

AN ASSESSMENT OF THE NEW CAIRO CITY

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ABSTRACT

The idea of suburb was evolved from the very start of massive/fast transportation. Cairo has expanded informally and dramatically during the last three decades, predominantly informally over the scarce agricultural land surrounding it. However, lately, the government is improving transportation, in a form of subway network and motorcar ring road, the matter that lead to create planned urban settlements on the periphery of Greater Cairo. Most the planned urbanization is concentrated on the Eastern side of Greater Cairo Region (GCR) forming what is called the “New Cairo City,” the biggest-most suburb for Cairo in the recent history. This paper focuses on this new urbanization in comparison with similar international models, and evaluates its urban development characteristics, rates, and objectives.

“KEYWORDS:” Urbanization, Urban Development, Urban Management, Urban Policy, New Cairo City, Egypt.

1- INTRODUCTION

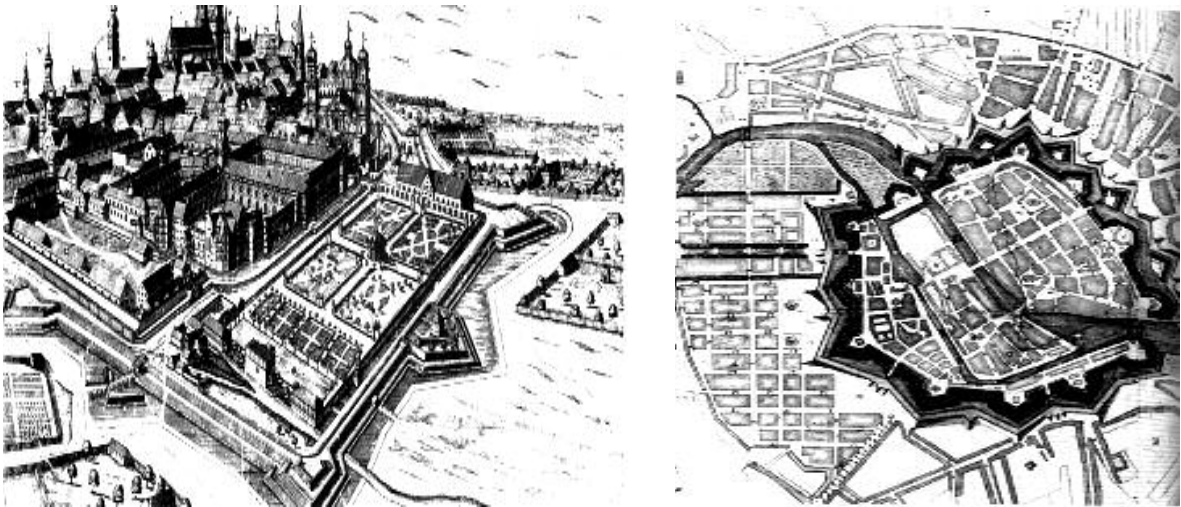
It is impossible to know if the history of suburbs started as an extrusive process from within, or as deliberate accretion. Towns as far back as the third millennium BC had, outside their walls, a suburban area-combining cluster of houses, farms, cattle fields, and gardens. In Mesopotamia, this suburban belt contained a commercial center and a secondary temple sometimes linked to the city proper by an elaborate processional ways. [1]

The incident of planned extension, well known in the West since the Renaissance, is more common in earlier centuries than may appear. Medieval towns of an “organic” plan, which seem cohesive and of a piece can often be shown to have

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grown in planned increments. Geographers have historically identified successful planed units based on the direction of the plots as well as the level of the streets. [2] For instance, in the early 1700, Munich grew in the front yard of feudal castles. It was wise from the prince to keep his castle on the periphery of the town to maintain self-governance (See Figure 1/a). In 1723, Berlin as a medieval town was limited within a bastioned wall among the suburbs developing around it. (See Figure 1/b).



(a)

(b)

Figure 1: a. medieval town of Munich grew in the front yard of feudal castles; b. The master Plan of Berlin in 1723, a medieval town surrounded with developing orderly grid suburbs in the North-and-Southwest sides. [3]

By 1900, transportation facilities meant for inter-city transit began to be used for "going back and forth" by those living in the areas surrounding existing cities. Municipalities and private concerns were quick to respond to this new market with the development of "high speed" or "light" rail lines. Sometimes, these links lead to "dead ends" in small towns surrounding the city. This was an extremely important development as it allowed people to live in a rather different geographical location, separated from where they worked. Soon after, another innovation radically changed the face and form of the city; i.e. motorcar. With the beginning of mass-produced, reliable motorcars, people could both satisfy their desire for privacy and enjoy the access to the increasing numbers of new housing locations. In fact, it is justifiable to

state that today's Edge City depend strongly on the motorcars. Edge Cities would not exist without them.

Conceptually, an Edge City is planned based on a 45 minutes comfortably driven trip to the main city, meaning that the maximum radius of such a city does not exceed 60 miles. Accordingly, developments are limited to particular areas. [4]

In Egypt, in the mid nineteen nineties, the Ministry of Development and New Communities established a new satellite for Cairo on its east side in order to relieve the long lasting urban 'crisis'. A crisis that was and still characterized by: (1) the increase in population density; (2) the spread of slums and informal settlements on scarce agricultural land; (3) living in low standard and inadequate sitting including cemeteries; (4) over crowding and the explosive occupancy rate. The Cairo urban problem was a result of political, economic, and social reasons. The political and economic circumstances led to many effects, regarding urban dominance, and increasing rates of population immigration from rural to urban areas. Both internal policies of the state in addition to external pressure/events led to this situation. Examples of internal policies are the unbalanced urban development policy and the discredited housing laws. For most of the external circumstances are the number of wars, that Egypt has fought.

Economic reasons have had their effects on Cairo's urban policies, which in turn led to a weakness of investment and increased construction costs and whilst announcing a decrease of income rates, the Egyptian Government restructured its urban policy in the Eastern Arch of Cairo. Instead of evacuating old Cairo from low-income people to new settlements, the new urban policy in the Eastern Arch of Cairo transforms and groups some of the new settlements into a marginal town—called the "New Cairo City"—to accommodate mainly medium, high and distinguished levels.

The objectives of this paper are to focus on this transformation as well as appraise this new marginal city in comparison with International standards. The case of London is going to be used as a reference.

To undertake these objectives, three levels of study are going to be tackled: Firstly, to clarify the urban problem in G.C.R., its feature, structure, and reasons.

Secondly, to identify: the current national policy adopted for the urban development of G.C.R. that led to what is called now the *New Cairo City*; its objectives; and the main concepts of the urban planning strategy will be clarified. Thirdly, to determine indications to define to what extent this urbanization has met designated goals according to the international standards.

2. THE HISTORY OF CAIRO'S INCREMENTAL URBAN DEVELOPMENT

“Khedive Ismail” achieved the big urbanization attempt during 1863-1879 in Cairo. This period witnessed the growth of new quarters around the Islamic core of Cairo like Shubra, Abbasyia, Mounira, Kasr El Nile, Garden City, and Zamalik [4]. The first half of the 20th century was the time of developing new suburbs like Heliopolis in the Northeast of the Islamic core and Maadi in the South, which were both, designed according to European standards to accommodate foreign and native bourgeoisies who could not find housing in Zamalik and Garden city. During Nasser's regime (1952-1970), Egypt witnessed an increase in the population by almost 11-12 Million inhabitants every decade (See Table 1: the increase of Egypt's population). It also doubled up its built up urban mass (See Figure 2: Developing the greater Cairo region).

To accomplish the economic development, the government adopted some policies such as: protecting agricultural lands, balancing the selection of industrial sites, improving the transport and communication networks, using existing utilities as much as possible, and protecting of historical heritage. To improve the living conditions, the government had adopted some policies such as: minimizing the urban growth attached to the urban area of G.C.R., providing the proper housing for the low and medium income families, reorganizing the urban structure, providing the houses with infrastructure especially for Squatters, renovating old housing areas, protecting water resources and controlling air pollution.

Table 1: Population growth in the Greater Cairo Region, 1927-1994 ('000)

| | Year | Cairo | Giza | Qalyubia | GCR Region (Region total) |
|-------------------|------------|-------|-------|----------|---------------------------|
| 1960 | Population | 3,349 | 1,035 | 400 | 4,784 |
| | % | 70.0 | 21.6 | 8.4 | 100 |
| 1976 | Population | 4,344 | 1,649 | 783 | 6,776 |
| | % | 64.1 | 24.3 | 11.6 | 100 |
| 1986 | Population | 5,603 | 2,506 | 1,405 | 9,514 |
| | % | 58.9 | 26.3 | 14.8 | 100 |
| 1994 ^a | Population | 6,849 | 3,467 | 2,133 | 12,449 |
| | % | 55.0 | 27.8 | 17.2 | 100 |

Source: CAPMAS, *General Census of Population and Housing*, Cairo, 1994 population estimated.

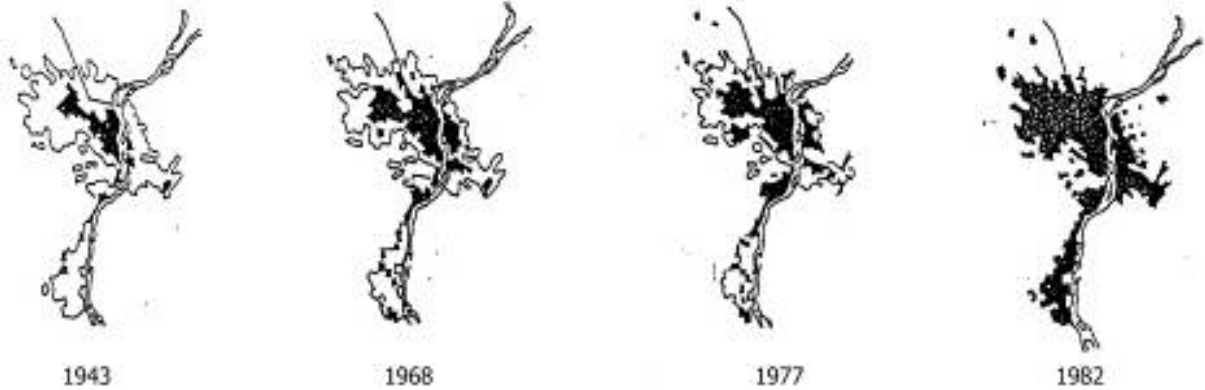


Figure 2: Development of the Greater Cairo Urban Mass: The urban growth occurred most characteristically in the pockets between transportation routes radiating from the city center.

3. THE CURRENT NATIONAL URBAN POLICY OF GREATER CAIRO

In 1970, the Egyptian government adopted two concepts, which provided the bases for the Master Plan of G.C.R.: The ‘Optimum Bulk and Containment’ concepts to make a barrier to urban uncontrolled extension, and ‘Self Sufficiency and New Urban Communities’ concepts to meet population growth and to encourage migration from rural areas and existing cities to the new urban communities. The Structural Plan of G.C.R., 1983, adopted an urban strategy to minimize deficiencies of big urban areas, and to benefit from their characteristics. This strategy depended on four main concepts; mainly:

- 1) ‘Axes of Development’ were designed to make a relation between the cities, and the new urban communities. These axes were supposed to link the urban area of G.C.R. with other economic regions, thus helping to build new integrated settlements.
- 2) The ‘Urban Region’ to act as an integrated whole and to provide structural organization on the regional level that help to provide proper living conditions and to provide the region with the required services on all levels. Figure 3 shows the borders of G.C.R.
- 3) The ‘New Settlements’ to organize the growth out of the existing urban areas, to stop informal growth, and to meet the population growth of existing cities. The structural Plan had suggested 10 settlements; each of them has an area of 1,400 feddan and about 250,000 inhabitants. These settlements lay in the east side of G.C.R. except for no. 6 and no. 7 as shown in Figure 5.
- 4) The ‘Homogeneous Sectors’ to put in order the existing urban areas and to attain a balance between inhabitants, job opportunities, and services to obtain self-sufficiency. Accordingly, the G.C.R. was divided into 16 sectors as shown in Figure 4

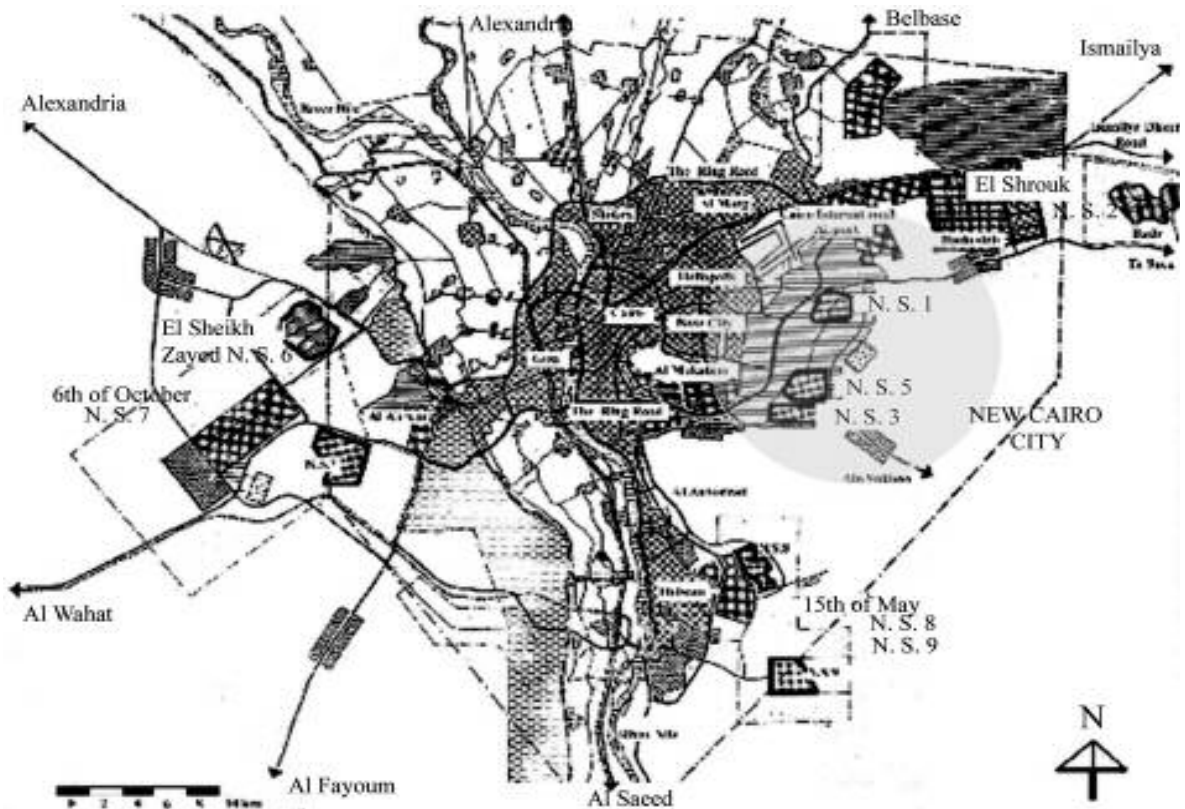


Figure 3: The new urban settlements on the east west axis of Greater Cairo Region. 6th of October and El Sheikh Zayed City on the West. Al Shrouk, Al Obour, and the New Cairo City on the East side. [5]

3.1 The Concept of the Homogeneous Sectors

The concept of "homogeneous sectors" may be considered the important-most among the four concepts underlining the proposed long-term strategy for G.C.R. It was recommended in the 1983 plan as a foundation for reorganizing the existing built-up area in Cairo. It has since been developed to cover the whole area of the GCR. It was suggested that, as Cairo is becoming too big to be managed as one unit and from a single core, it should be subdivided into smaller divisions within which development could be heading for ensuring better living conditions, particularly in terms of the provision of job opportunities and the improvement of current service standards. Homogeneity in each sector was defined as meaning an equal distribution of services and access to jobs among its residents. However, it was foreseen that some sectors could specialize in particular functions, such as administration, commercial services,

small-scale industries and handicrafts, or heavy industries. Such differentiation could strengthen the sector's identity. For the GCR, 16 homogeneous sectors were determined, as shown in Figure 4, according to the following criteria:

- A population ranges of 1-2 million inhabitants in order to provide an adequate upper limit for most services.
- Jobs should be available for 80 percent of the labor force within the sector.
- Each sector enjoys at least one service center in each sector.
- Formulation of Transportation networks to link the different parts and activities as well as inter-sectoral networks.
- Sectors should be separated by open areas, which could also be used for public facilities on the edge of the built-up areas, such as major roads, railroads, waterways, cemeteries, and sports fields. [6]

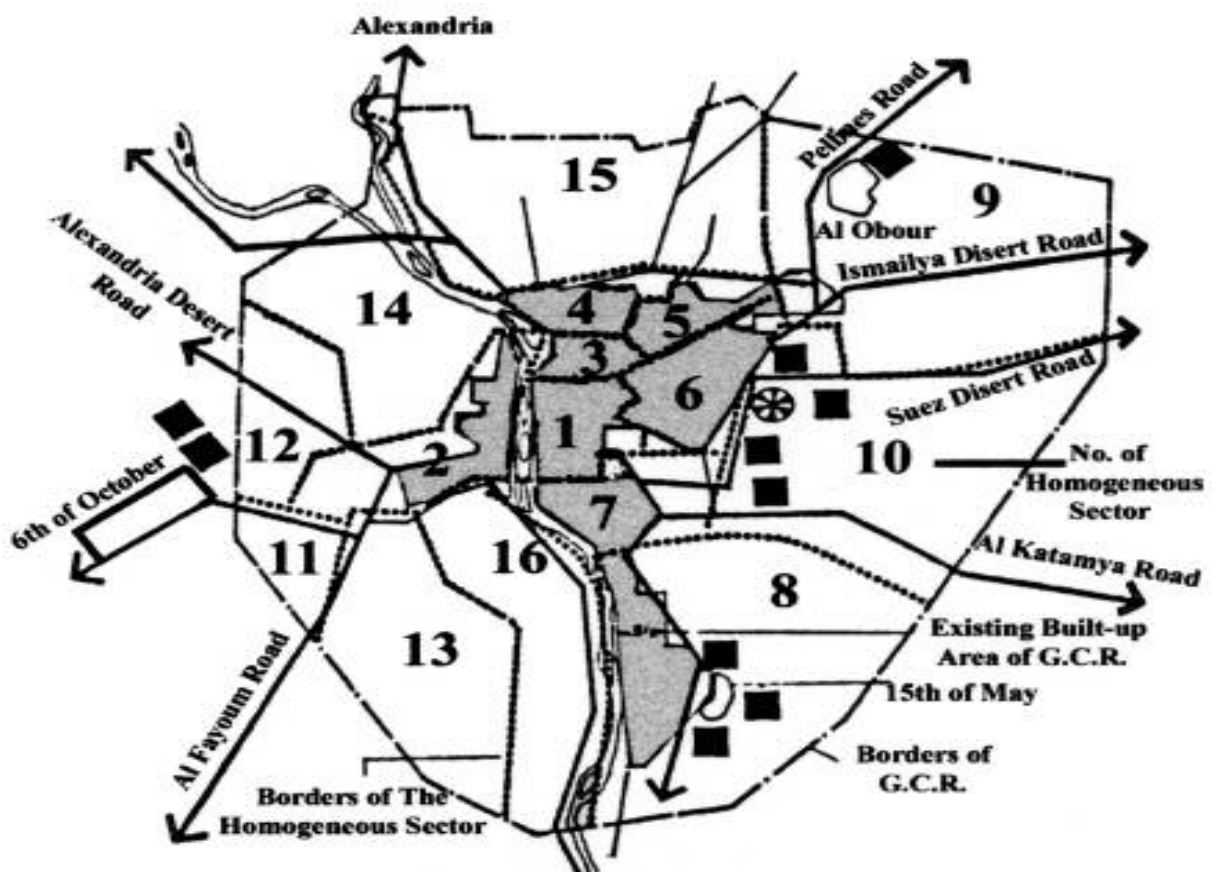


Figure 4: The 16 homogeneous sectors of Greater Cairo Region. [7]

3.2. Urban Development in the Eastern Side of Greater Cairo

The new settlements suggested in the long-term policy, were organized in two locations, with regard to Greater Cairo urban mass, mainly: the Eastern and the western arches.

There were many reasons behind the development of the Eastern Arch of G.C.R. Firstly, to direct new development towards desert areas attached to G.C.R., thus, encouraging the eastern growth and protecting the agricultural land in the North, West, and South of G.C.R. Secondly, attracting the investments in the field of real estate by providing large areas for urban developments. Thirdly, attracting the surplus population from the crowded areas of G.C.R.

4. THE FORMATION OF THE NEW CAIRO CITY

It was planned to establish 5 *new settlements* (NS) out of 10 to the East of G.C.R. to accommodate the target of 1 million inhabitants as each one has about 200,000 to 300,000 inhabitants. These settlements were located near to the Ring Road of Cairo with a distance of 500m to 1km. Figure 5 shows the locations of these new settlements on the Eastern side of Cairo as they were in the Structural Plan of G.C.R. [5]. Four of these settlements are directly connected to the Ring Road. N.S.2 is connected to Suez Road and it was moved to a new location between Ismailiya Road and Suez Road. The New Cairo City comprises/encompasses the existing New Settlements No. 1, 3 and 5 as well as any previous development in this area. Consequently, the urban area in the East of G.C.R. was increased from 7,500 feddan (including the 3 new settlements) to about 27,500 feddan to form what the Ministry of Development, New Communities and Land Reclamation and the General Organization for Physical Planning of Egypt refer to as the “New Cairo City.” As it has been shown throughout daily practice since the formation of this city, the Local New Cairo City Authority has been managing the implementation of infrastructure services and

facilities. The new city is lacking backing from the old central city governments because of both physical and social distances.

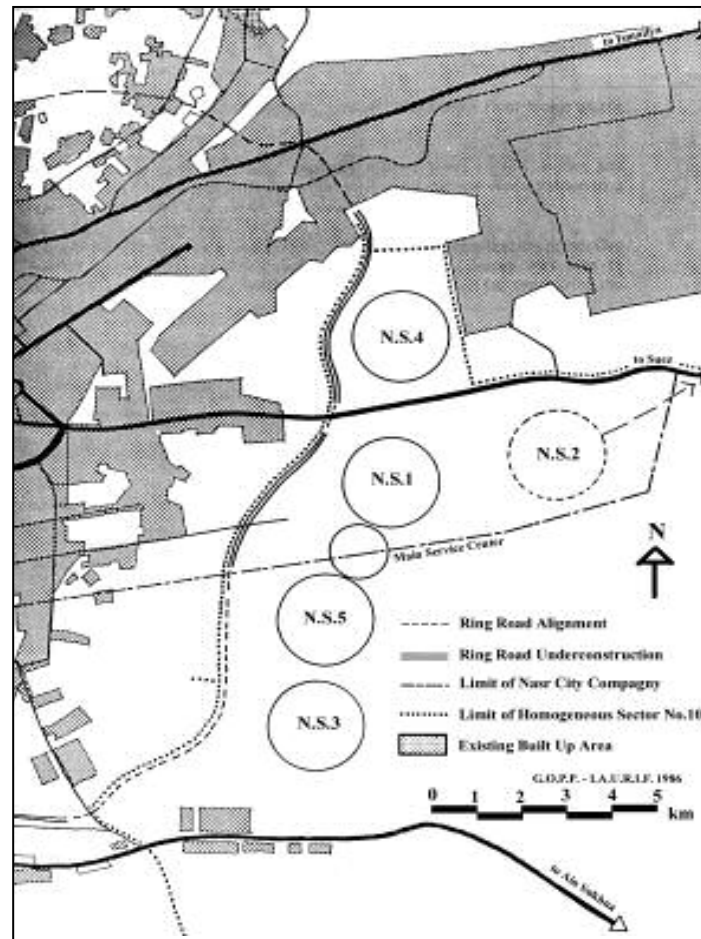


Figure 5: The Five Eastern New Settlements

The planning of these settlements (the N.S.1, 2, and 5) was dependent on five main concepts: 1) A new settlement has an area about 1400 feddan to meet about 250,000 inhabitants with a density of 180 person/acre. 2) A new settlement is surrounded with a green belt for entertainment activities and each one has a center with many activities such as residence, work, shopping...etc. 3) A new settlement integrates three distinct urban levels: a) city level with the city center itself and large public facilities. b) district level, a new settlement is divided into 4 to 5 districts with about 50,000 inhabitants, each district owns a number of public facilities, which define a sub center. c) neighborhood level, each district includes 4 to 5 neighborhoods of two

main types: low/medium income with a capacity of 10,000 to 15,000 inhabitants and designed to absorb 70% of the population, and medium/high income with a capacity of 8,000 to 12,000 inhabitants targeted for wealthier populations (30%). 4) A new settlement, which has an industrial area, located outside the green ring at 1 or 2 km from residential limits and directly linked to the settlement center. 5) The five new settlements constitute Homogeneous Sector no.10 which will include more than one million inhabitants. Consequently, it was necessary to plan for a sufficient land reserve likely to host a Main Service Center for the sector with an area of 350 feddan. It was located at the heart of the urban structure between N.S.1 and N.S.3.

Table 3 clarifies the urban features of N.S.1, N.S.3, and N.S.5 through the plans of these settlements with a comparison between what was planned, and what has happened due to the urban development of the East of G.C.R.

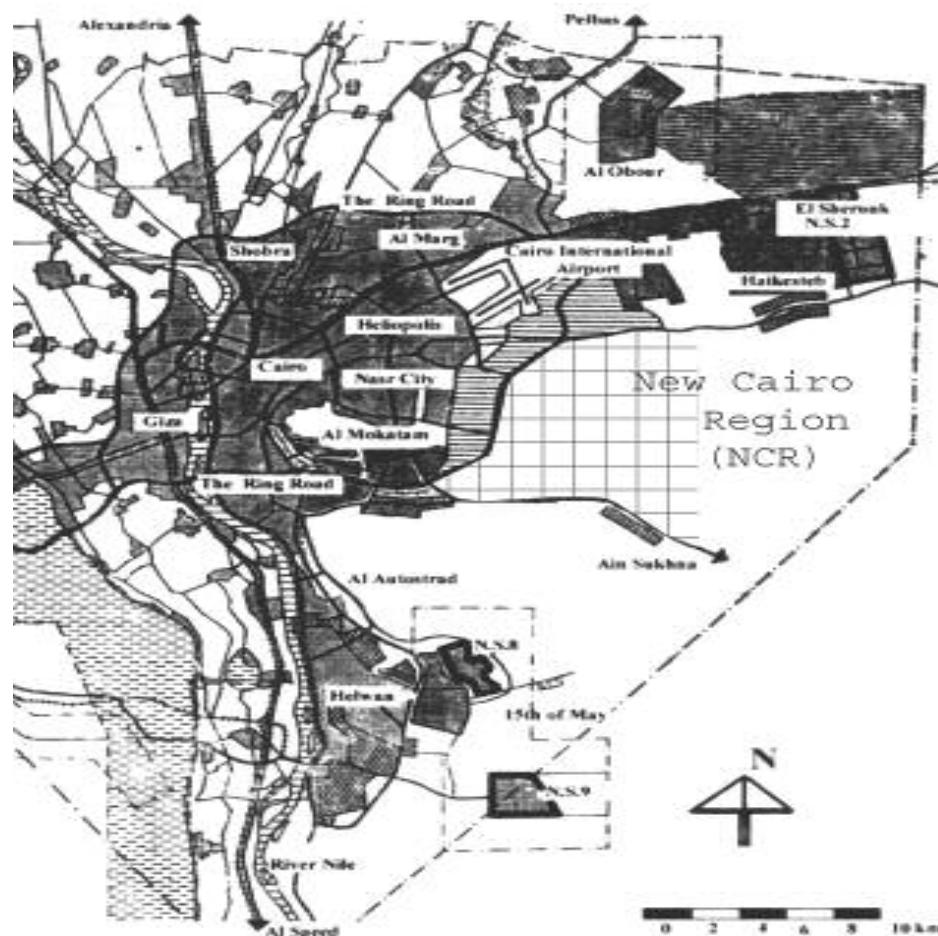


Figure 6: The formation of New Cairo City on the Eastern side of existing Cairo City [8]

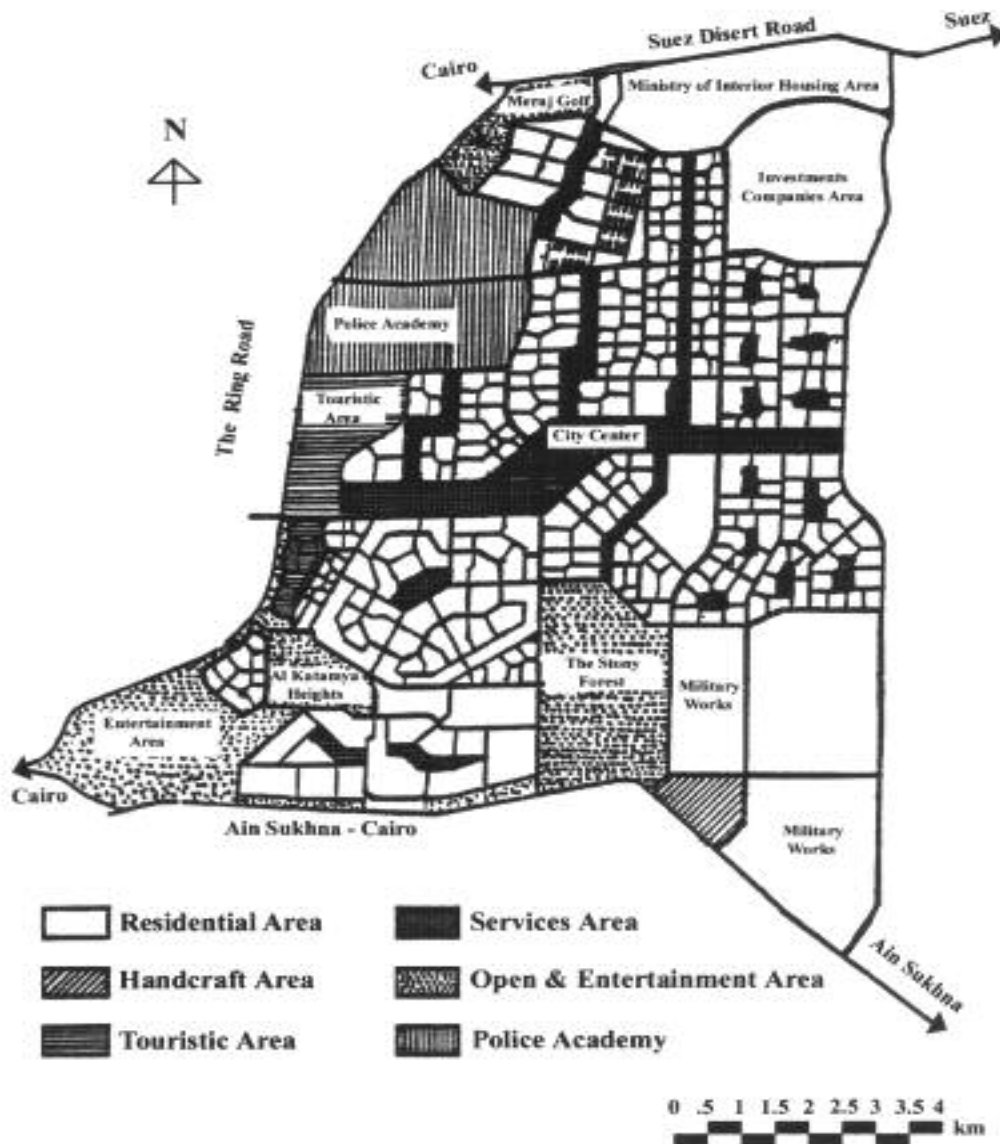


Figure 7: The master plan of the New Cairo City that is a composition of three settlements. [8]

As illustrated in Figure 6/b, the New Cairo City consists of two sectors, Northern and Southern. The main service center in the city is linear coming from the East to the West between the two sectors. Each sector is divided into 3 districts, each of them has a service center coming from the North to the South and connected with the main service center of the city. The housing in New Cairo has three main types: 1) Low level, medium level, and high medium level in the type of buildings that were proposed in the plans of the new settlements and established as a part of these settlements. This type represents about 17.6% of total housing area. 2) High level is

the type of plots with areas from 500 to 800 square meters to be developed by individuals as villas or small buildings. This type represents about 53.5% of total housing area. 3) Housing projects to the East of the city in the type of big lands with areas of about 25 feddan and more to be developed by investments companies as villas and small buildings in compounds. This type represents about 28.9% of total housing area.

We can assess the development that is planned to happen in the Eastern Arch through Table 3.

Table 3: The Development in the Eastern Arch, East Cairo.

| | New Settlements | | | Total of 3N.S. | New Cairo | Increasing Rate |
|--------------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---|-----------------|
| | N.S.1 | N.S.3 | N.S.5 | | | |
| Area (feddan) | 1868 | 1808.7 | 2721 | 6397.7 | 27409 | 4.3 |
| Target of population (inhabitants) | 200.000 | 200.000 | 200.000 | 600.000 | 1.250.000 | 2.08 |
| Residential Area (feddan) | 781 | 556.3 | 1120 | 2457.3 | 16510 | 6.72 |
| Services Area (feddan) | 171 | 232.5 | 331 | 734.5 | 3400 | 4.63 |
| Industrial Area (feddan) | 374 | 104.5 | 873 | 1351.5 | 153 | 0.11 |
| Investments Activities Area (feddan) | Non | Non | Non | Non | 2681 | |
| Housing Level | Economic-Medium-High Medium | Economic-Medium-High Medium | Economic-Medium-High Medium | Economic-Medium-High Medium | Economic - Medium - High Medium - High | |

The financial thought was governing this development. The residential area increased by nearly seven times. On the other hand, the target of population increased by two times. This is due to the dedication of big lands for the luxury housing projects and for investments companies to develop them. The services area increased by nearly 4.5 time, the investments activities area increased as a new activity, and the industrial area decreased by nearly 90%, this is due to the target of New Cairo City to be a residential city and a big service and entertainment center for G.C.R. These changes

are the policy of the state in attracting the investments generally to Egypt and especially to G.C.R.

5. ASSESSMENT FOR THE URBAN DEVELOPMENT ASPECTS OF NEW CAIRO CITY

More in depth assessment for the main aspects of establishing New Cairo City on the periphery of existing Cairo, in comparison with International references, shows the following:

The Objective of establishing a marginal City: The Eastern location---near to Heliopolis, Naser City and El Mokattam---helps to attract the surplus population not only from the nearby areas but also from all over the Greater Cairo Region. The main economic activities depend upon real estate development in ‘luxury’ housing, entertainment facilities, and services (such as golf courses, spas, hotels and private schools).

The Natural Feature of the Site: The topography of the site consists of a limy hill to the South connected to unstable links to the North and unsteady flat area to the middle. These features lead to an increase in the construction cost that represents a burden to the project.

Expandability: The urban formation helps horizontal expansion to the East on desert land. The city center could expand straight to the East and are the residential districts with the conservation of the functional relations of the city. Building codes and regulations were high/luxurious to control vertical expansion, however this will rely solely upon governmental enforcement of law.

Land budget: *The residential use*, the New Cairo city has different levels of housing: low, medium, high medium, and high/luxurious. The housing area represents about 16510 feddan or a ratio of 60.12% of the total area, which is corresponding to the objectives of the city. Although the ratio of housing use is high, the magnitude of

economic and medium housing is relatively low. Solving the problems of Marginality and Squatters of G.C.R. is no longer the prime concern of the new city. The industrial area represents only 0.5% while the investment activity represents 9.5% of the total areas of the city, which declares that this city is designated to be service-oriented.

Density: New Cairo City is planned to reach 1,250,000 inhabitants, which is considered enormous for a new city; the international average of a new city is determined by 103,000 inhabitants. Figure 7 shows net, main uses, and the total population density of the New Cairo City in comparison with that of the British cities.

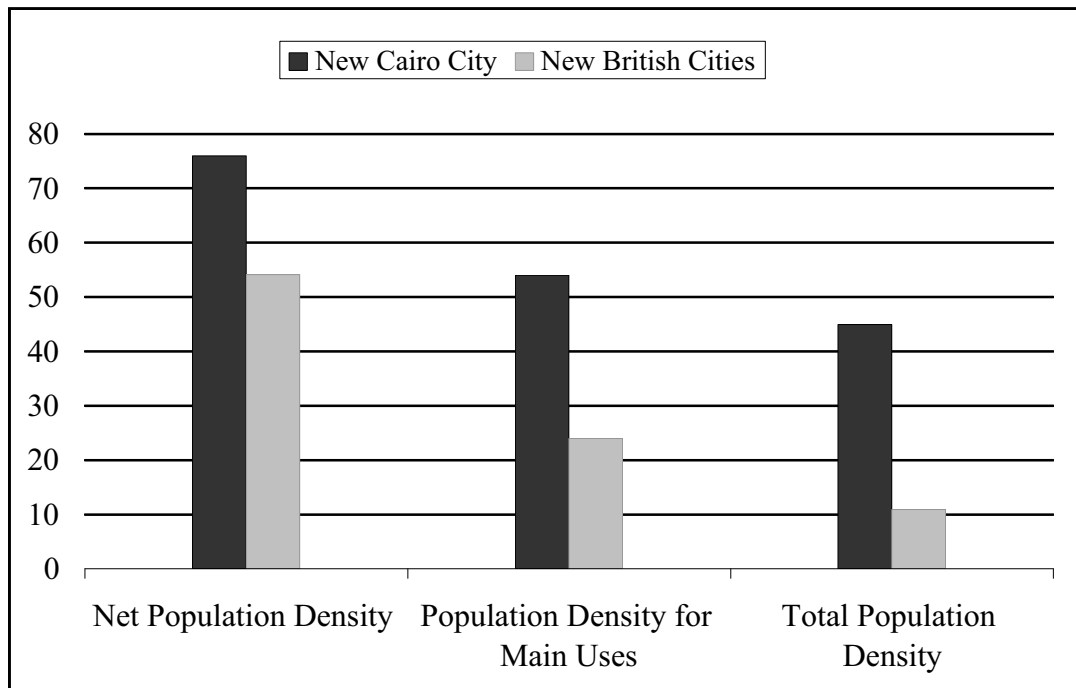


Figure 7: Comparison between the population density (person/feddan) of New Cairo and new British cities.

Transportation and communication: three regional roads are surrounding the site; the ring road of G.C.R. to the West, Cairo-Suez to the North and El Ain El Sukhna to the South. However, these three regional roads yet are not as effective as that of the International standards, especially El Ain El Sukhna that is far beyond these standards. The road network in New Cairo is grading from regional, arterial, and

collector to local roads. The area of main roads is almost 1325 feddan that represents 4.8% of the total area. According to International standards [3], this percentage is considerably low. The telecommunication network is designated to be an extension of the already existing network of Greater Cairo Region.

Urban growth rate: the rate of land consumption is 22 fedan/1000 persons. The rate of the residential use is 13.2/1000 persons. The rate of the industrial use is 0.12 fedan/1000 persons. These figures compared to International standard [3] are considerably low. Figure 8 illustrates comparative analysis between the development rates for both New Cairo City and the average of British cities. The urban development rate [8] is considerably low compared to that of British cities [3], the matter which hurdles achieving the city’s economic objectives especially for those related to public services (schools) that are badly needed not only for the new city but also for the Greater Cairo Region.

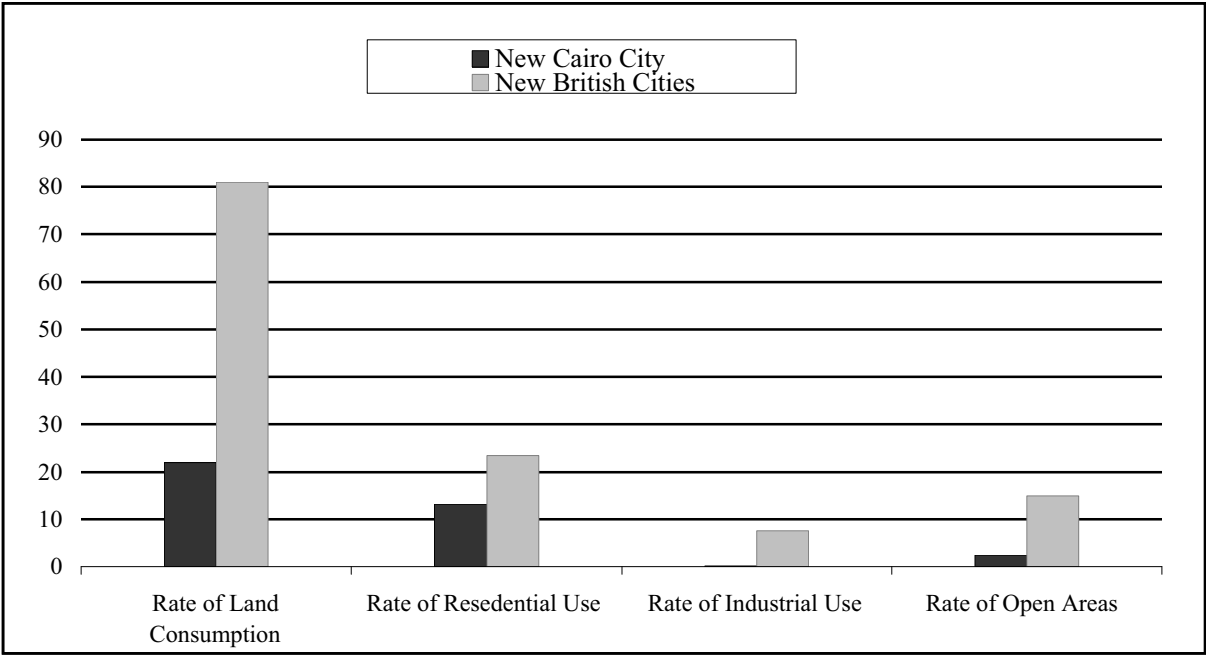


Figure 8: Comparison of the urban development rates (feddan/1000 persons) between New Cairo City and new British cities.

6. CONCLUSION

The previous discourse pointed out that political changes have influenced the urban development of the Eastern Arch of G.C.R., characterized by a process of "filtering" the upper classes out of Cairo. The higher socio economic who can afford the expenses of commuting long distances and are willing to give up the practice of maintaining the inner city dwellings with its inappropriate contextual conditions were encouraged to move and to live in the newly developed suburbs.

The urban policy behind the development of the Eastern Arch of G.C.R. has been completely changed. In the beginning, three proposed new settlements were aimed at providing low and medium levels of housing to solve the problems of 'Marginality' and 'Squatters.' Then, the Eastern Arch was transformed into a gigantic urban mass. The New Cairo city was developed to provide luxury level of housing for higher socio-economic groups. The new developments were characterized by villas lands and lands for investments companies in order to achieve the highest income to the state. Low and medium levels of housing will be limited to what has been already established in the new settlements.

The new developments comprised two negative features, when compared with similar international housing and urban development mainly:

- High target population, resulting excessive demands on transportation and infrastructure.
- Low growth rate, which denied the new city from achieving targeted economic objectives.

There must be no mistake made about New Cairo edge city. It really is a city. Despite its large areas, segregated functions, and suburban settings, it fits all the definitions of a city. It encompasses residential, commercial, and industrial districts. It provides jobs and entertainment both for those who live there and those who come in from outside. Most importantly, the local population recognizes it as a unique place; detached dwellings, parcellization projects for villas, and town houses to attract private developers and investment companies and to secure the highest revenues to the state.

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تقويم القاهرة الجديدة

خلال العقود الثلاث الماضية نمت القاهرة بصورة كبيرة وعشوائية على الأراضي الزراعية رغم قلتها. وقد ارتبطت فكرة الضاحية منذ البداية بوجود وسائل سريعة للمواصلات لذا فإن الانجازات الجديدة التي تمت في قطاع المواصلات والتي تمثلت في شبكة مترو الأنفاق والطريق الدائري الخاص بالسيارات قد ادت هذه الانجازات إلى نشأة مجتمعات عمرانية جديدة ومخططة على حافة القاهرة الكبرى. أكبر هذه المجتمعات العمرانية الجديدة تقع في شرق القاهرة الكبرى مكونة ما يطلق عليه اليوم مدينة القاهرة الجديدة والتي تعد أكبر ضاحية لمدينة القاهرة في التاريخ الحديث. يستعرض هذا البحث تاريخ نمو القاهرة الكبرى والسياسات العمرانية والمفاهيم التي ادت إليها. كما يستعرض تاريخ نشأة مدينة القاهرة الجديدة. يركز هذا البحث على مدينة القاهرة الجديدة مقارنةً بإياها بأمتلة عالمية ومقوماً إياها من حيث الأهداف والخصائص العمرانية والمعدلات.