The “Open Cities” Approach: a Prospect for Improving the Quality of Life in Alexandria City, Egypt

Mai M. Abdo, Hany A. Ayad, Dina Taha

(Mai M. Abdo, MSc Candidate, Department of Architecture, Faculty of Engineering, Alexandria University, Egypt, mai.m.abdo@gmail.com)
(Prof. Hany A. Ayad, Department of Architecture, Faculty of Engineering, Alexandria University, Egypt, hany.m.ayad@gmail.com)
(Dr. Dina Taha, Department of Architecture, Faculty of Engineering, Alexandria University, ditaha@alexu.edu.eg)

ABSTRACT

On one level, sustainable urban development has been the focus attention of most of the planners for the past few years. It is a huge field of interest that needs not only being well studied, but also being implied to all cities all over the world. On the other level, the concept of “Open Cities” is a prospect within the planning domain, which aims at providing equal services and infrastructure to its citizens as well as making cities more attractive to foreign population, may they be migrants, visitors or investors. Hence, cities should be planned in a way to welcome a diversity of people and cultures.

This research is concerned with the introduction of sustainable urban development factors into cities to achieve the concept of “Open Cities”. It aims at developing a plan that targets most of the problems facing cities, be it on the demographic, climatic, residential, commercial, social or political levels. It is believed that by combining the factors that affect “Open Cities” with the factors of Sustainable Urban Development, one could conclude the specific factors that should be tackled in order to achieve “Sustainable Open Cities”.

The proposed concept and methodology of combining the factors of Sustainable Urban Development to those of “Open Cities” will be applied on the city of Alexandria as a case study. This will pinpoint and highlight the strengths and weaknesses of such an approach.

INTRODUCTION

“Open Cities” have become an international trend that could be applied to cities all over the world. An Open City is one that is open to new ideas and innovation; welcoming to a diversity of people and cultures. It is a city of equal opportunities for all, a city that is open for the combination of lifestyle, creativity, scale, population, cultural and commercial diversity that enables it to become a ‘magnet’ city alongside cities. “Open Cities” require an open approach by city planners.

Alexandria has a lot of characteristics that greatly help it to be compared with all the successful “Open Cities” all over the world. The challenge is that it is needed to find the right way to benefit from these characteristics and points of strength in the most efficient way in order to make Alexandria a successful open city and achieve its vision as a cosmopolitan city and an attractive place to live in.

The paper will focus on the research’s case study of applying the methodology of combining the factors that affect both Sustainable Urban Development and those of “Open Cities” to be used in Alexandria urban development. It aims at exploring the “Open Cities” approach in achieving a sustainable urban development. It analyzes the spatial, socio-economic and administrative opportunities that could assist in the regaining of Alexandria cosmopolitan role in the 21st century. Finally, the paper suggests guidelines on how to incorporate the approach in the city planning and management processes in order to improve its quality of life.

METHODOLOGY:

Through the analysis of “Open Cities” factors and combining them to the factors of Sustainable Urban Development we will reach the factors that should be taken into consideration in planning the city of Alexandria to make it an Open City. Moreover, with analyzing the current state of the city planning and the challenges that face the city’s sustainable development, we could suggest certain steps that could be applied on the city to make it open and improve the quality of life of the city’s inhabitants.

OPEN CITY AND SUSTAINABLE URBAN DEVELOPMENT

Both “Open Cities” and Sustainable Urban Development are delimited by several factors that describe their physical and socioeconomic characteristics; by the analysis of these factors we will attempt to find/analyze
the relation between both types of factors, in order to use sustainable urban development to achieve the concept of “Open Cities”.

4.1 “Open Cities” Factors:
The British Council and URBACT (2009) stated that Openness is a multidimensional and complex phenomenon which has to be measured by more than one factor and also by a large number of individual indicators which measure different aspects of openness. These indicators can be grouped thematically into nine key factors, where each factor represents one of various dimensions of the quality of life of all inhabitants with special attention paid to international populations who are important for the attractiveness and openness of the city. These factors are:

1) Groups of international populations
2) Governance and leadership
3) Regulatory
4) Economic
5) Social and societal
6) Cultural and amenity
7) Internationalization
8) Connectivity and accessibility
9) Environmental factors.

4.2 Sustainable Urban Development Factors:
Sustainable Urban Development incorporates planning for transportation systems and land use to improve the structure of a town or city. Urban development includes urban renewal, which addresses issues like lack of investment in specific regions. Factors like land use, aesthetics, safety, unkempt buildings and transportation all affect how cities are planned.

In this respect, Colantonio (2007) stated that “as a framework or unifying set of principles to be applied across all towns and cities. The core components of sustainable communities present a vision which has gained the commitment of many stakeholders. However, turning the vision into reality raises key questions of delivery. The success of Sustainable Communities policies will depend on the effective interaction of spatial planning, transportation, the economy, the environment and a number of other policy interventions”.

Based on Nyakaana (2010), Fallaw (2010), Kishiue et al (2005), Ottensmann (2003), one can summarize the factors affecting sustainable urban development into the following: I suggest that the main factors affecting Sustainable urban development are as follow:

1) Network and infrastructure, 2) Geographical, 3) Political and safety, 4) Residential and planning,
5) Demographic, 6) Economic, 7) Environmental, 8) Social Factors.

4.3 The relation between “Open Cities” and Sustainable Urban Development:
There are several relations between each factor of those of “Open Cities” and the suggested factors of the Sustainable Urban Development, by analyzing each of these factor’s characteristics one could conclude the diagram of relations below:
The analysis reveals that these factors affect each other but in different weights. The factors of Sustainable Urban Development shown below are selected to be examined on the case study of Alexandria as the major effective factors on the city openness, as their effect is more than that of the other factors and also they are affected by the city openness too.

1. Residential and planning factors
2. Demographic and economic factors
3. Social factors
4. Network and infrastructure factors
5. Environmental factors
6. Political and safety factors

5 APPLICATION ON ALEXANDRIA

Alexandria, with a population of about 4.1 million, is the second-largest city in Egypt, and is the country's largest seaport, serving about 80% of Egypt's imports and exports. Alexandria is also an important tourist resort (CAPMAS, 2006). The city extends about 32 km along the coast of the Mediterranean Sea in north-central Egypt. It is home to the Bibliotheca Alexandrina, and is an important industrial center.

5.1 Residential and planning factors

5.1.1 Housing indicators

The most populous districts (qism) of Alexandria, as indicated by the results of the 2006 census, are Montaza, El Ameriyah and El-Rammil. However, Moharam-Bek, El-Manchiyat, Mena El-Bassal El-Labban and Karmooz are indicated as zones with high population density, as they constitute the old areas of the city. Residential densities of Alexandria all over its different districts are relatively high as presented in Table 1.
The “Open Cities” Approach: a Prospect for Improving the Quality of Life in Alexandria City, Egypt

Table 1: Alexandria, Population, Area and Density, (CAPMAS, 2006)

<table>
<thead>
<tr>
<th>Zone/District (Qism)</th>
<th>Population</th>
<th>Area (feddan)</th>
<th>Density (persons per feddan)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Gross Density</td>
</tr>
<tr>
<td>Bab Sharq</td>
<td>179,729</td>
<td>1,349.34</td>
<td>133.20</td>
</tr>
<tr>
<td>El-Ameriyah.</td>
<td>491,373</td>
<td>100,389.13</td>
<td>4.89</td>
</tr>
<tr>
<td>El-Attareen</td>
<td>343,836</td>
<td>6,934.52</td>
<td>49.58</td>
</tr>
<tr>
<td>El-Dekhiyiya</td>
<td>40,605</td>
<td>441.88</td>
<td>91.89</td>
</tr>
<tr>
<td>El-Gomrook</td>
<td>85,192</td>
<td>840.87</td>
<td>101.31</td>
</tr>
<tr>
<td>El-Labban</td>
<td>36,750</td>
<td>264.80</td>
<td>138.78</td>
</tr>
<tr>
<td>El-Manchiyat</td>
<td>23,616</td>
<td>136.76</td>
<td>172.68</td>
</tr>
<tr>
<td>El-Rammil</td>
<td>752,371</td>
<td>7,510.47</td>
<td>100.18</td>
</tr>
<tr>
<td>Karmooz</td>
<td>120,062</td>
<td>850.63</td>
<td>141.14</td>
</tr>
<tr>
<td>Mena El-Bassal</td>
<td>254,986</td>
<td>2,465.56</td>
<td>103.42</td>
</tr>
<tr>
<td>Moharam-Bek</td>
<td>299,401</td>
<td>1,307.79</td>
<td>228.94</td>
</tr>
<tr>
<td>Montaza</td>
<td>1,173,803</td>
<td>20,833.33</td>
<td>56.34</td>
</tr>
<tr>
<td>Sidi Gabr</td>
<td>226,304</td>
<td>2,778.47</td>
<td>81.45</td>
</tr>
</tbody>
</table>

Table 2: Alexandria, Population stratified according to income, (%), NUO Survey, March 2008

<table>
<thead>
<tr>
<th>Zone/District (Qism)</th>
<th>Income</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upper</td>
</tr>
<tr>
<td>Bab Sharq</td>
<td>45.76</td>
</tr>
<tr>
<td>El-Ameriyah.</td>
<td>30.99</td>
</tr>
<tr>
<td>El-Attareen</td>
<td>22.03</td>
</tr>
<tr>
<td>El-Dekhiyiya</td>
<td>45.45</td>
</tr>
<tr>
<td>El-Gomrook</td>
<td>15.46</td>
</tr>
<tr>
<td>El-Labban</td>
<td>4.69</td>
</tr>
<tr>
<td>El-Manchiyat</td>
<td>21.43</td>
</tr>
<tr>
<td>El-Rammil</td>
<td>20.89</td>
</tr>
<tr>
<td>Karmooz</td>
<td>1.52</td>
</tr>
<tr>
<td>Mena El-Bassal</td>
<td>3.15</td>
</tr>
<tr>
<td>Moharam-Bek</td>
<td>8.16</td>
</tr>
<tr>
<td>Montaza</td>
<td>46.19</td>
</tr>
<tr>
<td>Sidi Gabr</td>
<td>80.66</td>
</tr>
</tbody>
</table>

5.1.2 Planning indicators

Alexandria is an urban governorate that includes the city Alexandria and the new industrial town, Borg El Arab. The City of Alexandria consists of six districts (Ha): Al-Montaza, East (Sharq), Central (Wassat), Gomrok (Customs), West (Gharb) and Ameriyah. The city can be divided into four major zones:

From the western side of the city that extends from Borg el Arab to downtown, Shallat (Waterfalls) Gardens then to Montaza, Mamoura and Abu-Qur (East). The built-up area of Alexandria is 73,800 feddan (309,960 sq km). Residential use is the most dominant land use occupying almost 46 % of the total built-up area. Regional roads and railways comes in second place, where almost 29 % of the built-up area is dedicated to

1 Feddan = 4200 m²
transportation purposes to facilitate the flow of commodities into and out of Egypt through the port. Industrial uses comes third, with almost 19%; other uses include military, services and open areas figure 3.

According to the Ministry of State for Local Development, there are 29 informal areas within the City of Alexandria (figure 4). This represents about 2.9% of the informal settlements of Egypt. An estimated 1.4 million persons, representing about 35% of the residents of Alexandria, live in these informal areas (GOPP, 2007). They represent an estimated nine percent of those living in informal areas in Egypt. An estimated EGP 275.5 million during 1992/93 to 30 June 2004 had been spent to improve conditions in these informal areas by providing sewerage, electricity and paving streets. Most of these slum areas that are located in the old town in the western side of the city are distinguished by their compact patterns. These areas lack many amenities, such as open spaces and green areas; the streets are narrow and unpaved.

5.2 Demographic and economic factors
CAPMAS (2006) stated that the population of Alexandria reached around four million. It is the second most populous city in Egypt. Population annual growth rate from 1996 to 2006 was 2.1%, which is near the national rate. Male population represented 51% of the total population. The percent of illiterate adults declined from 24.8% to 19.3% from 1996 to 2006. The percentage of educated literates with secondary and technical diploma are the majority representing almost 55% of the literate population; while those with university and/or post graduate degrees represent almost 15% of the literate population. Those who are economically active and participate in the labor force are only 31.2% of the population. Those who are not part of the labor force are students, housewives, physically disabled, etc. The local economy of Alexandria depends on manufacturing as a major commodity production sector, as well as service production sectors, particularly trade and transportation (figure 5).
Unemployment is on the rise. In 1996, those unemployed represented seven percent of the labor force, while in 2006, they represented 10.22%. Accordingly, the dependency rate in Alexandria can be significant since only 31.2% are economically active.

5.3 Social factors

According to the GOPP (2006) studies, Alexandria needs additional educational services as the planning requirements indicate that the number of students has to be limited to 40, 38, and 36 students per class in primary, preparatory and secondary schools, respectively (Table 3).

<table>
<thead>
<tr>
<th>School Type</th>
<th>Number of Schools 2009/2010</th>
<th>Number of Students 2009/2010</th>
<th>Students per Class</th>
<th>School Deficit</th>
<th>Number of new Schools 2032</th>
<th>Total Number of Schools 2032</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>787</td>
<td>526,901</td>
<td>43</td>
<td>50</td>
<td>361</td>
<td>1,148</td>
</tr>
<tr>
<td>Preparatory</td>
<td>437</td>
<td>210,810</td>
<td>38</td>
<td>-</td>
<td>271</td>
<td>708</td>
</tr>
<tr>
<td>Secondary General</td>
<td>163</td>
<td>65,560</td>
<td>32</td>
<td>-</td>
<td>87</td>
<td>250</td>
</tr>
<tr>
<td>Secondary Business</td>
<td>26</td>
<td>14,350</td>
<td>36</td>
<td>-</td>
<td>13</td>
<td>39</td>
</tr>
<tr>
<td>Secondary Industrial</td>
<td>23</td>
<td>29486</td>
<td>30</td>
<td>-</td>
<td>11</td>
<td>34</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,436</strong></td>
<td><strong>847,107</strong></td>
<td><strong>50</strong></td>
<td><strong>743</strong></td>
<td><strong>2,179</strong></td>
<td></td>
</tr>
</tbody>
</table>

The calculated needs for educational services by 2022 mount to 275.2 feddan to build an estimated 323 schools, as Table 3 indicates. Most of that land is devoted to primary education to meet the growing needs of a growing population.

Health services are also strained. The current services rate is 1.4 beds per thousand persons, which is beyond the planned requirement (3.0 beds per thousand persons). The estimated needed health service by 2022 is 3,751 beds, which will require about 44.66 feddan of land.

Currently, there exists one youth centre for every 114 thousand persons, which is considerably too low when compared with the normal average. The planned requirement is one youth centre for every 50 thousand persons. The future need of sporting facilities is then 25 sporting facilities that require about 25 feddan of land (GOPP, 2006).
Alexandria has 17 police stations, and 55 police precincts. The Governorate has one fire fighting department that includes 46 fire fighting houses distributed among the six districts and Borg Al Arab City. The planned requirement is one fire house per 30 thousand persons. The current rate in Alexandria is one fire house per 89 thousand persons. The needed service then is 91 fire houses that require about 5.4 feddan of land (GOPP, 2006).

5.4 Network and Infrastructure factors
According to GOPP, 2008, Alexandria is well connected to other parts of Egypt via a number of routes. The Cairo-Alexandria Agricultural Road connects the city to other cities within the Delta region. The Cairo-Alexandria Desert Road connects the city with the new developments, such as Sadat City and Nubaria City. The Alexandria-Matrouh Coastal Road extends towards the west, serving a number of summer resorts, such as Marina, and connects the city with other towns, such as Alameen and Marsa Matrouh. This road extends to the Egyptian-Libyan borders. Alexandria is also well connected to other northern settlements, such as Rosetta, Damietta and Port Said through the International Road. Furthermore, the city has an international airport, and is connected to other areas of the country by railroads.

The street pattern of Alexandria takes the form of grid-iron, where major roads, such as the Hurreya st, El Geish st, stretch from the east to the west. Other important streets, such as Suez Canal Street, go from north to south.

Alexandria Water Company is responsible for providing drinking water to the residents of the Governorate. The company depends on Nubaria and Mahmoudia water canals as sources for fresh water. The company produces about 2,927 million cubic meters a day. Amounts of consumed drinking water are 1,757 million cubic meters, which means that lost drinking water is about 40 % of the produced drinking water.

An estimated 99.5 % of the residents of Alexandria (including Borg al Arab) are connected to sanitary system. Some treatment plants provide primary treatment; other plants provide secondary treatment to the wastewater. The treated wastewater is then discharged to Lake Maryut. There are four power generation plants that provide Alexandria (including Borg al Arab) with electricity. The city is well served with communication network.

5.5 Environmental factors
According to the reports of Egyptian Environmental Affairs Agency (EEAA), there are nine hotspots out of 13 locations for monitoring along the coast of the Mediterranean. El-Max, El-Dekhiyla, Western harbour and Abu-Quir are among these nine sites. The coasts of Sidi-Gaber, El-Anfoushi, El-Shatbi and Eastern harbour experience moderate levels of pollution. El-Agami, El-Montaza and west of Abu-Quir experienced less pollution compared to other polluted locations.

Lake Maryut, is one of the shallow lakes of northern Egypt. It constitutes the southern natural border to the city. Lake Maryut is heavily polluted. There are three drains connected to the lake: al Qala’a (Citadel), al Ummoum (Commons) and old estuaries to the north of the lake. These three drains are responsible for dumping liquid and solid wastes from the city districts into the lake.

In Alexandria the total generated municipal wastes ranges from 2,600 to three thousand tons a day. A private sector is responsible for collecting wastes and cleans the streets. There are three transit stations, and a sanitary landfill in Borg al Arab that receive these wastes. There are three composting plants that transform the municipal wastes into compost to be used as soil conditioner and/or organic fertilizer.

5.6 Political and safety factors
Egypt 2011 Crime and Safety Report stated that, the current overall situation has improved in Egypt, however, in late January and early February 2011, Egypt experienced a dramatic revolution and massive political upheaval. The country is still in a state of flux and the future stability of the nation remains unpredictable. In late January and early February 2011, massive protests swept the nation and hundreds of thousands of demonstrators converged on Tahrir Square and other areas throughout Egypt to include, but not limited to, Alexandria, Suez, Mansoura, Menufiya, Assuit, Qena, Tanta, and Mahallah in a successful effort to topple the regime. During these demonstrations, violent clashes between protestors and police ensued that resulted in the deaths of many demonstrators and police.
Police stations throughout Cairo and other cities were burned, and an unknown number of weapons were stolen from the police stations as well as uniforms which have yet to be accounted for. According to unconfirmed reports, up to 23,000 prisoners have escaped from police stations and prisons, and approximately 10,000 are still at large. There was widespread looting before neighborhood “watch” groups and vigilantes reestablished a tenuous calm. In the days following the initial protest, police resources were exhausted and depleted, and the result was minimal, if any, police presence throughout most of Egypt.

Intercity roads are generally in good condition, but unmarked surfaces, stray animals, and disabled vehicles without lights or reflectors are among the many hazards that can be encountered on highways, especially after dark. Embassy personnel in Egypt are prohibited from traveling outside Cairo by motor vehicle after sunset and are encouraged to travel between cities via air or train. Although rare, petty crime is a growing concern in Egypt. These crimes range from pick-pocketing and assaults to more frequent and aggressive female sexual harassment. Also, a steady increase in various types of crimes and criminal behavior. Residential burglaries are on the rise.

The police in Egypt are generally very concerned about the welfare of foreigners, tourists, and business interests. In practice, foreigners who are crime victims often receive more support from the police than do Egyptians. Tourism and antiquities police are stationed in hotels and tourist sites throughout the country.

Nowaday, the police and military forces are working on keeping all the country with its cities more safe and politically stable. They are doing great efforts in order to keep the cities attractiveness not affected with these crimes and keep all the tourists and foreign investors safe whenever they are visiting the cities.

6 DISCUSSION
Albert Speer, 2012 stated that Alexandria by its size and geographic location has got the potential to establish itself as the quality of life alternative to Cairo. However, in order to fully exploit this potential it needs to gain attractiveness and tackle vital problems like cleanliness and solid waste management, environmental pollution, traffic congestion and partially poor or lacking utility infrastructure. Alexandria will also have to take care of its architectural heritage and its archaeological treasures. They need both, protection and investment to make visiting the city more appealing to tourists (not only domestic and Arab tourist but also international travellers) and businesses. These development steps would help Alexandria to reach the concept of being Open City in order to achieve the city vision and goals.

6.1 Residential and planning factors
Albert Speer, 2012 said that Alexandria in particular features in its core districts very high residential densities of up to 500 persons per feddan in areas like Raml 1st. In positive terms this means that high densities are already embedded in the genetic urban code of Alexandria, and reaching an appropriate density will not be the problem, especially not in core area expansion zones. On the other hand, it has to be understood, that excessive densities like in the Raml sub-district cause serious overcrowding-problems and have to be avoided in new developments for health and safety reasons. Based on their international expertise and on a survey of average density figures in Alexandria’s core districts the consultant-team recommend not to exceed a gross residential density of 250 persons per feddan and employ considerably lower densities in suburban extension areas.

In the Alexandria 2032 city profile report it was suggested to make alexandria a green city as the residential quality is closely linked to the availability of nearby green open spaces for leisure and recreation, which also fulfill important micro-climatic functions. Alexandria today is underperforming in terms of amount and accessibility of green open spaces, which is why newly planned extensions should include public parks and greens. These new areas for recreation have to be linked to the existing urban fabric as well and should be interconnected through a network for non-motorized mobility. New open spaces should be introduced alongside with innercity brownfield site developments wherever possible.

Alexandria has to devise an urban housing policy, which meets the demand in all strata of society and provides a well-balanced offer on the rental and ownership market. Every Alexandrian household, especially young married couples, shall find an adequate units in price ranges compatible with their income and adaptable to changes in family size. The city will successfully create a wellfunctioning and transparent
residential real estate market and achieve this by controlling unplanned building activities and by legalizing properties in existing unplanned areas.

By means of foresighted land-use planning and a stricter zoning regime, Alexandria will manage to avoid conflicts between residential and industrial land uses and limit the environmental impact of new developments. For inner-city areas along the Mahmodeia Canal and in Gomrok, a relocation of industrial enterprises and the conversion of disused and underused industrial sites to higher value uses will open up new perspectives. The adjacent residential neighbourhoods will benefit from this process of brownfield development.

6.2 Economic factors and Demographic factors

Albert Speer, 2012 mentioned that Alexandria faces the challenge of accommodating about 2 million additional residents by 2032. It is clear that such an increase in Alexandrian citizens cannot be absorbed by the existing urban fabric, but will result in a massive expansion of the city’s built-up area. Population growth will have to be redirected away from the already overcrowded core area of Alexandria to new settlement centers either on Alexandrian territory or in the Alexandria Urban Region, especially down the North Coast Strip of Marsa Matrouh Governorate.

For the education facilities it would be better to decrease the literacy rate and improve education and training centres quality, also we should make the density of the students in their classes according to the international standards and never let it increase even with the increasing of the population rate.

Unemployment is on the rise so it should be carefully studied when trying to develop Alexandria in order to make it economically active and decrease this huge rate of unemployment, that could be reached easily when the city becomes more open. Also, we should work on increasing the FDI rate in Egypt as that will help in providing extra spaces for Egyptian employment and by increasing the city openness and attractiveness we could easily solve the problem of unemployment and to attract FDI, Alexandria needs to examine what investors want. The primary objective for investors is to have transparency and political stability, easy access to, and easy communication with their investment projects. In all of these areas, Alexandria has room for improvement.

Alexandria shall take advantage of its existing diversified economic portfolio and build its future positioning on three concurrent streams of local economic development. The Natural Growth stream capitalizes on the existing strength of Alexandria in manufacturing industries, the Euro-Mid-Eastern Hub development stream focuses on logistics and related activities, and draws upon the existing seaport, road and river transportation infrastructure. As a third and most ambitious endeavour, Alexandria will embrace the City of Enlightenment stream for boosting the development of knowledge-based businesses. All of the aforementioned streams of local economic development will be linked to specific projects in urban development. Be it a research centre in Sharq, an office park dedicated to business process offshoring in Wasat, Smart City Campus in New Borg El Arab or the extended Al Nahda industrial zone in Al Ameriyah - there will be numerous high-profile investment opportunities for foreign and domestic companies in Alexandria.

With 60% of Egyptian foreign trade passing through Alexandrian Ports, the city seems naturally set to assume the role of a Euro- Mediterranean cargo hub. Substantial investment will be required to expand the already good logistical capabilities. Furthermore such endeavours should be closely coordinated with nationwide development plans for the logistics networks as Alexandria faces strong competition from Damietta and Port Said.

6.3 Network and infrastructure factors

Albert Speer, 2012, in Alexandria 2032 planning mentioned that the railway line operating between Borg El Arab and Alexandria city centre has to play a pivotal role in this respect. Each new urban centre will have to be fitted with an efficient and affordable internal circulation and transportation network structure. Technical utility infrastructure networks have to be implemented in all devised urban expansion zones taking into consideration aspects like sustainability and reduced resource consumption. Decentralized power generation from renewable sources will complement these endeavours by stabilizing the distribution network.
Urban upgrading will be the key to improving the quality of life for the majority of Alexandrians in the coming two decades. This encompasses ensuring electricity supply, potable water supply and sanitation by extending and upgrading the networks, investing in healthcare, social and educational services, as well as offering better and more connections in public transportation. Spending half of one’s working day commuting in traffic jams on clogged main roads seriously affects the quality of everyday life in Alexandria and negatively impacts the economic performance of the city. A remedy will be a set of measures, which includes massive investment in public transportation systems to increase their level service and availability throughout the city, as well as upgrading and extending the existing road network infrastructure.

### 6.4 Geographical factors and Environmental factors

Albert Speer, 2012, in Alexandria 2032 planning stated that, as far as tourism is concerned, Alexandria has to take advantage of its natural topographic properties, the most prominent of which are certainly the Mediterranean Sea shore and its inland water bodies like the canals and lakes. Especially the Corniche – as yet dominated by the only viable major North-South arterial road – bears a significant potential for further upgrading and adding new points of touristic or commercial activities. Also Lake Mahmoudiya with its shores partly occupied by unplanned settlements and the heavily polluted main basin of Lake Marrouit are in need of strategies for environmental upgrading opening up opportunities for future development.

Alexandria since its beginnings has been an urban hub, a port city strategically located between Orient and Occident, open to people of various beliefs and to merchants, goods, and ideas from foreign countries. Today, of course it is no longer the sea-routes and ports of Alexandria alone through which ideas are exchanged, but modern means of travelling, which themselves get more and more substituted by modern media and the intangible data-highways of the internet. Internationalism and open-mindedness are deeply routed in Alexandria’s urban genome, and the city will seize the opportunity to reinvigorate its once colourful and diverse cultural life taking on and blending – like in former times – influences from Egypt, Northern Africa and Europe into a unique cosmopolitan atmosphere. However the strong positioning of Alexandria as a physical hub on the Mediterranean remains and shall be further reinforced by expanding logistics infrastructures like ports airports, road and rail networks.

### 6.5 Political, safety and Social factors

Albert Speer, 2012, IN Alexandria 2032 planning said that Alexandria is a great city with public-spirited citizens so, it will be a city promoting a sense of community and active citizenship through public awareness programs and participatory actions. Alexandrians shall take responsibility for their natural, built and social environment. The Governorate’s administration can only support such public spirit, yet the major changes will have to be brought about by the Egyptian people who have to revise their personal life-styles and attitudes and finally agree upon the way they want to live in their mother city. Alexandrian home owners and potential builders should understand that unplanned development without proper roads and sanitation, without enough space for social and educational facilities in the long run jeopardizes the quality of life of every citizen and start gaining trust in coordinated public planning.

Also, Alexandria is a city promoting social inclusion and gender equality as it will have at least double female workforce participation during the next two decades alongside with providing its youthful population with enough employment opportunities and thus seize the demographic dividend. Social inclusion has a long-standing tradition in Arab cities, which Alexandria – especially in its new residential neighbourhoods will adopt by providing adequate housing for all income levels. Infrastructure provision in all unplanned areas will be implemented according to a comprehensive plan improving residential quality all over the city. Furthermore all neighbourhoods in the urban fabric of Alexandria shall be designed and upgraded considering gender issues like adequate street lights, safe public spaces, access to affordable public transportation and informal employment opportunities.

The political and safety factors are affected a lot with the post revolution in 2011 and this should be solved very fast to make Alexandria a safe and friendly city to all its visitors as it was. The country political forces are working hard to make the city always safe and solve any political problems as soon as they could. But the Alexandrian residents are always helping all the visitors and protecting them and their safety is the city main concern.
7 CONCLUSION

Improving the quality of life in Alexandria is not only key to the well-being of Alexandrians, but will also support the city’s positioning as an important economic and touristic hub in Egypt and on the Mediterranean. Alexandria is blessed with three waterfronts offering plenty of opportunities for sustainable expansion and development, if environmental problems are solved.

“Open Cities” is a perfect trend that will help Alexandria greatly to reach its future development vision by using Sustainable Urban Development ways of planning. The deficiencies in the urban and socioeconomic structure of Alexandria would need to be solved by the city decision makers and planners in order to reach the city openness.

Finally, Alexandria could be successful Open City by limiting the average gross residential density, redirecting urban growth to the west, linking urban nodes efficiently and providing utility infrastructure, improving quality of life and environmental quality, making Alexandria a greener city, reducing visual as well as noise and air pollution, stimulating successful socio-economic development, providing sufficient building land for economic growth, increasing Alexandria’s touristic attractiveness and establishing Alexandria as a euro-mideastern hub for logistics, trade and business.

8 REFERENCES

DR K. MADBOULY, MOSTAFA, ENG. AHMED EL MAGHRABI, State of the Built Environment and Housing Indicators of Seven Egyptian Cities, Comprehensive Report, Cairo, Egypt, October 2010.
GENERAL ORGANIZATION FOR PHYSICAL PLANNING (GOPP): The General Plan for the City of Alexandria, Cairo, Egypt, 2006.
EGYPTIAN ENVIRONMENTAL AFFAIRS AGENCY: The Environmental Profile of the Governorate of Alexandria, Cairo, 2007-2008.
UNITED STATES DEPARTMENT OF STATE OSAC BUREAU OF DIPLOMATIC SECURITY. Egypt 2011 Crime and Safety Report, Riots/Civil Unrest; Crime; Terrorism, Cairo, Egypt, 2011.