

Smart Growth of Capitals in Arabian Cities

What healthy city can do for you

Dr. Daliah Shebl Said
Lecturer in architecture department , Faculty of engineering ,
Kafr- Elshieh (KFS) university, Egypt.
Email: Dalia.shebl@gmail.com

Abstract: Along the different times and across the history, the capitals and the big cities have attracted people from everywhere especially the poor and low income people. Those cities suffered from many problems and over population which reflect on the quality of life and make many disturbing in urban, traffic, Roads, housing and infrastructure...etc., These problems will form a major challenge for any capitals or big cities to develop. Which almost need to growth and increase their areas to encounter the dense urban fabric.

Actually the growth of the capitals especially in Arab countries is coming as a random ways and it hasn't a consensus plans or strategies to do it. The sprawl urban almost appearing as informal districts and in recent years the government tried to arrange it by construct a new cities adjacent to capitals. But in fact those new cities formed an additional load to main capitals and big cities

Hence the paper record the most important problems which facing major cities and capitals in the Arab countries as well as the most important strategies and trials as an attempts from the governments to encounter these problems and presents some principles to guide our cities to smart growth and the study takes some different examples of smart growth and the form of urban sprawl. Then the research introduce some principle to guide the horizontal expansion and continuous crawling urbanization of new cities to smart growth, which coalesce into large cities with take into consideration the most important theories and the experiences of urban growth. also The research consider a calls to the states and governments to locate new urban growth to optimize infrastructure , productivity , quality of life and make connectivity and accessibility which is consistent with the Principles of sustainable development.

Keywords: Smart – Growth – Capitals –Arabian- Cities.

----- ◆ -----

1- Introduction:

Since the city has been a symbol of civilization and human accomplishment over the past 2000 years and earlier, it has been the place for visions of human betterment, including population health and quality of life.(Hall 1998). In 1800 only 3% of people lived in a city of 1 million or more; by the year 2000, it was 47%. In 1950 there were only 83 cities worldwide with populations over 1 million, By 2007 there were 468. In 2008 the world passed the 50% urbanization mark. Cities have evolved into more complex space inter-linked by a number of systems and planners.¹

At the beginning of the nineteenth century, when the world population at I billion, barely 3per cent lived in cities: by the the beginning of

the twentieth century and with the world population at 1.65 billion, this approached 15 percent. In 2008 , with the world wide population advancing towards7 billion, the threshold of 50 per cent was reached a proportion that has been predicted to increase to over 60 percent by 2030 and at least 70% by 2050, by which time the global total is projected to have reached between 9 and 10 billion.The proportionate as well as overall increases will be most dramatic in the poorest and least urbanism continents, Africa and Asia and least significant in the most developed continents (Rodwel2013) and according to 2010 statistics the Arab region, home to 357 million people, and consider one of the most urbanized in the world, with 56 per cent of its residents living in cities.

Cities may be known for their bright lights, but not everyone who moves to the city, or is born there, benefits from it. The city can't

¹ <http://urbanfailure.blogspot.in/2014/05/the-prespective-of-densification-of.html>.

always keep up with the number of people who move there, so urban poverty and homelessness have become global phenomena. On the same time many capitals cities continued to expand over the following decades their new suburbs have become increasingly remote from the major centers of employment, education and other major activities. The question that remains to be answered is how we can transform the disadvantages of cities into advantages for its inhabitants.

2- The Demographic definition of Capitals Cities.

There are two main kinds of definitions of the city, based on two important characteristics of cities; the demographic definition is based on the idea that cities are big places with lots of people, while the functional definition flows from the notion that cities have an impact on their surroundings. Neither definition is "correct" or "best." Rather, they are more or less useful for various kinds of purposes.

This definition was first codified by sociologist Louis Wirth in his influential 1938 paper, "Urbanism as a way of life". Cities, according to Wirth, are defined by four characteristics (Wirth1938):

1. Permanence
2. Large population size
3. High population density
4. Social heterogeneity

Most modern functional definitions of cities derived from mid-20th century economic geography, where central place theory focused on the regional distribution of retail market centers. Big cities have a cultural and an economic component. From an economic point of view the best definition that considers cities as a spatial corollary to functional specialization.² This implies that cities are born of diversity when there is division a labour among functions, and then, when all these different activities need to be propinquity. When cities are born a dialectical relation evolves between the process of economic development and the process of urbanization which mutually influence each other (Bekemans 2000).

In the Arab region and according to 2010 statistics refer to the Arab countries is a home to

² Luis Racionero Grau , the director of Spanish college, Paris, System of cities and Convergence.

357 million people, and consider one of the most urbanized in the world, with 56 per cent of its residents living in cities. Since1950 we found only two cities with populations greater than one million. By 2010 there were 23 cities of this size, with a total population of approximately 65 million. By 2025, 31 cities in the region are expected to have a population greater than one million. Cumulatively, these cities will then be home to nearly 97 million residents. In 1950 the previous studied recorded the largest cities in each Arab country were relatively small such as Sana'a, Dubai, Mogadishu and Amman with only 46,000; 20,000; 69,000 and 90,000 residents respectively. The largest cities were Cairo, Alexandria, Casablanca, Baghdad, Algiers, Damascus, Beirut and Aleppo, each with a population greater than 250,000 residents (The State of Arab Cities 2012). In the early- to mid-1950s, many of the Arab cities prepared development plans. Although there was some rural to urban migration, most migrants settled in villages surrounding the cities. It was not until the mid-1960s that informal settlements started to develop. They became more common in the 1970s and 1980s.

3- What Makes Cities Grow?

This question is the subject of countless magazine articles peddling lists of "best cities" the most reliable measure of a city's future health is whether employment is expanding or contracting. Declining cities are not home to growing businesses that need people... From two hundred years ago (around 1800 A.D.) there was only one city in the world –London – with a population of 1 million. In 1900, only 13% of the world's population lived in cities. At the beginning 20th century, almost a hundred years ago, there were three cities with a population of 1 million or more. Today, there are 281 cities with a population of over 1 million! By 2050, that number will have raised to 70% of population in capitals cities. We are adding the equivalent of seven New Yorks to the planet every year. Why have cities been growing so big so fast?

- Over the past half century, migration to the capitals are increased in dramatic way, it has been driven by contemetary regional demographic and human capital trends as migration of People which moving from the rural area to the urban area causes problems. There is concrete evidence that overwhelming numbers of people are leaving rural areas in

hope of finding better a job and enhancing their life and according to the annual statistics report, city population grows five percent each year as a result of migration of rural dwellers to cities.

4- Challenges Facing Capitals Growing Cities

In general, the most important challenges which faced the growing of cities that urbanization are driven by a rise in urban population levels, which in turn increase in urban land cover. However, the population threshold at which urban land expansion occurs is very flexible and is largely dependent on local political and social attitudes to densification and sprawl. In less-developed regions, the process of urbanization often entails the migration of population from rural areas, and the outward expansion of urban areas.

5- Urban and planning impact:

Losses of public space which represent in majority of roads are publicly owned and free of access. Increased traffic has adverse impacts on public activities which once crowded the streets such as markets, agoras, parades and processions, games, and community interactions have gradually disappeared to be replaced by automobiles. Many cases, these activities have shifted to shopping malls while in other cases, they have been abandoned altogether. traffic flows influence the life and interactions of residents and their usage of street space. More traffic impedes social interactions and street activities. People tend to walk and cycle less when traffic is high.

5-1-Social impact:

Cities have inevitably become places inclined towards crime, drug abuse, violence and moral degeneration. Children are the main victims of this urban misery. Almost 100 million children live as good as abandoned in the streets of the big cities of the third world (Bekemans & Edward 2000).

5-2- Economic impact:

Economics growth was unable to keep space with demographic changes
Income inequality: Wealth moves to suburbs, business follow as a result a physical gap separates wealthy communities from poor communities.

Poverty and low income residents are unable to pay the cost of commuting and relocating is financially difficult additionally

less opportunity for jobs reinforce poverty, crime, and social issues.

5-3- Environmental impacts and energy consumption.

Nowadays, one of the most important issues in cities is air pollution, Without a doubt, the more dense population in a city is the more air pollution would be brought about them. Air pollution is a product of human activities has left its fingerprints on all aspect of the human life. According to health experts, the rates of lung cancer and heart disease have increased rapidly in recent years. In a study performed on two populations of urban and rural area, with 300,000 participants, it was concluded that city-dwellers are two times more likely to suffer lung cancer.

- Other form of Pollution, including noise, generated by circulation has become a serious impediment to the quality of life and even the health of urban populations.

- Energy consumption by urban transportation has dramatically increased and so the dependency on petroleum.

6- Form of Urban Growth:

The urban expansion of land uses can take place in five general categories (Gibelli& Rigamonti 2002):

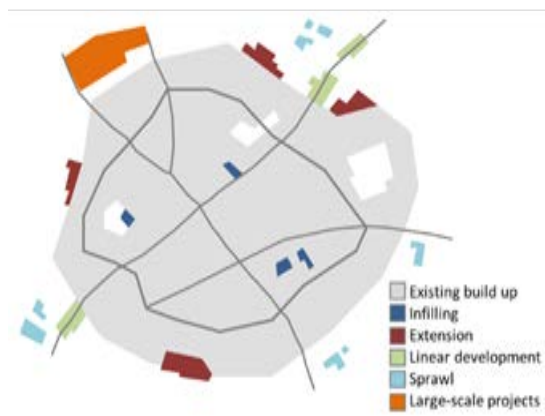
- **Infilling:** New developments are set in areas that were previously unused or being redeveloped to new uses. Brownfield redevelopments are a good example of urban expansion opportunities on sites that have lost their economic purposes, such as old industrial sites or abandoned terminals (waterfronts or rail yards) as fig(1).

- **Extension:** A standard form of expansion where land use is development directly adjacent to existing land uses. The new infrastructure such as streets and utilities is expanded from the existing network.

- **Linear development:** Similar to extension, but in this case the expansion is shaped by an existing corridor of circulation such as an highway or a transit line (subway, light rail). It directly takes advantage of the accessibility offered by the transport infrastructure. In some cases, the development is the rationale to expand an existing corridor.

- **Sprawl:** A standard form of suburban development taking advantages of scattered lots. Each developer is taking advantage of an existing plot of land without much consideration to the existing urban pattern.

- - **Large-scale projects:** The setting of a large infrastructure project such as new port, airport, industrial zone, logistics zone or intermodal rail terminal consumes a large amount of land. Its operational rationale is often very different from the existing landscape so the level of integration to existing land uses is problematic.



Fig(1)
Types of urban expansion

Urban sprawl today represents a challenge for both scientists and decision makers, due to the complexity of its generative processes and impacts. Urban sprawl can cause automobile dependency which increased Pollution and reliance on fossil fuel and more carbon emission adds up in the atmosphere.

Urban sprawl refers to the outgrowth of urban areas caused by uncontrolled, uncoordinated and unplanned growth. Sprawl in fact exists in very different forms which range from highly clustered centers – edge cities– in low density landscapes to the kinds of edgeless cities that exist where cities grow together into mega-poles of the kind that are characteristic of western Europe and even eastern China. . The morphology sprawl of these structures ranges from rather distinct edges and peripheries and takes three types as Low-density depend on Sprawl of outward spreading and the population becoming bigger and bigger . secondly; Ribbon Sprawl which characterized by concentration of development along major transportation arteries, primarily roads, third : the Leapfrog Development Sprawl which scattered form of urbanization with disjointed patched of urban land uses, interspersed with green areas as fig (2) these various differences pose a major planning form of urban sprawl.

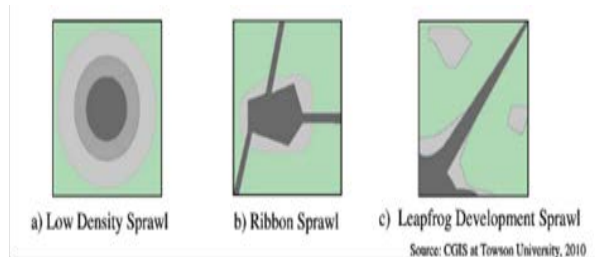


Fig.(2) types of urban sprawl

The problem of urban sprawl is a global problem faced by all countries in the world's rich and poor. This phenomenon has now threatening about 110 countries around the world and more than 1.9 billion hectares of the world is threatened by desertification and here became this phenomenon is a challenge for most countries of the world, especially developing ones, and whose population is growing at high rates, and the consequent pressure on resources, particularly Agricultural land surrounding cities. So many capitals cities continued to expand over the following decades their new suburbs have become increasingly remote from the major centers of employment, education and other major activities.

7- Smart growth approach.

Smart growth of the cities is not a new concept. It emerged as an urban theory in the United States more than 60 years ago in response to rise in unplanned, ad hoc urban development that resulted in disconnected communities (Council of Capital City Lord Mayors 20`14). Mr. Barlow said that “Smart Growth has been proven by cities in the United States, Canada and Europe to be an urban management alternative that really works by valuing long-range sustainability over short term rapid expansion and growth”.

Smart urbanism is a working methodology for enabling change and delivering complexity in our towns and cities. It could be termed ‘emergent’ urbanism, ‘open’ or even ‘responsive’ or ‘collaborative’ urbanism and certainly has the qualities of all.

A Smart Growth approach aim to increase populations in established areas means people living in those communities have easy access to jobs, a range of housing and transport choices and public spaces. In short, Smart Growth is about sustainable urban management and taking a holistic, long term approach to the task of building our cities and communities.

The Smart Growth is especially important now given that, for the first time in human history, more than half the world's populations live in cities and Mass movement of people into centers in a big city which create a major challenge for governments and decision makers.

In urban planning circles, smart growth refers to the infrastructure development strategies cities employ in hopes of creating more sustainable and successful communities. But, what about the other smart growth -- the approach that involves investing in the development of our citizens, our human capital? The benefits of smart growth are well understood; greater accessibility, healthier communities, higher productivity, better yield on investment, more resilient cities, better environment and improved living standards. Together, these result in stronger communities and a more productive economy as fig(3).

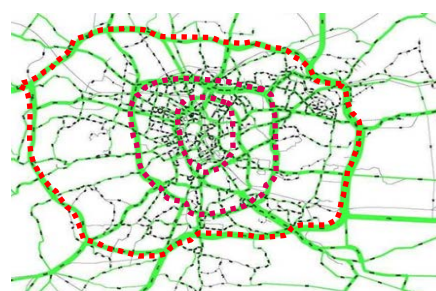


Fig(3) Smart Growth cycle

As a theory, smart growth has influenced city planning strategies across the United States, United Kingdom, Canada and Australia where it has been incorporated in most Australian State and Europe... Krakow which located in southern Poland is an example of smart growth of urban expansion; it is population according to 2013 census is 1.5 million people. It is consider the green city and spread in a smart growth. Each district is surrounded by green belt as a green lung of the city as fig.(4) (5) and prevents the random urban expansion, and preserves the distinguished character of each region as fig(6). The future direction of spatial development is increasing in the existing centers of social and economic activities around the Krakow and the expansion of the suburban areas as a backup of the central metropolitan estate.



Fig(4) Historical photo of master plan of Krakow 1900 agriculture lands



Fig(5) The ring green belt



Fig(6) The old city and surrounded by green lung

8- Cairo as a case study:

In Cairo, the capital and Egypt's largest city, is characterized by a high population density 27,000 inhabitants per square kilometer. In this regard, densification does not seem to be an adequate solution. The practice of 'smart growth' principles in Egypt is made more difficult by longstanding attitudes within the country's planning and governance communities. Densification of the central city directly opposes both the 1970s 'desert cities' initiative and the 1990s suburb an growth policies advanced at both regional and national levels of government.

In Egypt, where much of the population growth occurs within the finite space of the Nile river valley and delta, the greatest threat posed by this form of growth is to local food and water security. The urban population in Egypt is not evenly distributed among the 219 cities, in which they live; Egypt's two primary cities

Cairo and Alexandria comprise 43 percent of the total urban population (17 percent of the total population of Egypt) while 77 cities comprise 4 percent of the urban population (Abouleish2005). only 4-6% of Egypt's area is inhabited and cultivated in narrow Valley tubular which dense of problems and has a population of more than 70 million As fig(7). Over the past 50 years successive plans have failed to utilize vast desert areas. To deal with this multitude and quality of problems and circumstances, new realistic and comprehensive strategies have to be used in order to develop the existing cities and create new cities in the unexploited desert. (The Egyptian Cabinet Information and Decision Support Center 2009).

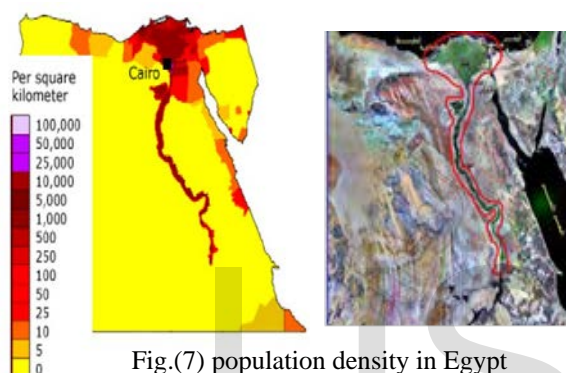
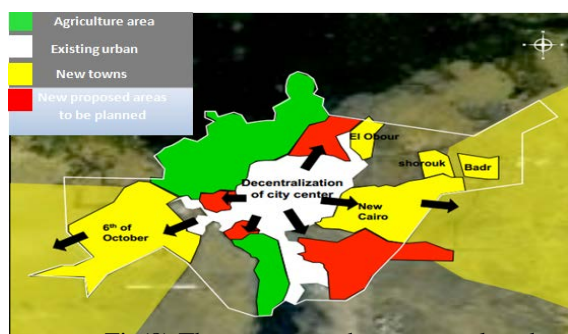


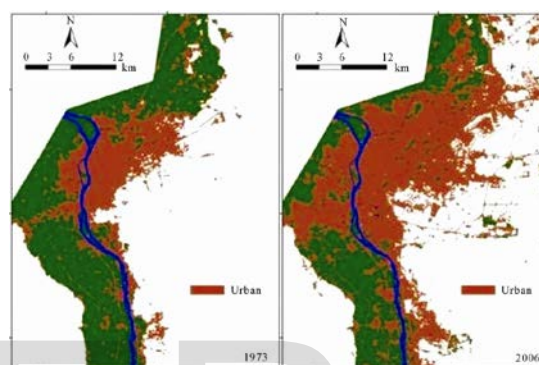
Fig.(7) population density in Egypt

The urban growth of Cairo over the last few decades has resulted in a deteriorated and defective urban fabric. Cairo has experienced a tremendous urbanization in the form of informal settlements in the past 5 decades. A recent study showed that more than half of Cairo's built up area is unplanned construction. Complemented by a massive population growth, informal settlements is one of the most environmentally degraded urban areas in Cairo. Those areas have expanded over a huge portion of agriculture land resulting in the loss of valuable production opportunities (Eco citizen world 2013) as fig (8).



Fig(8) The new towns become so closed to capital city "Cairo"

In Egypt that urban sprawl eats up 30 thousand acres per year from 5.5 million acres as fig (9) show the spread of urban from 1973 to 2006. During the period of the present investigation, about 7 million persons have been added to the population of Cairo. This quick population growth entailed the construction of new urban communities, such as El-Salam, El-Obour and New Cairo settlements. New ring road has been constructed to encompass Cairo. This road was established mostly upon agricultural lands (Sutton& Fahmi 2001).



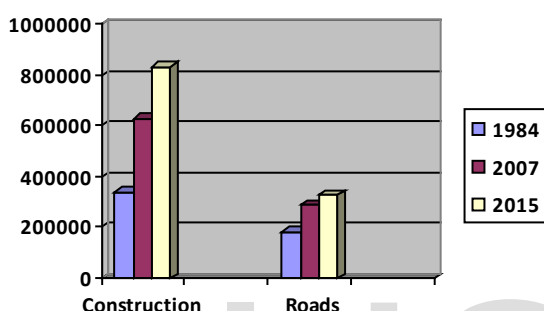
Fig(9)The land cover maps of Cairo in 1973 and 2006.

The statistics refer to the average erosion of agricultural land as a result of encroachment of urban "buildings and construction," in that period 586 705 acres and an increase in roads and irrigation canals and drainage main areas equivalent to 108 332 acres so the timeout of farmland for buildings and roads equivalent to 695 037, accounting for 25509-acre / year for buildings 0.4710 acre/year for roads, meaning that the annual loss of agricultural land in buildings, roads equivalent to 30 219 acres as fig(10).



Fig(10)The informal building and sprawl urban to agriculture lands

- For example, we find a lot of infringements, which occurred on the original plans of new cities and accompanied appearing many new activities and uses were not present, which leading to a change in the direction of the proposed growth of the city and became the planning in the direction and the growth of the city in the other direction, as happened in many cities in Egypt ...In addition the surrounding land of the cities, which form the interval district between cities and breathing space as a green lung is decreasing day by day as a result of the extension of urbanization above and increase the proportion of urbanization in the world as fig(11).



Fig(11) Mass urban in Cairo is extended rapidly through 20 years ago to reach to new towns

The research presents an example of urban infringements on the Sixth of October City which consider one of the largest and most important new city in the west of Cairo. it was planned to extension in the northward but under many pressures and various forces acting on the new cities, whether political, governmental or investment force which has been modified scheme over the city in different directions of growth. This expansion represented in northward "government housing projects and tourism projects eastward housing until Sheikh Zayed City and on the west the industrial extension, in addition to major projects that have been created on the axis between the city and Cairo as fig(12) which shown the heavy traffic such as MSI Media and Production markets as large scale projects.(Metwaly2011)



Fig(12) Crowded and heavy traffic on 26 July corridor, Egypt

The original plan for the Sixth of October City changed for several consecutive extensions in different directions especially an important development in 2013 of works in 'green belt' section of the city. The green belt is set on 922 acres of land allocated by the Ministry of Housing and Urban Communities but now become aim to establish several projects such as Porto October, vision club and kuaddico Villas project... and many other project as fig. (13).



Fig(13) Master plan of 6th October city and the green belt

9-Sustainable principles to guide a smart growth: "problem and solution"

Smart growth of cities and capitals refers to development strategies that revitalize neighborhoods, protect green areas and open space, keep housing affordable, reduce urban sprawl, and provide more transportation choices. Strategies that promote smart growth include reducing impervious surfaces, restricting development in environmentally sensitive areas, and using environmentally friendly green infrastructure. In fact most of capitals and large cities in Arab countries is going through in difficult period... The current strategies seem more theoretical it is run in side and the application in another side .The research suggest some principles to guide smart growth driven from similar experiments:

- Public transport has an important contribution to make the local transport networks and to social cohesion. A good transport system is a determining factor in the competitiveness of the urban economy and in the quality of life of city-dwellers. The notion of "sustainable mobility" has become the central goal of the common

transport policy which aim to reconciling the demand for mobility (by both business and people). The common transport policy also addresses issues such as the integration of spatial planning priorities into transport infrastructure planning and promotion of inter-modal transport.

For example in The city of Shanghai which consider one of the most dense population in the world is home to nearly 23 million people population density of up to 119,000 people per mile, and they have enough problems related to population density is very high and the problems of housing, traffic ...etc. The Chinese government was forced to stop issuing car licenses for the lack of room for more of them within the city except for a limited number licenses each month in accordance with the system looks like a lottery.

The transport policy must be designed to contribute to solving congestion and environmental problems. Moreover transport policy aims to alleviate the problems of peripheral areas by linking them to core of the community as well as together through improved infrastructure and with the establishment of a regulatory framework that ensure the provision of the effective high quality transport services. (Mayors 2014)

- Minimize powered transportation. Where Surface roads/ways and powered transportation will remain an essential part of the fabric of a city, but they and their use should be minimized. A great example is Kitakyushu in Japan which, post-World War II, was the most polluted city of the world and is today a unique example of pollution control, recycling, green technology and clean environment.

-Discourage sprawl. Large-lot suburbs have become an extension of modern cities, and make the city system wildly unsustainable

-It is recommended that governments set limits on migration laws of rural people so that less people tend to leave villages.

- Provide an essential service in a form and at a scale that eliminates the need for most transportation. Basic shopping should always be within a neighborhood, and businesses of a given type should be encouraged to cluster in order to provide for job mobility without vehicular travel.

- promotes greater mixing of housing, commercial and retail uses. This makes the community more transit and pedestrian friend

-integrate bikeways into and between buildings. A great thing about cities is that bicycles way to get around the cities ... Yokohama has reduced waste generation by almost 38.7 per cent, leading to a saving of \$1.1 billion of capital cost, otherwise required for installing incinerators. Its waste reduction between 2001-07 resulted in a reduction of 8,40,000 tons of CO2 emissions.

- Supporting the establishment and growth of start-up companies and small and medium enterprises, pointing out that the provision of the necessary support will help to attract more investment, and support for economic growth.

-The states should take the initiative to scientific planning in order to reduce its negative effects on the environment and regulations vital surrounding residential gatherings where population growth, form an increasing pressure on the original plans for the new cities where increased the demand for land uses for the different purposes of housing and other human services, and transportation as well as play an important role in the advance of urbanization on agricultural land through the construction of roads and the establishment of factories and enterprises and commercial activities on the sides of these roads.

- improve the resource management is consider one of the most important guide in smart growth (water, gas, fuel....) Singapore is an example of innovative integrated water management approaches using reclaimed water, recycling and desalination. In 2010, 30 percent of its supply of water came from reclaimed water, 20 per cent from collected rainfall and 10 per cent from seawater desalination.

10- Conclusion :

Most of Towns and cities were constructed by clustering each other's, for economic social and cultural reasons, But now we face a Major urban problem which presented in extensions of original mass in big cities to almost reach to new towns which will certainly be joining an existing or emerging cluster and form an additionally loads on mother city and becoming more exhausted that will need to be more dense accordingly from where planning , transport and different services. In addition of appearing many infringements which occurred on the original plans of new cities and accompanied appearing many new activities and uses were not present, which leading to a change in the direction of the proposed growth

of the city and became the planning in the direction and the growth of the city in the other direction.

The Expansion and urban growth in the unplanned direction led to disappear the spaces areas comma between cities and become so closed to the cities and major mother towns and capitals such as Cairo and Alexandria which due to many problems and obstacles of traffic on the regional roads between cities and, increasing the burden of major cities.

11- Reference:

- 1- Abouleish, Ibrahim (2005): "Sekem. A Sustainable Community in the Egyptian Desert" (Edinburgh: Floris Books).
- 2- Adapted from Camagni, R., M.C. Gibelli and P. Rigamonti (2002) "Urban Mobility and Urban Form: the Social and Environmental Costs of Different Patterns of Urban Expansion", Ecological Economics, Vol. 40 , pp. 199â€"216.
- 3- Bekemans Leonce& Mira Edward (eds). , Civitas Europa-Cities, Urban System and Culture Regions between Diversity and Convergence", Series Multicultural Europe, N8 , presses Interuniversitaires Européans', 2000 , p 235.
- 4- Bekemans Leonce& Mira Edward (eds). , "Civitas Europa-Cities, Urban System and Culture Regions between Diversity and Convergence" , Series Multicultural Europe, N8 , presses Interuniversitaires Européans' 2000 , p173.
- 5- Dennis, Rodwell "Heritage as a Driver for Creative cities", The Idea of Creative cities /The Urban Policy Debate, Cracow, 17-18 October 2013.
- 6- Ecocitizen world map (2013)," Ecocitizen world map report, case study: Imbaba, Cairo", Cairo university, El Balad foundation.
- 7- Erdmenger Jurgen ," The Trans-European Transport Network" Director of general for transport, DG-VII, Directorate A, European Commission, Brussels.
- 8- Report of Smart Growth , Unlocking Smart Growth in Australia's Capital Cities, Council of Capital City Lord Mayors, March 2014
- 9- Galster G, Hanson R, Ratcliffe MR, Wolman H, Coleman S, Freihage J (2001) Wrestling sprawl to the ground: defining and measuring an elusive concept. Hous Policy Debate 12:681-717.
- 10- Luis Racionero Grau. , the director of Spanish college, Paris , System of cities and Convergence.
- 11- Merisotis Jamie, Smart Growth: Creating Sustainable Cities through Higher Education 2013, valid in website: http://www.huffingtonpost.com/jamie-merisotis/smart-growth-creating-sus_b_4383828.html
- 12- P. Hall, Cities in Civilization. New York: Pantheon, 1998.
- 13- Report from The Egyptian Cabinet Information and Decision Support Center .Center for Future Studies "Sustainable Cities in Egypt , Learning from Experience: Potentials and Preconditions for New Cities in Desert Areas ", September 2009.
- 14- Report of Smart Growth, Unlocking Smart Growth in Australia's Capital Cities, Council of Capital City Lord Mayors, March 2014.
- 15- Sutton, K. and Fahmi, F. (2001) Cairo's urban growth and strategic master plans in the light of Egypt's 1996 population census results. Cities, 18, 135-149.
- 16- The State of Arab Cities 2012, "Challenges of Urban Transition", UN. Habitat
- 17- Wirth Louis, "Urbanism as a way of life", The Amercian journal of Sociology, Vol.44, No.1 (Jul., 1938), 1-24.
- 18- <http://urbanfailure.blogspot.in/2014/05/the-prespective-of-densification-of.html>.
- 19- <http://www.urbis.com.au/smartgrowt> h#sthash.ex3NSmaI.d.
- 20- <http://www.urbis.com.au/smartgrowt> h#sthash.ex3NSmaI.dpuf.