planning Agency is to enhance knowledge, propose spatial guidelines for the territory of Greater Bamako and support the competent authorities in defining and ensuring the consistency of public policies in terms of urban development strategy.

A special task force dedicated to the creation of the Agency was put in place for the specific purposes of not only preparing the creation of a planning agency, but also supporting specific development projects from the district as part of the 4th Urban Project in Mali (PUM4), including Mali's Urban Communities Support Project (PACUM), the Bamako Sanitation and urban Development Project (PADUB), urban transport projects (including public transport) and developing the new Master Plan.

In the framework of a cooperation agreement between Greater Lyon and the City of Bamako, technical assistance provided by the Lyon Urban Planning Agency led to the creation of a task force. By 2014, the task force had been running for two years and the Planning

Agency should be created after a financial and administrative feasibility study ordered by AFD, a major sponsor of the future Planning Agency (Ville de Bamako, Agence d'urbanisme pour le développement de l'agglomération lyonnaise, 2012).

**Addis Ababa: from revising the Master Plan to establishing a permanent planning agency**

In around the year 2000, there was a decision by the Addis Ababa city Government to create ORAAMP (Office for the revision of Addis Ababa Master Plan). After the revision of the Master Plan (a 3-year process), the project office should become permanent, albeit as a smaller body reduced to 15 people. The new Master Plan will guide all the actions of the Addis Ababa departments and major stakeholders. But the project office will be very useful as a permanent body, in contact with UPII, and all departments of the Municipality and major stakeholders in the process of implementation. It will be very useful for the following:

- to update the territorial Master Plan data;
- to be a permanent source of information for stakeholders;
- to follow up prospective studies on and for Addis Ababa;
- to monitor the implementation of Addis Ababa's new Master Plan, notably through very simple indicators.

In 2014 and 2015, the Lyon City Planning Agency, through a cooperation agreement between Addis Ababa City Government and Greater Lyon, has been assisting the Project Office with the implementation of the Master Plan on a smaller scale, drawing up Local Development Plans, including regulation of heights and a public spaces charter.

**Setting up the Alexandria Development Agency**

Currently the Governorate of Alexandria implements its development projects through diverse departments (planning, housing, roads and communication, education, services and infrastructure, etc.). Most of these projects are central government-led and reflect priorities expressed by the different ministries in Cairo, with a limited degree of local involvement or participation.

AlexMed research centre has been working on a proposal for the establishment of such a Alexandria Development Agency (ADA). The setup and running costs for the first years will depend on government funding and grants. However, if the agency is provided with resources such as land for development, this may speed up the development of various urban projects and reduce dependency on government funding. The proposal for an endowment or donation of land as «prime pumping» funding is important, but there is a reasonable chance that it will be met with resistance from private and public owners, unless ADA is established by law as a statutory public body and receives the overall control over public land.

The proposed Agency should seek to:

- better coordinate exiting planning activities in the governorate through an open and accountable setup;
- mobilise the support of local business, community and public development agencies;
- focus on policy and strategies reflecting local and regional priorities;
- send a clear signal and message to public/private and international investors by focusing on specific projects ready for implementation;

- facilitate all bureaucratic functions (permits etc.) and the necessary infrastructure crucial to the initiation of development projects;

- survey socio-economic and spatial changes in the Alexandria urban area.

Whatever the form it may take, the purpose is to create an effective mechanism within the Governorate that is structurally and functionally sensitive and responsive to local needs, capable of communicating efficiently, setting priorities, programming and mobilising resources, as well as communicating with stakeholders to develop and implement projects.

A minimum would be to set up a task force for land management and monitoring as a first step towards a more comprehensive tool engaging all fields and services dedicated to urban development.

**Project implementation bodies: an efficient tool in the hands of the Governorate**

**The roles of specialised implementing bodies**

At project level, a dedicated development authority might be established to lead project implementation and to coordinate action in a specific area or sectors: transport, special development zones, regeneration of the city centre, harbour development, etc.

These special purpose vehicles can be established by the state or by the local governments that sit on their Governing Boards and mobilise private funding. These public development corporations can be established by the local governments such as the Société de Développement Local (Local Development Company) in Morocco. Tunisia chose to establish a public private partnership (PPP) - the Tunis North Lake

## ORGANISATIONAL PATTERNS FOR EFFECTIVE PUBLIC CONTRACTING AUTHORITY

<b>TYPE OF PUBLIC CONTRACTING AUTHORITY</b>	A contracting authority carried by a local State service or under the umbrella of a Ministry or government	A contracting authority carried by the local authority, which may take a collegial form, especially in the case of inter-municipalities cooperation	A delegated contracting authority set up through public funding and private funding, under control of the public authority (Board of the Company)
<b>MEDITERRANEAN EXAMPLES</b>	Aqaba Special Economic Zone Authority (Jordan) under the umbrella of the Jordan State	Agadir (Morocco) Local Development Company in charge of public transportation management (majority of the capital is owned by the municipality)	Société de Promotion du Lac Nord de Tunis Private Tunisian-Saoudi company for the the development of Tunis North Lake (Control from the Ministry at the Board)

Barthel, AFD

Development Company (SPLT) results from a special agreement between the state and the private sector.

Two types of special purpose agency adapted to Alexandria's context are presented here: a metropolitan transport authority and an urban project development entity (authority or company).

### Special local authority coordinating urban transport

A metropolitan entity that integrates a large number of the powers needed in the field of urban mobility is commonly called a "metropolitan transport authority" (MTA). The effectiveness of a MTA depends on i) its geographical scope, ii) its powers (from the organisation of all modes of public transport to traffic management, parking policy and support for non-motorised modes) and iii) its financial resources. The MTA can either benefit from state or local governments funds, or be able to mobilise its own resources, but should, above all, have a long-term view of its funding.

*"Casa Transports": from a "modal entity" created for the tram to a Metropolitan Transport Agency*

In 2004, Greater Casablanca launched

a new approach to transport system planning aimed at providing the metropolitan area with a high quality and efficient public transport system by 2030, to meet the needs of the increasing population (estimated at more than 5 million inhabitants by 2030), reduce traffic problems, develop socio-economic activities and mitigate pollution caused by transport and traffic. This approach took shape through the drawing up of an urban mobility plan (PDU) that includes a proactive scenario for public transport development with mass-transit modes. The long-term network foreseen (2030) should consist of: (i) four tram lines with a total length of about 76 km, covering the dense urban core and urban extensions; and (ii) a rapid suburban train line (RER) about 63 km long from Mohammedia to Nouaceur/Airport.

The first Casablanca tramway line is the initial step of this approach. For this project, a local development company, Casa Transports, was established in March 2009 on the initiative of the Moroccan government and the Urban District of Casablanca (CUC), bringing together mainly local and national

public shareholders (CUC has a 54.4% stake, the state 29.8%, the Hassan II Fund 10.4%, and some institutional organisations share the remaining 5.4% stake). Its capital stands currently at MAD1.125 billion and will increase within 18 months to MAD4 billion. Initially created to implement a mass-transit project, Casa Transports' powers have been subsequently expanded to cover urban mobility planning.

The AFD has supported the Directorate General of Local Governments of the Ministry of Interior (DGCL) since 2007 in order to reinforce the "local development company" tool. The first phase of the plan in Casablanca was to build the first 31 km tramway line for an overall budget of MAD5,900 million. Line 1 was delivered in December 2012. Its operation has been delegated to a private company. Other projects are planned, to be coordinated and implemented by Casa Transports (Source: Casa Transports & AFD).

### *Alexandria in need of an integrated transport authority*

In Alexandria, in order to coordinate transit in the urban area, a coordina-

ting organisation should be created to facilitate/manage physical and programmatic connections between transit networks; integrate fares and or payment methods to facilitate transfers between transit modes; and organise networks into appropriate mass-transit and feeder systems, eventually limiting minibuses to local feeder networks.

The traffic demand in Alexandria implies a comprehensive and efficient transport infrastructure. In order to achieve this goal, all transport modes should be operated under one integrated transit authority, which could merge planning and operational aspects. Currently, there is no such authority or institution responsible for the entire system or which could have a coordinating role.

### **Special entities implementing urban projects**

The model of the project implementation agency or special authority, a project regulatory authority responsible for the selection of investors-developers, has been applied in many countries, including France, Morocco or Jordan.

This type of authority is being used more widely: several development corporations exist in Morocco (Bouregreg, Marchica Med, and Tangiers-Med) or in Jordan (Dead Sea Development Zone and its equivalent for Aqaba). They can be either public or private (but controlled by the public local and national stakeholders).

#### ***Special Economic Zone Authority in Aqaba, Jordan***

In Aqaba, since 2001, The Aqaba Special Economic Zone Authority (ASEZA) is the autonomous management, regulation and development institution for ASEZ (the Aqaba Special Economic Zone). Covering the Kingdom's sole seaport of Aqaba and its environs,

including Wadi Rum, the zone is currently established on 375 sq. kms of territory in the south of Jordan. A six-member Commission, headed by a Chief Commissioner, forms the board of the Aqaba Special Economic Zone Authority (ASEZA). Appointed by the Cabinet and reporting to the Prime Minister, the Commission has the task of running the ASEZ, and is vested with zoning, licensing, and other regulatory powers that distinguish it from the rest of Jordan. The ASEZ enjoys a special fiscal regime to attract long-term capital and turn the city into a major regional economic hub.

The ASEZA's stated vision is to (1) make Aqaba a world-class business hub and leisure destination, enhancing the quality of life and prosperity of the regional community through sustainable development, and (2) to turn the city and its environs into a driving-force for the economic growth of Jordan and the entire Middle East. The ASEZA's declared mission to translate this vision into reality requires:

- improving the quality of life for all community members
- creating, regulating and sustaining a globally competitive investor-friendly environment
- optimising the efficient use of entrusted resources, in harmony with a master plan based on internationally recognized best practices; and
- setting a transparent and accountable corporate structure, governance, and culture that generate synergies between the activities of the organisation.

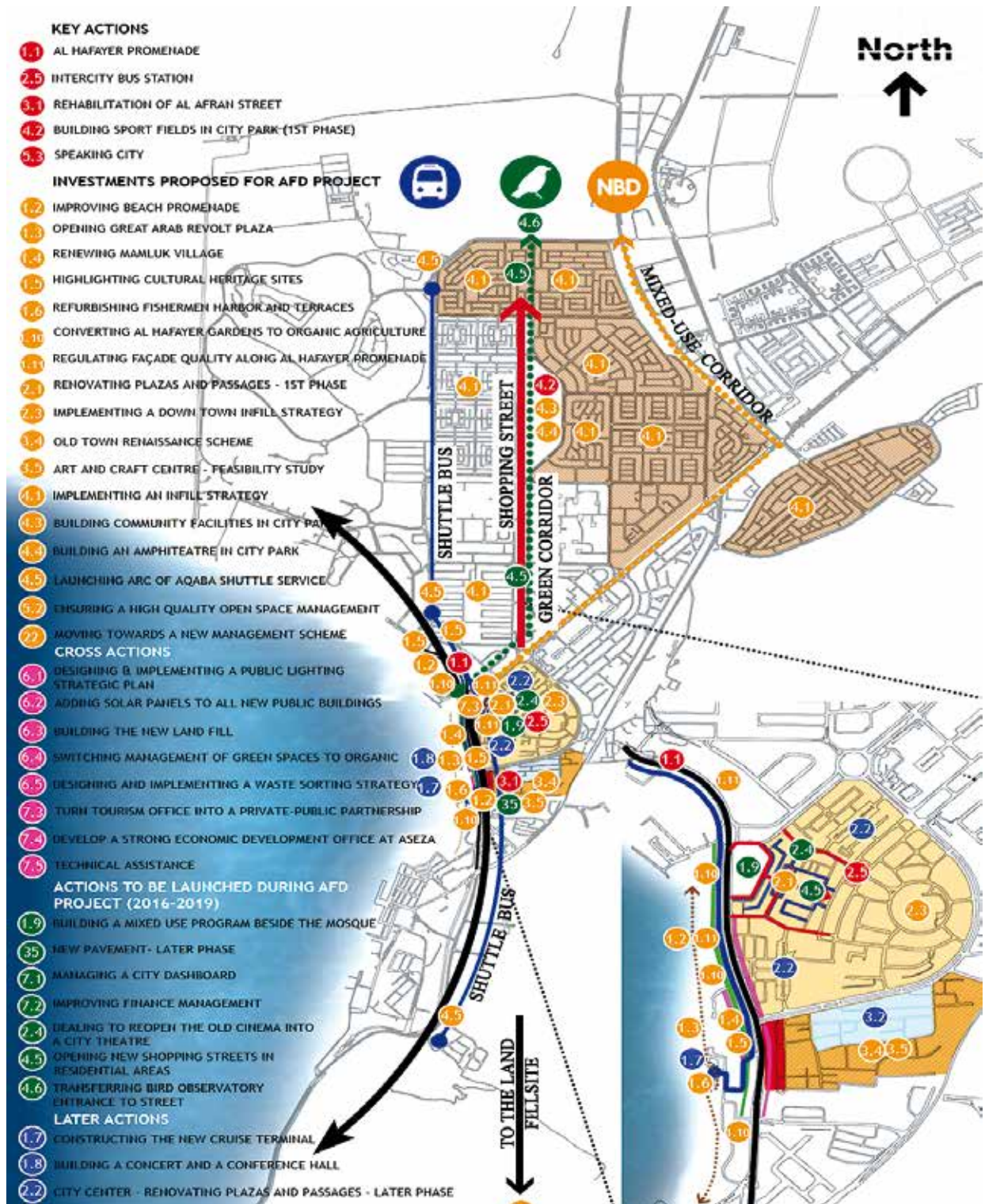
Through the "Urban Project Finance Initiative" (UPFI), the AFD is funding technical assessments to design and prepare implementation of the revitalization of the city centre and its connection with the waterfront.

In 2005, for the development of the Bouregreg valley, a strategic and vulnerable area located between the cities of Rabat and Salé, the King of Morocco validated the idea of creating a public agency by special law. The Agency for the development of the Bouregreg valley holds powers exceeding those of the Urban Agency of the two cities of Rabat-Salé in the fields of urban studies, land acquisition, contracting authority and project management. It is empowered to replace the conventional planning institutions and urban management administrations within its territorial scope. In terms of land acquisition, the Agency was given state land, but above all, the Agency has the power to acquire private land either amicably (with financial compensation to households and companies) or by compulsory purchase. Directly related to the Royal Palace, the Agency has thus replaced the local authorities in Rabat and Salé with a set of specific powers.

Private investment funds entered into joint ventures depending on the phasing of the project: in 2006, a joint venture with the Bouregreg Agency, Caisse de Dépôt et de Gestion and Sama Dubaï for the "Amwaj" section (120 ha). This joint venture did not work well and a new consortium was created in 2014 with Wessa Capital, which raises funds from Morocco and the United Arab Emirates. For the "Bab Al Bahr" section (70ha), a Shareholders Agreement was signed in 2007 between the Bouregreg Agency and an Emirati consortium, Al Maabar International, which focuses on the development of about half of this section (30 ha).

The AFD and the European Investment Bank may provide institutional support and advice for the new development phases of the Bouregreg, through UPFI.





Investments proposed for AFD financing in Aqaba (Jordan): focus on public realm improvement, linkages, old town renaissance, new community facilities. AFD, 2015.

*Alexandria in need of a special urban project implementation body*

Alexandria is looking at implementing challenging projects such as the regeneration of the seafront in the city

centre (Corniche) or other projects such as Minat Al Bassal regeneration. This kind of special authority (special purpose vehicle) could be useful. Another possibility would be setting

up Public-Private Partnerships through which urban projects could be implemented based on a win-win situation for both sides.

PART 3

# A PROJECT-BASED APPROACH TO STIMULATE URBAN DEVELOPMENT

Alexandrian authorities and local players are convinced of the urgency to transform and improve the functioning of the city both in terms of institutional governance and in terms of projects. These players also realise that launching too many projects could hamper the urban project by diluting the energy and the scarce resources for development and regeneration.

In the absence of a single document setting commonly agreed priorities, the most practical approach would be to start with a few projects that could be implemented rapidly and be of immediate interest to a wide range of players; Governors, sections of the population, investors, landowners, workers and employees.

The point is to start a «political» process of development and regeneration that is visible to all, in the hope that it will trigger attention, interest and

investments.

Out of the dozen of local projects presented at the June 2014 conference, a selection of some outstanding actions is proposed here:

- Public urban mass-transportation as a tool to regenerate the city
- brownfield regeneration: optimising and diversifying the city
- urban renewal in the core centre and economic leverage for on-site population
- nature-based assets, blue and green corridors to enhance city resilience.

Rather than proposing other development plans that are too often obsolete even before they are reviewed and approved, and rarely implemented, a project-based approach should be preferred.

The planning phase engaged with the



## THE CONCEPT OF TOD

A transit-oriented development (TOD) is a compact, higher density, mixed-use, walkable area within a half-mile radius of a transit station. TOD generally includes residential, commercial, retail and recreational space, and is designed to create connections between transit, bicycles and pedestrians. The Institute for Development and Transport Policy in New York (IDTP) has identified several criteria for successful TOD:

- develop neighbourhoods that promote walking [walk]

- prioritise non-motorised transport networks [cycle]
- create dense networks of streets and paths [connect]
- locate development near high-quality public transport [transit]
- plan for mixed use [mix]
- optimise density and transit capacity [densify]
- create regions with short commutes [compact]
- increase mobility by regulating parking and road use [shift].

SUP Alex 2032 needs to be linked to a very flexible project-based approach to stay in line with a changing social, urban and economic situation and to a population that needs to see its environment improving rapidly. To keep the connection between the political vision and the urban project requires involving local players and designing specific forms of urban engineering and mechanisms adapted to the urban context.

Project-based development makes it possible to specify urban usages, types of uses and the sizing of places, operational concepts, functions and scales at the heart of the design and use of space.

In a context of diversification of lifestyles, but also multiplication of possible usages and territorial scales into which to integrate an urban site, project-based development ensures the participation of local players, both public and private, as well as communities, at both the design and implementation phases. Engaging with local players and stakeholders can help better define the types of social and functional organisations that steer, operate and facilitate the development of different areas of a territory. This implies, in particular, ensuring the accountability of policy leaders so that they are able to assert their position as the main public player in the territory.



TOD principles. IDTP

### Transit-Oriented Development (TOD): a catalyst for urban transformation

Transit oriented development is an integrated approach to urban development linking transport to planning; an additional impact is the promotion of heritage, as in the Yenikapi project (Turkey), providing both the opportunity to restructure public spaces and

to introduce high quality elements of design and landscaping. TOD makes it possible to plan and develop more compact urban planning, anchoring new urbanisation around transport nodes thus allowing higher density and curbing urban sprawl. The TOD project in Johannesburg (South Africa) emphasised transport as a driver of change for greater social cohesion through densification and social diversity.



Yenikapi transport and urban project works, Istanbul, Turkey. Brian Stokle, Flickr

### Foreign examples supported by AFD to improve sustainable urban development

*Istanbul, Turkey: a 28 ha project combining transport development and heritage conservation*

The arrival in the District of Yenikapi of the major metro line (M2) and of the Marmaray Rail Tube connecting the European and Anatolian sides of the Bosphorus gives this historic district of Istanbul a new urban feature: it is the most important intermodal connecting point in Istanbul. This intermodal hub will take the form of the Yenikapi multimodal station, a major amenity facilitating the transit of 1.5 million passengers per day.

The early excavation works for the metro and Marmaray railway line in the Yenikapi area have led to a major archaeological discovery: the remains of the ancient Harbour of Theodosius (the largest port dating from the Early Byzantine period), featuring 35 ships dating from the 11th century and the remains of Neolithic dwellings. The quality and quantity of the discovery prompted the municipality to create a dedicated archeopark. Moreover, beyond this cultural amenity, the

Yenikapi district has plenty of heritage remains to preserve and highlight.

With a AFD EUR 45 million funding, the Yenikapi site will host:

- the main strategic public transport infrastructure (M2, Marmaray, then M1 and T4);
- the largest multimodal transport station in Istanbul;
- major cultural facilities that will attract many tourists and residents.

The intended result will be achieved by re-designing the project both as a contemporary transfer area integrated with its urban surroundings and as an attraction point where the archaeological findings significant for World History and Cultural Heritage can be showcased.

*Johannesburg (South Africa): a TOD approach to improve social cohesion and lower carbon emissions*

The City of Johannesburg, in order to «sew up» the city, has developed a roadmap for regenerating the city Centre (Inner City Roadmap) and a densification programme around the transport arteries (Corridors of freedom).

The aim is to better integrate disadvantaged people and reduce inequalities by promoting access to housing, infrastructure and employment, while fostering lower carbon footprint urban development models.

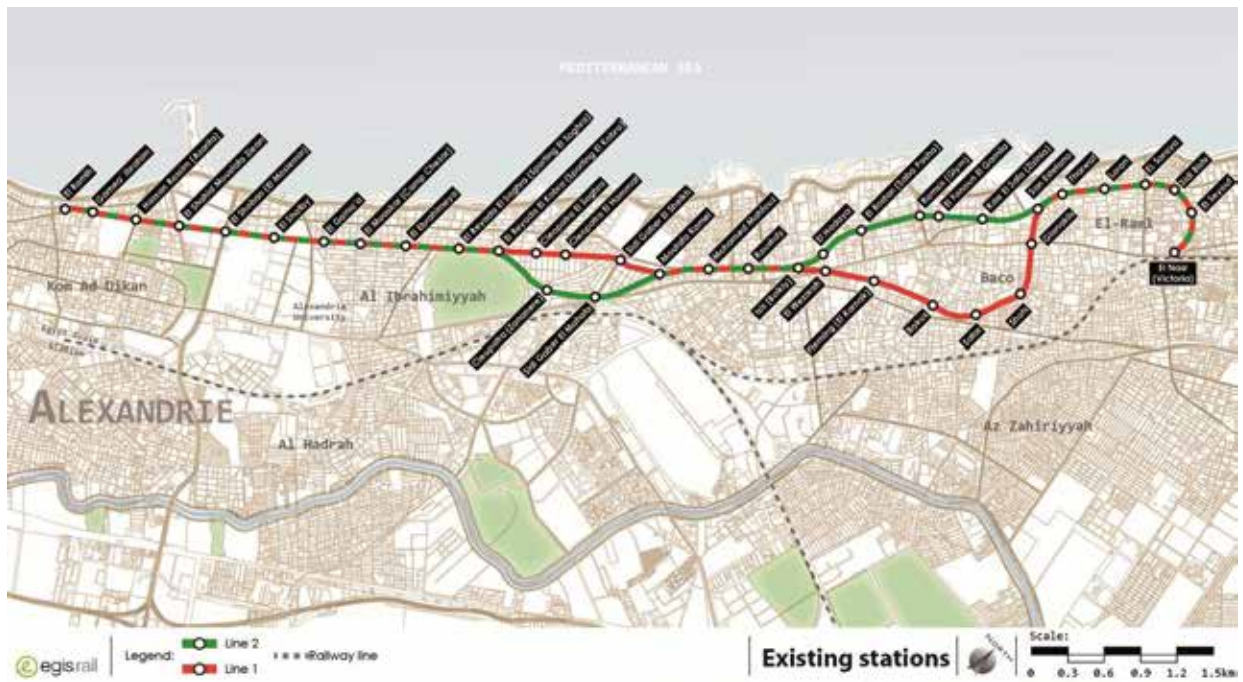
The AFD supports the spatial transformation strategy of the city by financing part of the municipal 2014-2017 investment programme with a €120 million loan. This project combines social and environmental impacts (AFD, 2015), including:

- mitigation of geographical and social urban segregation;
- improving access to housing, water, transport and employment;
- reduction of greenhouse gas emissions, enhancing resilience to climate change.

### TOD potential for Alexandria urban development

The TOD approach and its implementation criteria could help Alexandria to design a transit-oriented development (TOD) policy that integrates not only various modes of transport but also different neighbourhoods, making them complementary to each other. Each





Alignment and extension of the Raml Tram renovation project. AFD-Egis, 2014

transport project can be approached as an urban regeneration system in its own right:

- regional railway lines form the backbone of the public transport system: the Abu-Kir line, which has been converted into a high-capacity metro, covers the East-Centre segment; the West-Centre connection is achieved through the upgraded Borg El Arab line;
- for the mid-distance East-West function, a combination of tram and BRT is proposed along several corridors: the Raml tram corridor, Corniche road, Mahmoudieh canal, but also on the coastal road linking the western areas;
- New South-North links are being created;
- Several Park and Ride facilities at city entrances have been suggested (AFD-Egis, 2014).

As a whole, these projects promote densification towards the West along two axes and urban regeneration along the Mahmoudieh canal with a BRT project linked to a “green corridor” development project zone in order to meet Alexandria’s development challenges.

An related challenge is how to change the old network or fabric of small family enterprises – garages, repair shops, warehouses, small specialised suppliers and retailers, and to retain such enterprises within accessible reach of the central areas. Business parks within the city and the port area can be used more intensively with more productive floor space and jobs per hectare. More high-rise development, or a release of floor area ratio along the canal and near public transport hubs, for example, might help development around the «Gates of Alexandria»: Alexandria’s Main Station, Lake airport, Harbours, etc.

***Renovation of the El Raml tramway: a first step towards regenerating the city centre***

Although there is a consensus of opinion on the urgent need for investment in one - or several - rapid-transit projects in Alexandria, the question is: where to invest first? In order to help the Egyptian authorities make a well-informed and rational decision before launching the implementation of a project, the French Development Agency (AFD), with the financing of

the Neighbourhood Investment Facility provided by the European Union, has published a study on Alexandria Urban Transport. The study is divided into two phases: in the first phase, the consultant has made a complete diagnosis of mobility in Alexandria with a view to proposing a long-term scenario for urban transport development, consistent with the strategic urban planning exercise that is currently under discussion (SUP Alex 2032). Building on this long-term transport scenario, the consultant has compared four “priority corridors” in order to select a short-term priority project. In the second phase, the consultant will carry out a feasibility study of the short-term priority project selected.

The renovation of the El Raml tramway line has been selected as this short-term priority project: it will improve not only the quality of transport service, but also the image of the city.

The French Development Agency (AFD) has announced its willingness to contribute to the financing of the project of modernising the Raml Tram (the “Blue Tram”) in Alexandria.

## **Brownfield regeneration: optimising land, diversifying the city**

### **Brownfield development projects: a variety of programmes and objectives (France, UAE, Belgium)**

The following examples can inspire Alexandria to regenerate its cultural heritage assets.

*Converting barracks in an incubator for green and creative economic activity in Bordeaux (France)*

The Darwin Ecosystem is an urban redevelopment project led by a private group of SMEs and supported by the local government, located on the former site of military barracks on the right bank of the Garonne river in Bordeaux in the future Bastide-Niel eco-neighbourhood. The goal is to create optimal conditions for the responsible development of about 40 companies operating in the fields of the green and creative economy.



*Caserne Niel, Bordeaux, France. Jean-Baptiste Roux, flickr*

Offices, shops and services have been settling there since December 2012 in a spirit of broad collaboration, pooling resources, enhancing social diversity,

fostering the ecological transition ... an alternative entrepreneurial approach aimed at energy conservation and social entrepreneurship.

## **URBAN REGENERATION: REBUILDING THE CITY OVER ITSELF AND UPGRADING IT**

Urban regeneration is a process of transformation of the city whereby the city reconstructs itself over itself by recycling its built and land resources.

Urban regeneration is a social, economic, physical, sustainable, demographic, financial and collaborative issue. Urban regeneration can be defined as the integrated local redevelopment of deprived areas (at neighbourhood, city, and metropolitan area levels). It covers many aspects of city life: physical, social and environmental. Approaches depend on a city's history, and therefore policies must be integrated and area-based. (Eurocities)

It also has as its main objective to limit urban sprawl and suburbanisation by fostering concentrated dense housing, notably to reduce the environmental footprint of dwellings. The city can be renewed in old neighbourhoods, but also in brownfield sites. (Ministère de la Ville, France) The main objective is not to erase past

or current patterns but to use what exists as a resource that will generate value and revenues.

A brownfield site is land and buildings previously used for commercial or industrial purposes. The land may be contaminated by low concentrations of hazardous waste or pollution, and has the potential to be reused once it is cleaned up. (Environmental Law Institute's Brownfields Centre)

Since the mid-1980s, urban planning decision-makers have paid increasing attention to the regeneration of brownfield sites and underused spaces in dense urban areas, first for industrial, commercial or residential uses that provide economic benefits through local taxes and employment, but also for parks, playgrounds, open spaces, by including them in the green and blue frames of the master plan. Brownfield sites can also be transformed into museums, housing units, schools, university facilities... where buildings and machines can be re-used.





Grand-Hornu, Belgium. Ines S, Flickr



Exhibition day in Alserkal Avenue, Dubai. [www.alserkalavenue.ae](http://www.alserkalavenue.ae)

#### *Warehouses as creative spaces in Alserkal Avenue in Dubai*

Situated within the industrial quarter of Al Quoz in Dubai, Alserkal Avenue houses 20 creative and art spaces. Since 2007, it has grown organically in tandem with the Middle East's burgeoning arts scene to become the foremost arts and cultural hub of Dubai and the UAE.

#### *Transforming a mining complex in a Museum of Contemporary Arts in Bousu (Belgium)*

Grand-Hornu is an old industrial mining complex in Hornu in the municipality of Bousu, Belgium. It was built by Henri De Gorge between 1810 and 1830. It is a unique example of functional

town planning. Today the Province of Hainaut owns the property. The Innovation and Design Centre, the Museum of Contemporary Arts and the Grand Hornu Foundation are located on the premises and make Grand Hornu one of the main European showcases of contemporary arts. As one of four major mining sites in French-speaking Wallonia, UNESCO designated it as a World Heritage Site in 2012.

#### **A unique opportunity for Alexandria: Minat El Bassal and Kafr Ashry**

Minat El-Bassal was once a famous Alexandrian industrial district character-

ised by large warehouses specialised in storing and preparing Egyptian cotton for export. Now, it is an underdeveloped urban area, close to the Central Business District of the city. The area contains a great number of old industrial warehouses mostly vacant, due to the lack of cotton for export. Part of this area is now registered on the city's National Registered Heritage Buildings' List, under code 6040 «Warehouse». Such a heritage site faces the unviable future of becoming one of the city's cement residential blocks. A preliminary study undertaken by a consultant team from the University of Alexandria pointed out the high regeneration potential of Minat El-Bassal and Kafr Ashry for combining a local economic development approach with heritage restoration, urban development (mixed-use, including tourism) and social upgrading of a poor district nearby (Kafr Ashry).

The selected buildings have characteristic industrial features that attract special kinds of users and investors who seek to live and work in an old industrial atmosphere different from standard developments built today. The buildings contain enormous surface areas with flexible spaces suitable for conversion to new functions serving the social and economic needs of the waterfront and harbour areas. The project aims to conserve the cotton industrial heritage



*Minett el Bassal industrial buildings next to the Mahmoudieh Canal.*  
Dr Dina Nassar & Dr. Heba Abu el Fadl

in Egypt by maintaining the quality and setting of the buildings while guaranteeing revenue for maintenance. In order to sustain the project and create a liveable and attractive community at Minet El-Bassal, the project intends to include new commercial, housing and cultural activities and facilities. The involvement of the private sector either as programme leader or as partner with state agencies will be essential to the success of such project and to halting the deterioration of the city. See the insert for an example of a project-based management structure.

Similar industrial sites all over the world have been developed and became modern magnets for tourist, cultural, and social activities. This brownfield redevelopment can help to solve environmental problems due to the condition of the Mahmoudieh Canal and planning problems regarding the limited extension options for the city centre. It can help also to revive the economy and improve the cultural aspects of the neighbourhood.

The Alexandria Governorate, in cooperation with the Egyptian Company for Pressing Cotton and the other owners, should be responsible for the mana-

gement and execution of the whole project. Their main responsibilities would be to finalise an overall master plan, a business model, and implementation phases. The master plan should set out a project that strikes a balance between redevelopment uses, revenue-generating activities and social needs. MURIS and the Governorate may have to establish a new unit or structure to interface with the private sector. This critical issue should lead to a win-win situation between the leader of the urban project (MURIS/Governorate) and the private sector in order to generate revenues from the sale of construction rights to compensate the public investments (public realm, social facilities, cultural infrastructures, etc.).

### **Urban renewal in historical core area as economic leverage for the local population**

#### **Lebanese Cultural Heritage and Urban Development Programme through AFD and World Bank funding**

The AFD has financed the Lebanese Cultural Heritage and Urban Development (CHUD) Programme since 2003,

in Tripoli and Tyr, through several loans.

In Tripoli, AFD funding of the CHUD program allowed the complete renovation of the Saint-Gilles crusader citadel, now turned into an archaeological museum. In addition to the renovation of the souks of ancient Tripoli funded by the World Bank, the city has also benefited from public space renewal in its historical centre: a platform crossing the Abu Ali River has been constructed to be converted into a commercial and pedestrian area.

In Tyr, the fishing port has been redesigned in consultation with the local stakeholders, in order to preserve traditional fishing activities and enhance the cultural identity of this central public space in the old city. This activity has been part of a comprehensive renewal of public and market places in the city centre, co-funded by the World Bank.

In both cities, a second phase funded by the AFD through a €20M loan was planned to continue the restoration of the two old cities, mainly their souks, a pedestrian pathway along the seashore and the archaeological sites in Tyr.

#### **Urban renewal, economic revitalisation and social inclusion: the challenges facing Alexandria**

##### *Housing and social inclusion for the rebirth of the city in the central area of Alexandria*

Besides using heritage as leverage to increase the attractiveness of the city, many areas of the city have to be renewed for safety and health reasons. As already indicated, the current norms and regulatory systems (land use, rent, listed buildings, and cultural heritage) are serious obstacles to the regeneration of the city and jeopardize the efforts to make heritage sites more appealing to visitors with visitor centres, improved access routes and supporting retail outlets. (SUP Alex, 2013)



## HISTORICAL CENTRE REVITALIZATION: MAIN ISSUES

Urban issues can also be concentrated in city centres because of the density and multiplicity of functions: housing, services, jobs, retailing, culture, etc. Conflicts of uses are common in public spaces: traffic, public and private transport, parking, parks and sidewalks, street vendors, events and street animation, etc.

“Accessibility to the city” starts with access for all to the city centre, in terms of services, transport and housing (social diversity).

Historical centres are home to Heritage of great value, which has to be preserved and promoted. Access to Heritage can also be a driver for improvements inside the urban fabric, when special attention is given to public spaces and amenities.

In the heart of Egyptian cities, the deterioration in the built environment and the loss of attractiveness of the

urban fabric have created difficult social conditions often associated with economic decline.

Building new housing or renovating the existing housing stock in compact city centres can enhance the attractiveness and functional diversity of core city areas. It also helps to curb urban sprawl and to revitalise «city living» through more suitable housing that matches current demand. Renovation of buildings can contribute, when possible, to the energy transition with gains in energy consumption and lower emissions in already populated areas.

Urban renewal in core areas can be seen as a way to regulate or soften the hectic vibes of a city without eradicating the leverage that the city centre represents for sustaining its spirit, social diversity and economic attractiveness.



*Alexandria's streets by night.* MatHelium, Flickr

As is the case in many Egyptian and Mediterranean cities, the shortage of affordable housing reduces knowledge based productivity and hampers the future presence of a young generation of entrepreneurs or researchers or creative people in the city, thus giving the wrong image that the City is relatively unjust and weak at dealing with social and affordable issues.

This means that additional dwellings are needed with the corresponding amenities such as schools, shops and sports facilities, local services and maintenance. A virtuous Housing Policy should be incorporated into a coherent housing policy plan with a series of phased measures such as the upgrading / renovation / maintenance / activation of resettled tenements and affordable housing.

Examples prepared by local teams of consultants from the University of Alexandria encourage sustainable growth and development by the conservation and restoration of Gamal Abdel Nasser Avenue and Salah Salem Street, in addition to the upgrading of the Kom el Dikka area with a view to asserting and capitalising on the cosmopolitan interactions in the traditional urban centre.

## TWO LABORATORIES FOR THE REBIRTH OF THE CENTER OF ALEXANDRIA

Focusing on Fouad Street and Salah Salem Street (the oldest street in the world founded by Alexander the Great and now the core part of the European quarter in Alexandria), the following intervention is proposed by the research center Alex Med under the direction of Dr Mohamed Awad:

- closing the two streets off for pedestrians only at night time during weekends, while closing the neighbouring areas at night time throughout the week;
- revitalizing the cultural and social life in downtown Alexandria by redeveloping the ground and first floors of the historic buildings in the area;
- restoration of the elevations of Fouad St. and Salah Salem St. and restoration or adaptive reuse of selected significant buildings in the two streets;
- upgrading the lightscape of the two streets;
- restoration and upgrading of both the hardscape and the softscape of the two streets.

In Kom el Dikka area (a remaining Ottoman area with local flavour inside the European quarter), it would involve:

- restoration of the façades with new unified colour plaster for the façades of the buildings;
- upgrading of the waste disposal network;
- adaptive reuse of El Nadoura cistern as a museum;
- rebuilding the house of Sayed Darwish (an early 20th century iconic musician) to be open as a music centre;
- upgrading of the two plazas (El Saha and El Gabal) so that they could host cultural performances (music, poetry, theatre, etc.)
- introducing gastronomy and culinary heritage features prepared by the local people;
- increasing the rental value of the small shops to serve local food, sell souvenirs and handicraft thus creating jobs and promoting traditional activities.



Proposed area of intervention in Alexandria City Centre. Dr Ahmed Abdel Moneim

### High-quality public space: a tool to solve conflicts of use

Quality of life in a city is increasingly recognised as important, and along with it the design, maintenance and

use of public space. The social atmosphere in the major streets might be improved by increasing the quality and diversity of the shops, by refurbishing traditional edifices and street-

level frontages and arcades and by «acupuncture» treatment of public spaces: lighting, planting, public furniture (benches, dustbins, street signage, pavement, bus stops), colour coding of eminent buildings, promenades, entrances to public buildings. The major streets that function as 'high streets', where the majority of amenities are concentrated and where there is heavy through traffic, are already receiving special attention.

The improvement objectives are clear:

- streets, squares and waterside areas must meet high design standards;
- more space to be set aside for pedestrians, which means less space for motorised traffic;
- careful cleaning of the streets, which implies rethinking garbage collection procedures.





*Semi-fixed solution for crowded areas with few open spaces which need weekly or seasonal markets. Dr Magdy Mousa*

Another challenge is to propose solutions to resolve conflicts of usage between street markets / outdoor salesroom extensions and accessibility of inner-city areas by walking, public transport and private cars. One of the small-scale projects of the University of Alexandria deals with the issue and proposes technical solutions to rationalise the operations of the street vendors and free more space for traffic. Solutions are welcomed that would help motivate street vendors to meet hygiene and safety standards and other regulations in order to attract more customers.

The street vendor issue, as well as the over-occupation of pavement and street spaces by regular shopkeepers, is not only a technical or regulatory challenge, but basically an economic and social one. The objective is to help street vendors to grow and formalise their businesses and strengthen the trust and sense of security for city centre visitors. The problem cannot be solved by authoritarian measures only.

A consultant team from the University of Alexandria has worked on some technical proposals to organise the street vendors by optimising the public space without removing all street vendors, considering the high economic value of such space for the vendors and the services rendered to the inhabitants.



*Fixed market (semi-folded units to gain space after closing time) for street vendors with large heavy products in order to legalise their situation. Dr Magdy Mousa*



*Portable solution for light and small-scale activities. Dr Magdy Mousa*



*conflicting uses in public space in Alexandria. Dr Magdy Mousa*

## **Safeguarding natural assets: the blue and green corridors**

### **Mexico City: preservation of wetlands programme financed by FFEM and AFD**

Originally made up of five large lakes, the Mexico Basin has become an endangered wetland due to the depletion of water resources, chaotic urban development and the loss of the 'chinampas' – a traditional form of agriculture. The water resource, which has been over-exploited by this megalopolis of 25 million inhabitants, is an issue of huge importance. Led by AFD and the French Global Environmental Facility (FFEM), its plan involves preserving and improving the quality of water reserves; safeguarding chinampera culture by strengthening agricultural practices in the region (agro-ecology); planning and control of urbanisation; and social development to bring essential services to inhabitants.

The goal is to put in place sustainable economic networks, which are able to find value in the rich natural resources without destroying them. The role of the authority responsible for the natural, cultural, and humanitarian aspects of the world heritage sites of Xochimilco,

Tláhuac and Milpa Alta extends beyond the requirements of conservation. The authority promotes a process of integrated development through which it can confront other similar problems, and raise awareness of good practice among users and inhabitants (AFD, 2015).

### **A gradual approach to “green” and “blue” in Alexandria**

Parks and green spaces are essential elements in the ecosystem environment; they represent the breathing lungs of the city, where they minimise the impact of pollution and are considered home for biodiversity of different species.

The water in and around the city is of one of the qualities that distinguish Alexandria from most other Mediterranean cities. The awareness that this is a significant asset for the city will only grow stronger. The Eastern Harbour offers many possibilities for recreation functions while the waterfronts and shorelines are opportunities for quality urban development.

The «green and blue» spaces in and around the city fulfil an increasingly important role in the welfare of Alexandria's inhabitants; they are also valid

criteria to attract corporations to locate themselves in the city making the blue and green spaces an important economic factor. The city of Alexandria is aware of this, as proved by the regeneration of the Corniche, the planting of trees along the boulevards, etc.

Besides being attractive, the greenery and water must also be accessible and usable for more recreational purposes implying the need to ensure the safety and cleanliness of the riverbanks.

### *Enhancing Mahmoudieh canal as an integrated urban project*

The Mahmoudieh waterway could become an increasingly central feature within the metropolitan area, connecting the local airport (Matar) to the seaports. A delicate task is the upgrading of the natural qualities of the canal, in combination with water sports and recreation while maintaining industrial or economic functions.

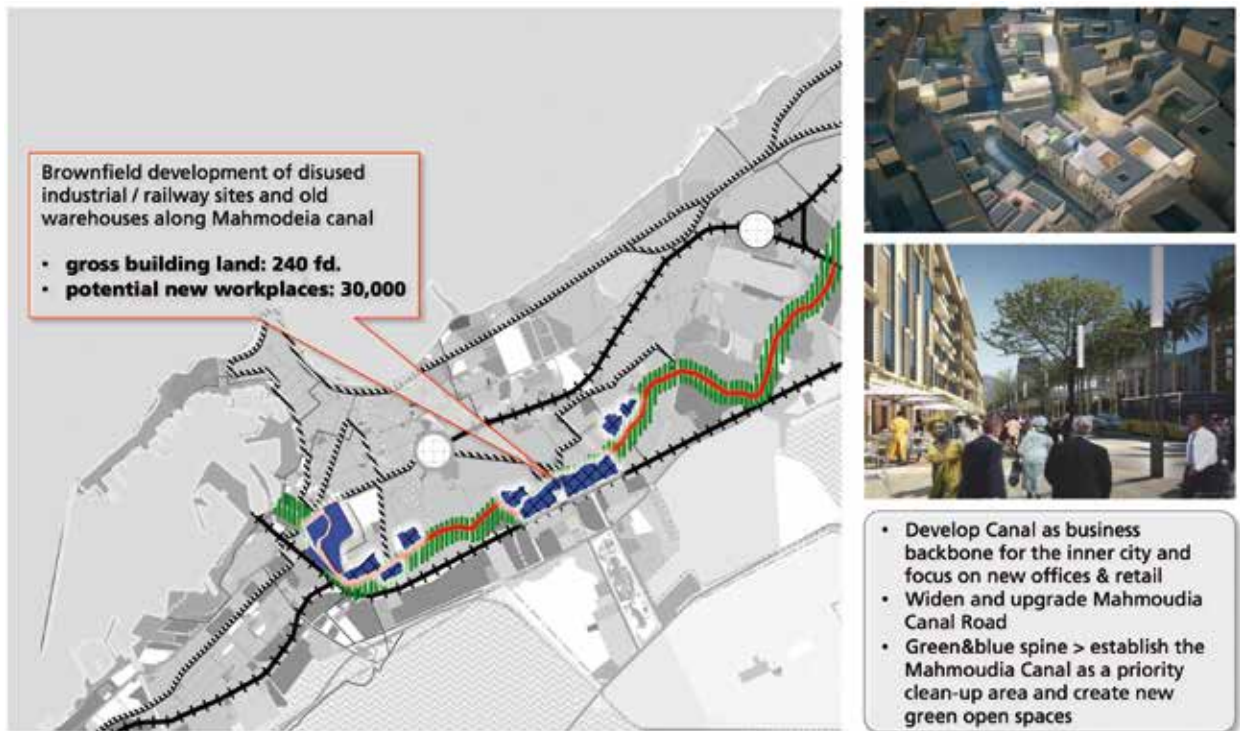
This canal stretches 18 kilometres from the East to the West of the city. The faded industrial areas along the banks of the canal present opportunities for mixed-use communities, combining housing, employment, tourism and leisure, while the canal and its surroundings have the potential for acting as a

## **THE CONCEPT OF GREEN AND BLUE NETWORK**

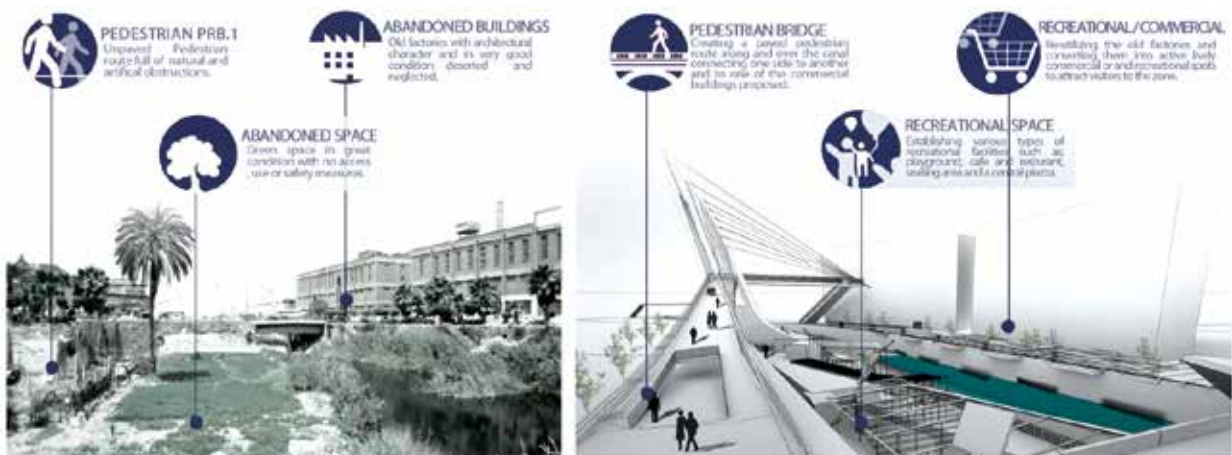
A “Green and Blue Infrastructure” is a natural infrastructure linking the whole territory of a city and is used as a planning tool. It enhances biodiversity in a new way, whether ordinary or noteworthy. Today, all public policies (and particularly planning) have to take account of biodiversity. This infrastructure is a project in itself, aimed at maintaining and reconstituting a network of natural corridors so that animal and plant species, as well as humans, can communicate, circulate, find food, reproduce and rest. It is a contribution to maintaining the services that biodiversity delivers to society: water quality, pollination, flood prevention, improvement in our living environment.

By taking account of ecological continuity at local level in planning documents and by using contractual leverage we can ensure that biodiversity is integrated into land use plans at various levels. For example, a Green and Blue Infrastructure contributes to reorganising land use, which takes into account spatial geographical factors as well as social, economic and cultural factors. Local councils can control their urban development by guaranteeing balance in land use, in order to preserve natural environments and the functionality of ecosystems. (Le Grenelle de l'Environnement, 2010)





Mahmoudieh canal urban revitalization scheme. AS&P, Alex SUP 2032, City consultation, March 12, 2014, p.56



University of Alexandria consultant team's proposal for regeneration of a section of Mahmoudieh Canal. Dr. Abdelfatah el Mousli

green lung stretching along the south of the city. Regeneration of the Mahmoudieh Canal will service five districts of the agglomeration: Montazah, Shark, Wassat, Gharb and Gomrok.

*The Matar Lake: a conservation project that needs to be initiated*

The development of the urban fringe or edge relates to the treatment of the interface between the urban and

rural environments. In Alexandria, as in many cities, this interface is challenged by a proliferation of unplanned and sporadic developments, blurring the distinction between the city with its urban characteristics and the country with its rural characteristics.

The Matar Lake is the nearest to the city centre, and was established on the city's southern boundary during the

rule of King Farouk as a strategic water reservoir in the Second World War. The whole area around this lake is currently experiencing chaotic urban expansion at the expense of agricultural land.

An intervention on the Matar Lake could help improve the quality of life and of community well-being on the urban edge of Alexandria city, producing a sustainable development fra-



2001



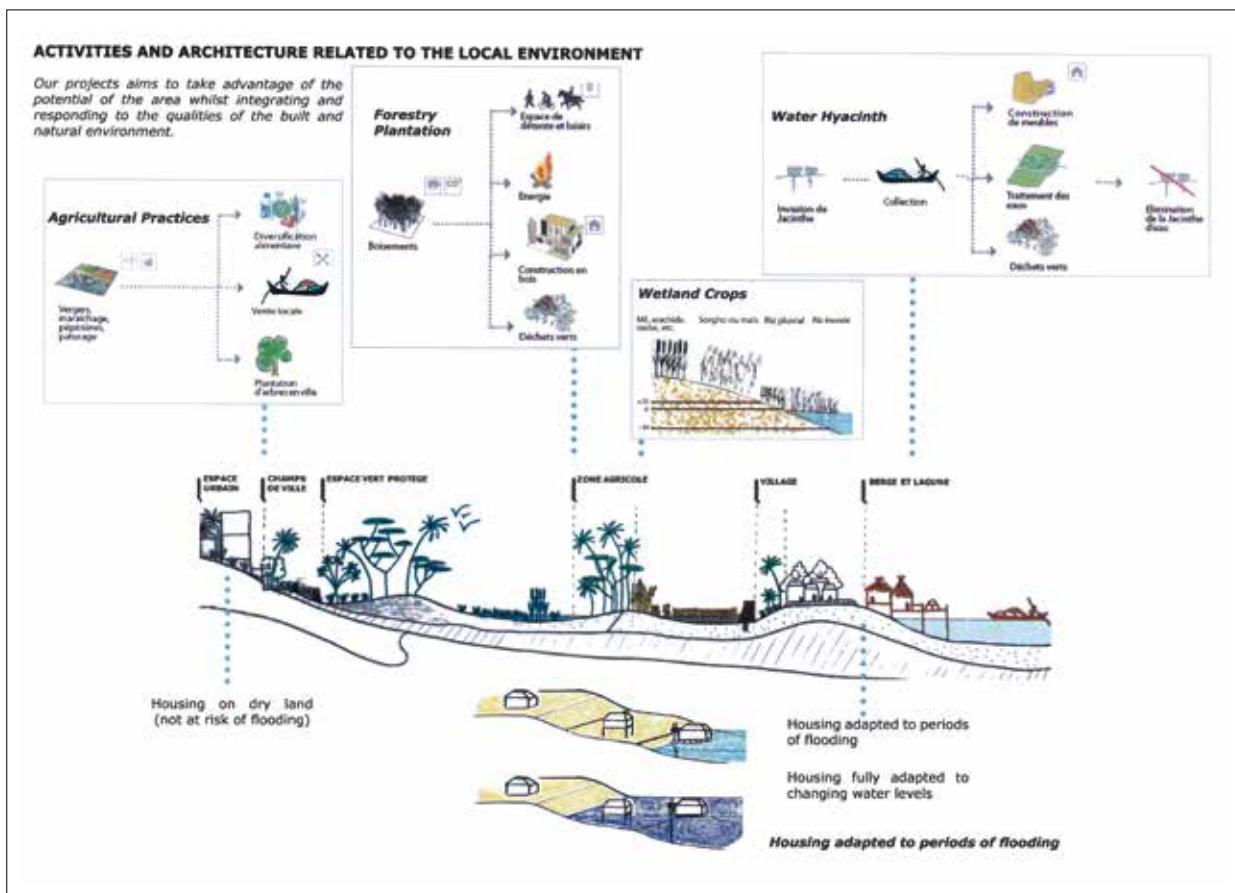
2014

Urban sprawl around Matar Lake 2001-2014. Dr. Hany Ayad

network through designing specific measures to improve the living conditions of residents, preventing further environmental deterioration in the lake area, and helping to establish a sound regulatory framework for the Governorate to manage the lake and pursue participatory approaches to

urban upgrading and tenure security. This area could houses new recreational and touristic amenities for the local community and the city as a whole. In this respect, the untapped potential of Matar Lake could be explored and revealed to the public. The land value

of the area is high, due to its location near the city centre and proximity to major arterial roads and highways. A recreational project might induce an added value investment opportunity for the land that respects its high market value and strategic location.



Porto-Novo (Benin) lagoon integrated project (ideas from Ateliers de Cergy Session, 2012)

# ALEXANDRIA AT A TURNING POINT

**D**espite serious constraints, Alexandria is moving into a new cycle of urban redevelopment in response to global competition, social pressures and changes. New strategic areas have been identified for densification and transformation into knowledge-intensive sectors with a mix of residential and business functions. Alexandria faces major issues if it wants to remain economically strong, socially equitable, environmentally sustainable, and fully able to pull its weight in the regional and Mediterranean context.

Economically strong and sustainable: Egyptian and foreign enterprises are establishing operations in Alexandria because they are heavily dependent on a high-performing logistical base – ports, railways, roads - the supply of services to business and on the quality of life in the city, all of these factors being today important economic benefits.

Being the core city of the metropolitan region: Alexandria's challenge is to develop further as the core of an internationally competitive and sustainable Mediterranean and Arab metropolis in which the other municipalities of the Northern Region (Marsa Matrouh, Aboukir, etc.) play a decisive role in fostering the turning of Northern Egypt into a vibrant metropolis. Alexandria must ensure, step by step, that it has a world-leading education system from pre-school and compulsory school to Universities and research, as the fast-growing companies of the future locate their activities where there is a magnet for researchers, innovators and entrepreneurs.

Developing sustainable land use: more intensive use of the space in the city will make it possible to accommodate many more people and businesses. This increases the customer base for amenities, which makes it possible to manage energy and transport more efficiently and removes the need to encroach on the landscape and on agricultural land. The shortage in the City of affordable housing reduces the knowledge based productivity and the future presence of young manpower in the city.

Engaging a new cycle of regeneration: transformation strategies in a context of urban competition.

Being an accessible Mediterranean and Arab metropolis through public transport on a regional scale: a major city that wants to function as a metropolis cannot do without fast, frequent and comfortable public transport on a regional scale; people must be able to travel swiftly and without problems from port and from airport to City centre (East-West and North-South axis) by means of a flexible mobility system including fast trains, regional trains, light rail or rapid bus.

Becoming the design city through high-quality construction and public space: public space that has high-quality design can also be sustainable. Many neighbourhoods and buildings considered technically out of date prove to be of great significance to the city. Because of their specific character, experiential value and adaptability they could become popular with 'the contemporary urbanites'.

Fostering cultural urban spaces: the city is a space for cultural creation. The notion of cultural urban space is not primarily about making room for standard cultural institutions, activities, events, art, etc. in the urban space. It is to reverse the decline and cultural impoverishment from which urban space has suffered for many years; it is to grow and invest in Alexandria's creative economy.

Caring for its blue and green spaces: the green and «blue» spaces in and around the city fulfil an increasingly important role in the welfare of Alexandria's inhabitants and as criteria for businesses to establish themselves in the city.

Positioning itself as an international attractive city: events are the occasion to position not only the core of the metropolitan area, but also the neighbouring cities. Accessibility, transport, joint events, communication and marketing will become priority measures to ensure the success of future events by investing in major regeneration accelerators, such as railway corridors, an airport node, the waterfront, resettled tenement communities, etc.

Improving the performance of the delivery mechanisms: establishing a more effective mechanism (agency) within the governorate that will be structurally and functionally more sensitive and responsive to local needs, capable of communicating more efficiently to set priorities and programmes and to mobilise resources, communicate with stakeholders, develop and implement projects.



# BIBLIOGRAPHIE

## REPORTS AND INSTITUTIONAL PUBLICATIONS

**AFD-Egis**, Alexandria Urban Transport Study. Phase 1: Elaboration of a long-term urban transport scenario and selection of a short-term priority project. Executive summary, 2014

**AFD-BEI**, Egypt Country Profile, UPFI, March 2013

**AS&P**, Strategic Urban Plan for Alexandria City 2032. Finalizing Phase 1 : Presentation of key results, February 2014, 70p.

**AS&P**, Strategic Urban Plan for Alexandria City 2032. Phase 1 City Profile Report, Vol 1 and Vol 6, September 2013, 87p.

**Committee of the Regions**, Egypt Fact sheet, Division of Powers by Policy Area, General Overview, May 2014, 16p.

**ITDP**, TOD-Standard v2.1, March 2014, 78p.

**Le Grenelle Environnement**, The Green and Blue Infrastructure in mainland France. Challenges and Experiences, 2010, 20p.

**Ministère des Affaires Étrangères**, Orientations de la coopération française en appui à la planification urbaine stratégique, juillet 2012, 21p.

**PFVT et Ministère des Affaires étrangères**, Orientations de l'aide française en faveur de la maîtrise d'ouvrage publique locale, avril 2014, 24p.

**SWEEPNET**, Country report on the solid waste management in Egypt, 2010, 50p.

**UCLG**, Global Observatory on Local Democracy and Decentralization, Local Government Finance: The Challenges of the 21st Century . Second Global Report on Decentralization and Local Democracy (GOLD), 2010.

**Ville de Bamako, Agence d'urbanisme pour le développement de l'agglomération lyonnaise**, Programme de travail. Mission d'AMO auprès de la cellule de préfiguration de l'Agence d'Urbanisme de Bamako (2012-2013), 2012, 7p.

**World Bank - CMI**, Climate Change Adaptation and Natural Disasters Preparedness in the Coastal Cities of North Africa, Final report, 23 July 2011

**World Bank - Cities Alliance - GOPP - Alexandria Governorate - Bibliotheca Alexandrina**, Alexandria City Development Strategy, Process and results 2004-2008, 2008, 89p.

## RESEARCH PUBLICATIONS

**Arandel C., El-Batran M.**, "A Shelter by their own: Informal Settlements Expansion in Greater Cairo and Government Responses" in Environment and Urbanization, Vol. 10, No. 1, April 1998, London, UK.

**Arandel C., El-Batran M.**, The Informal Housing Development Process in Egypt, DPU, University College London, July 1997.

**Barthel P.-A., Monqid S.,**

Le Caire, réinventer la ville, Autrement, collection Villes en mouvement, 2011, 170p.

**Barthel P.-A.,**

Fostering the sustainable planning approach in new city projects: lessons learned and proposals (Morocco and Egypt) in Pascaline Gaborit (ed.) *New Medinas: Towards Sustainable New Towns? Interconnected Experiences Spanning the North and South Mediterranean*, Peter Lang Editions, 2013

**Barthel P.-A., Verdeil Eric,**

"Arab Cities, Sustainable Cities? Challenges, movements and testing of new urban policies South of the Mediterranean" in *Environnement urbain / Urban environment*, Volume 7, 2013, pp. 6-8.

**Zaker Mousa Tammam Hassan, Mahmoud Ali Ahmed Mohamed,**

"The Conflict Of Authorities Between Centralization And Decentralization In Local Governments And Its Impact On The Activation Of Strategic Plans In Egypt" in *Journal of Applied Sciences Research*, 8(8): 3887-3897, 2012

## PRESENTATIONS & POSITION PAPERS

**Gautier M.,** CDC / CMI,

"Adaptation to climate change and natural disasters in the Coastal cities of North Africa. Case of Alexandria" in *Resilient Cities 2013* (31 May - 2 June 2013) Bonn, Germany

**Mohareb N., Kronenburg R.,**

"Arab Walled Cities: investigating peripheral patterns in historic Cairo, Damascus, Alexandria, and Tripoli" in *Proceedings: Eighth International Space Syntax Symposium*, Edited by M. Greene, J. Reyes and A. Castro. Santiago de Chile: PUC, 2012.

**Sharaf El Din S., Ragheb G.,**

"Strengthening Alexandria Urban Fabric by Planning Urbanism's Walkable Area" in *Proceedings Real Corp 2013*, 20-23 May, Rome

**Soliman Ahmed M.,**

"Urban Informality in Egyptian Cities: Coping with Diversity" in *Fourth Urban Research Symposium*, 2007

## VISITED WEBSITES

<https://www.itdp.org/library/standards-and-guides/transit-oriented-development-are-you-on-the-map/what-is-tod/>

<http://www.fargfabriken.se/en/previous-cities/alexandria-egypt>

<http://www.territoires.gouv.fr/le-pnrqad-revitaliser-le-coeur-de-la-ville>

<http://www.alserkalavenue.ae>

<http://www.tadamun.info>

# APPENDIX

Alexandria fact sheet p.15  
(SUP Alex 2032 – vol 1 – sept 2013)

## CLIMATE

Climate Arid/Semi-Arid (south)  
and Moderate (north)

Month with Lowest Avg  
Temperature January 14°C

Month with Highest Avg  
Temperature August 27°C

Avg Annual Rainfall 200mm

Prevailing Winds NW and NE,  
avg. speed 14.4km

Elevation 0-40m above sea level

## ADMINISTRATION / POLITICAL STRUCTURE

Governorate, muhafazat Alexandria  
Governorate

Municipalities, shiyakha 139

Principal City Alexandria City

City Districts, hay 7

Sub-Districts, taksimat idaria 16

New Urban Communities (NUC)

New Borg El Arab

## TRANSPORT

Number of Licensed Vehicles (2011)  
670,000 vehicles

Vehicle Ownership Rate (2011) 90  
vehicles/1,000 citizens

Road Transport Mode Split:

Private Car 28%

Bus 16%

Taxi 7%

Minibus 49%

Percentage of Trips completed  
on foot 36%

## INFRASTRUCTURE

Daily Water Demand 370 litres per  
person

Percentage households with potable  
water access near 100%

Household wastewater treatment for  
Urbanised Areas : 87% of households  
connected to sewage network

Generated Solid Waste 3,500 tons/day

Percentage Biodegradable 55%

Percentage Recyclable 15%

## BUILT ENVIRONMENT

Total Population

Governorate 4.11 million people

City 4.02 million people

Borg El Arab 51,340 people

New Borg El Arab (NUC) 41,660 people

Gross Residential Density

Governorate 98 persons/fd  
(23,311persons/sq. km.)

City 126 persons/fd  
(29,964 persons/sq. km.)

Borg El Arab 6 persons/fd  
(1,473 persons/sq. km.)

New Borg El Arab 23 persons/fd  
(5,592 persons/sq. km.)

Average Household Size

Governorate 3.7 persons/household

City 3.6 persons/household

Borg El Arab 4.9 persons/household

New Borg El Arab 4.1 persons/household

Alexandria City

Percentage of Owner-  
Occupied Units 71.6%

Percentage of Residential Area-  
Unplanned 40%

Housing Construction Rate,  
2006 15,700 Units

Avg. per Capita Annual Income 3,557 LE

Avg. Household Annual Income  
14,096 LE





[www.afd.fr](http://www.afd.fr)



Agence Française de Développement (AFD)  
5, rue Roland Barthes - 75598 Paris cedex 12  
Tél. : + 33 1 53 44 31 31