The Egyptian New Communities, Between Objectives and Realization – A Critical Discourse, Three Decades Later.

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Abstract

The Egyptian New Communities experience is among the most comprehensive and ambitious, regionally and worldwide. Initiated in the mid-Nineteen Seventies, as a governmental policy within a general strategy to tackle the multitude of problems burdening Egyptian settlements in general and major and secondary cities surrounded by agricultural land in particular.

New Communities were thought as an effective partial solution for the problems of: encroachment of agricultural land, lack of urban land for development, deteriorating fabric, infra structure and facilities and low quality living.

A variety of New Communities were proposed as a result of extensive, serious and comprehensive studies and joint endeavors of local and international experts; sponsored and orchestrated by the (then) Ministry of Development (Reconstruction) and New Communities, Egypt and its sub-organizations.

The New Communities drive; conceptions, proposals, detailed studies, implementation plans, and partial realization continued in full vigor for almost two decades, i.e. between the mid-Nineteen Seventies and the mid-Nineteen Nineties. It continued afterwards and to date, in a different pace, lacking comprehensive evaluation, critical monitoring, consistency and respect to original goals and objectives, policies, plans and details. This is manifested in the wide gap between what was planned and what is realized, in both physical and non-physical aspects. Qualitative evidence on the deficiencies and shortcomings of the implementation is provided by satellite imaging, in terms of; completed phases and imbalance between key land-uses, i.e. housing area, community facilities and industry.

The authors were involved in many of the studies of New Communities during the said two decades; they participated in the formulation of master plans and detailed studies and followed the fortunes and misfortunes of the New Communities since.

The present work main objective is to highlight the present conditions and status of selected Egyptian New Communities, in terms of, urban form and growth as well as deviation from the original visions and perspectives. It falls into five closely related sections, namely; The Egyptian New Communities in Context, Selected New Communities - Master Plans and More, The Present Scene, On Deviations and Remedies and Epilogue.

Keywords

Urban Planning, Urban Design; Urban Management; Egyptian New Communities' Development, Conceptions and Realization; Built Environment, Human Settlements.

1. The Egyptian New Communities in Context

The Egyptian new communities development experience that started in the mid-Nineteen Seventies and continued since, is arguably among the most comprehensive and ambitious in terms of: numbers, scale, investment, and related endeavours, regionally and worldwide, (7), (13), (17), (18).

The origins of the proposition of developing new communities outside the populated areas of Egypt; dates back to the late 1960s. The Greater Cairo Region – Preliminary General Plan, Study (1970), advocated the development of four new satellite towns in the Greater Cairo Region to accommodate some 25000 person by the year 2000, (1), (7). It however remained an intention and an accepted proposition for almost a decade.

The conception, policy, and related plans and actions of developing of new communities outside the densely populated Nile Valley and its Delta gathered momentum in the second half of the 1970s. It followed the state's efforts and priorities given to the reconstruction and revitalization of the Suez Canal three key Cities and Region, that suffered and devastated by the war years, i.e. between 1967 and 1973, (2), (3), (7). A sequence of steps and actions confirmed the earlier and late intentions and showed the will to realize and implement the policy behind it. Among the earliest steps was the formulation of a new ministry to undertake the responsibilities of new communities' development, to expand the scope and objectives of the former Ministry of Housing, and to collectively combine Reconstruction, Development, Utilities, and Infra Structure. This was further enhanced by the creation of an autonomous national authority solely responsible for the development of "New Urban Communities" outside the traditionally populated Nile Valley and it settlements, major and minor, (3), (7), (13).

The key goal of the new Ministry of Development and New Communities was to transform Egypt's map and urban structure and spatial distribution; to enhance and support national development, economic and beyond. In other words to address and help solving an array of inter-related problems, including; urbanization explosion, over-populated primate and major existing cities, regional imbalance and distorted urban structure, threatened, besieged and depilated (invaluable) agricultural land; together with the housing crisis, deteriorated and inadequate infra structure and community facilities, (3),(13).

The 1978-82 National Plan clearly advocated that the expected national population growth of the order of 28 million (between 1976-2000) - should be attracted to and absorbed in new development areas, to be located outside the traditionally populated Nile corridor (representing a meagre 4% of Egypt's total area). The new development areas comprised, land reclamation projects and new desert settlements/cities. The said National Plan called for an ambitious expansion of the populated area from 4% to 16% by the year 2000, (7).

Hence the shared goal of the Ministry of Development and New Communities and the New Urban Communities Authority was to create new urban desert communities with mixed economic base to alleviate the burdens of existing cities and to support and fulfill the national socio – economic development objectives. The New Communities development was in fact an integral part of a balanced and comprehensive development plan and drive, (7), (13), (18).

The sites of the new communities/settlements were decided according to an array of factors and criteria, and were mostly the result of macro, regional and national studies. Location factors included: relation to existing major cities and urban centers, accessibility, setting features, topography, soil and ground water, water supply sources, energy availability, demographic considerations, economic factors and strategic factors (defense limitations), (13).

The proposed and developed new cities and urban settlements fall loosely into four general categories, namely: autonomous/independent cities/settlements, satellite cites (semi autonomous), twin cities and cities/settlements related to grand-scale national projects;

Industrial, land reclamation and others. Many of the new cities and urban settlements satisfy a number of those features, hence fall into two or more of the said categories, (13), (18).

The development of Egyptian New communities in terms of conception, detailed studies and initial development mostly date back to period extending from 1976 to the early 1990s. The said period witnessed the completion of the development studies and implementation of more than 18 new cities/communities, (13), (17), (18).

Many of the pioneering development studies were carried-out by joint local and international teams (mostly from the 1st World), in order to meet the technical challenges of the new experience; e.g. the Master Planning and 1st Phase studies of the new cities of: 10th of Ramadan, Sadat, New Ameriyah (New Borg El Arab), 15th May and El Obour. The key features of the said new settlements are summed up in Table (1), including; category/ classification, generation, location/ regional association, urban mass and designated areas, target population and dominant economic base(s).

Most of the new communities shared four general characteristics, namely: a mixed economic base, providing the majority of its labour force with job opportunities, accommodating diverse socio-economic groups and ambitious population and growth targets.

2. Selected New Communities – Master Plans and More

To illustrate the features of the Egyptian New Communities; conceptions, plans and drive, through its relatively short course from initiation and till the present – within the bounds and limitations of the present forum – five selected new urban communities will be briefly presented and followed through.

The selected five New Communities reasonably present the features, characteristics and to an extent the mixed fortunes of the Egyptian New Communities. A key factor in the selection rationale was the involvement and first hand experience of the authors (see the references and notation section). The authors jointly or separately, were involved in all of the development studies, master plan and details preparation of the selected five case studies. They witnessed and participated in forging the conceptions and details of the five selected settlements in one or more of the following aspects: urban planning, urban design, housing, site planning and community facilities programming.

The selected five New Communities are: Sadat (4), 6 October (6), New Ameriyah City (currently New Borg El Arab), (5), New Menya City (8), and Urban Settlement No. 3 (in the Greater Cairo Region), (10); see Figs. (1) & (2) and Table (1). The selected new communities loosely represent: the three generations of new communities, relative independence (or otherwise), the variety of economic bases, target population range, completion of preliminary and advanced studies, early implementation of the initial growth phase.

2.1. Sadat City, 1976 -1978.

Sadat City was the second of the two pioneering Egyptian New- Cities. Its Master Plan studies were completed in 1976-1977; the result of collaboration between Egyptian and American consulting groups ((Sabbour, David Crane, Marcel Breuer et al), (4). An autonomous city, located some 95 km to the Northwest of the capital, Cairo, almost mid-way between Cairo and Alexandria, on the eastern side of the regional desert road linking Egypt's two-primate cities. The location is accessible to almost one third of Egypt's population, being

within an hour drive from Cairo, Alexandria, and the Nile Delta (major centres). Its target population was one million and to reach: 60000 person in the first 5 years, 150000 in 10 years and 500000 in 25 years. Planned with a mixed economic base combining; the various levels of industry, agriculture, construction, and services (local and regional) - to provide job opportunities for almost all its labour force (some 165,000 jobs), (3), (5), (7). The city's inhabitants were thought to be attracted from the neighboring densely and overpopulated governorates of the Nile Delta.

The planned rapid growth was enhanced by balanced self-contained phases; reflected in and to be achieved through its master plan and implementation. It is a true linear city, with linear major and secondary (city and district) centres together with an integrated industrial major linear spine (and strategically separated heavy industry), to allow for a balanced growth, Fig. (3.1). The said rational and balanced growth of the city during the consecutive phases; combining the development of residential areas, necessary community facilities and industrial activities (generating job opportunities), would inevitably encourage the workers to settle down rather than to commute from the near-by existing urban and rural settlements.

The area of Sadat City's urban mass totaled some 48 km²; comprising 34 residential areas – carefully organized to secure pollution free settings through the provision of greens, allotments (2000 acres), and shelter belts (33,000 acres). The implementation of the Master Plan started in full vigour in the early 1980s, with balanced attention given to infrastructure, public buildings, industry and housing development, (4), (13).

2.2. New Ameriyah City, 1978 - New Borg El Arab (since 1989)

It is the fourth of the pioneering Egyptian new cities. The master plan and detailed studies were executed between 1977-1982, by a joint Dutch (ILACO) and Egyptian (Hassan Ismail and Partners) consulting groups, (5).

New Ameriyah City was planned as an independent city, on the regional coastal road some 60 km to the west of Alexandria and about 8 km from the Mediterranean coast line, on a plateau 30-60 m above sea level. The development objectives included; to help in solving Alexandria's congestion and overcrowding and lack of development land, to protect the threatened agricultural land, and to provide a major urban magnet in the region. N.A.C. had a target population of 500000, to be reached in 25 years. The new city was to provide job opportunities for all its inhabitants (150000 jobs). Its mixed economic base comprised; industry, agriculture, services, construction, and tourism. The N.A.C. conception is reflected in its Master Plan flexible urban form; a linear development with only the first phase details defined and planned together with the main delineators (major roads and infra structure of the second phase. N.A.C. urban mass totaled some 48 km² (11000 acres), Fig. (4.1). Growth phases were carefully planned to provide self-contained communities comprising housing, community facilities, and industrial development, (5).

Initial growth started in the early 1980s, comprising the first district and the related connected industry. The new city's population was to reach a target of nearly 42000 (in three years) and the city's first sector (Eastern-most) was to be completed in 8 years from the initial start. The N.A.C. name was changed in 1989 to New Borg El Arab to commemorate an Arab Summit meeting held in the close town of Borg Al-Arab, (13).

2.3. 6 October City (1979)

The Greater Cairo Regional Planning studies proposed 4 key new satellites, namely: 6 October, Amal, and Obour together with 15th May, Tolan (7). Six October was the second new satellite city in the Greater Cairo Region in the first generation of Egypt's New Urban

Communities. Contrary to the first satellite city (15th May) - which was planned solely as a dormitory town, to provide housing and community facilities to the working force of the huge industrial complexes in the "Helwan" district (south of Greater Cairo) - 6 October was envisaged as a semi autonomous city. Its economic base comprised; industry, services, construction, tourism, and agriculture, (6). To provide some 80% of the total job opportunities for its inhabitants to be.

Six October was the first Egyptian new community to be planned solely by Egyptian experts/consultants under the guidance of the General Organization for Physical Planning, GOPP.

It is located in desert site west of Greater Cairo on a plateau overlooking the Nile Delta to the Northeast and the Pyramids plateau to the Southeast, some 34 km to the West of Cairo, accessible from both Cairo - Alexandria and Cairo - Fayoum, regional desert roads. The proximity to the Capital city was thought to attract the city's population from the overcrowded mega city, (6).

The original master plan is once again linear comprising three distinct urban areas, namely; the touristic area (4000 acres) to the East and the connected/integrated industries (2500 acres) in the Southwest and the residential/general urban mass (almost 5000 acres) linking the former two. The main urban mass comprised 12 districts accessible from the city's central spine, Fig. (5.1). The city featured a mixed socio-economic/income population target of 350,000, to be reached by the year 2000 and to continue there after to reach one million inhabitants, (6). The new city's designated area was decreed in 1979, totaling some 360 km², (13).

Six October's urban mass was surrounded by green belts and agricultural outstretches in the Northwest and South. Development objectives also included relieving Cairo and Giza from surplus-population and over-crowding; to provide a development magnet, supplying urban land for housing, community facilities and industry, extending quality living environment and balanced structure to its inhabitants. The new settlement was intended to be a relatively autonomous development with its integrated economic base, services and residential areas; to discourage its residents from commuting to Greater Cairo and using the new settlement as a convenient dormitory town, (6), (7).

The city's development started in earnest in the early Nineteen Eighties. The settlement witnessed a rather accelerated development. The absence of development land for industrial activities within Greater Cairo encouraged investors to build their factories in the industrial zone of the new city. Many high educational institutions (mostly private universities, academies and high institutes) were developed and started full operation. The creation of job opportunities and provision of services helped the booming of the settlement, (13), (18).

2.4. New Menya City, Upper Egypt (1983/84)

Most of the existing Egyptian cities, located in the Nile Valley and its Delta, are surrounded by agricultural land. In order to hinder the related urban sprawl on agriculture land, the National Plan and underlined policies advocated the creation of closely located new settlements on the nearest accessible desert land, hence the adoption of the concept of twin cities to solve the problems of the existing urban centres along the river Nile, (7), (13), (18). New Menya City belongs to the second generation of Egypt's new communities. Together with New Beni Sweif were the pioneering new settlements in Upper Egypt. New Menya City can be loosely classified as a twin satellite city. Mirroring its mother, or the older twin; Menya city across the Nile – The New Menya City is located in the Eastern Nile bank on an elevated site overlooking the Nile and Old Menya to the West. The mother city, located on

the West bank of the river Nile is surrounded by fertile agriculture land and its physical expansion was and still is on it. Hence, the wisdom of the development of a twin city on the nearby desert land across the Nile, (8).

The planning studies were carried out by a team of Egyptian experts under the auspices of the GOPP. Development objectives included: creating a magnet to attract development and surplus population, provision of investment venues and job opportunities (for the majority) and quality living for its inhabitants. The New Menya was thus planned to support its twin existing city, to provide development urban land for housing, leisure, community facilities and industry. Its mixed economic base comprised: tourism, industry, services, construction, and agriculture. The new city's master plan featured a flexible linearity, comprising; a linear spine and four asymmetrically located districts, three industrial areas (integrated and connected), city green and tourist area, Fig. (6.1). The city's target population totaled some 120,000 persons; distributed over an urban mass comprising; net residential areas (650 acres), local and central community facilities (317 acres), industrial areas (277 acres), (8).

The new city was to accommodate mixed socio-income groups, reflected in the target housing-mix distribution, namely; 60% economic housing, 25% middle income and 15% upper middle, (8). The new city master plan was approved in 1984.

The New Menya planned initial growth phase, the GOPP (1987) included the development of the first district and industrial area (B); to provide residence, services and work for some 40,000-50,000 population, (8). Its implementation started shortly after, (13), (18).

2.5 Urban Settlement #3, Greater Cairo Region (1989)

The new urban settlements in the Greater Cairo Region belong to the third generation of Egypt's new communities. The concept was the product of the comprehensive study "The Greater Cairo Region Strategic Plan and Long-Term Development"; jointly undertaken by the GOPP (Egypt) and I.A.U.R.F. (France), to address the problems of the primate city and region and to propose solutions, (9). The study key recommendations and proposals comprised: controlling and delineating Cairo's expansion by constructing a new outer ring road together with an integrated an ecological shelter belt, managing the existing urban districts through the conception of homogeneous sectors (each sector comprises a part of the existing city and its related desert-located extension). The said Sectors would be complemented by the development of a ring of new limited scale-desert settlements in the East, South, and West of Cairo's urban mass.

Ten new urban settlements were proposed and location-decided; to absorb surplus population and to support the upgrading of existing areas in the related homogenous sectors within the city. Three new settlements were proposed to the east of the Eastern Arc of the ring road namely: the 1st, 3rd, and 5th urban settlements, with population of the order of 200,000 each, Fig. (2), Fig. (7.1). Clearly separated by green areas and were thought of as balanced communities in terms of socio-income groups, viable mixed economic bases comprising service and integrated industry, thus offering job opportunities for the majority of the new residents.

Extensive planning studies, carried out by leading Egyptian consultants under the supervision of the General Organization for Physical Planning (GOPP), Egypt - preceded the development of each of the new urban settlements. The urban planning, urban design and housing studies for the new urban Settlement #3 were undertaken, by the authors for the GOPP (1989), (10).

The Urban Settlement #3 is located on the Northeast corner of the intersection of Cairo - Kattamiya regional road and Greater Cairo ring road), Fig. (7.1). It represented a unique

development case with its restricted growth boundaries to the North and East as well as by the existing land-uses, the ongoing housing development projects and the natural archeological site (the petrified forest) it contained.

The proposed master plan for settlement #3 is characterized by its complex linear urban form, comprising two physical units, namely; the "Kattamiya" housing area (10,000 housing units) and the emergency housing site. The second unit includes the newly planned urban mass for settlement #3, which in turn comprises three urban segments linked by the settlement's central spine, and the industrial park in the East end, Fig. (8.1).

Settlement #3 target population was 213000, to be accommodated in 14 local areas to house 163000 plus about 50000 persons to settle in the newly developed 10000 housing units area. The total area of Settlement #3 urban mass totaled some 700 hectares (1870 acres), comprising; the general urban area (31% of the total), community facilities and green open spaces (19%), major roads (21%), industrial areas (6%) and green belts 24%. The New Settlement was to provide 80% of its population with job opportunities, (10).

3. The present scene – 3 Decades After

In the second half of the 1990s the new communities policy, witnessed a number of controversial decisions, the negative effects of which are currently evident; including:

- Increasing the planned target population of a number of the relatively promising new communities - though most of the originally planned final targets were ambitious as well as the targets of the planning growth phases proved hard to achieve. The new unsubstantiated growth targets were hastily decided in response to market speculative demand for urban land, mainly for housing and industrial development. The new set targets were not the result of thorough, detailed and evaluated studies; hence adding to the burdens of new communities.

The population of 6th October City was increased during the Master Planning Phase from 350000 to 500000 persons to be reached in 25 years (in the year 2005 or thereabout). The target population was raised to a colossal 1.5 million, the city urban mass was hastily doubled and the planned green areas and belts were replaced by residential districts and service centres. Further more one of the designated Greater Cairo New Urban Settlements (#7) was added to the city urban mass. Further more, the detached "Sheikh Zayed" new city joined another detached new urban settlement (#6) and both formed a gigantic urban stretch, physically attached to that of 6 October city, with a population target of some 2 million, see also Rageh (18), Aly (19) and Shalaby (21).

Similarly, and more dramatically, the three detached new urban settlements on the Eastern Arc of Greater Cairo ring road, with a planned target population of 600000; were transformed into a mega urban mass, namely; "New Cairo" with a preliminary target population of 1.5 millions. The land designated to the new urban mass, if completed could accommodate some 4.5 millions person, (14), (15),(18).

- Changing the demographic mix and land allocation; e.g. replacing low income housing and general urban areas by middle, upper middle, and luxury dwellings, resorts, and developments, hence ignoring the objectives behind the new communities and the recommendations of the related studies as regard the target socio-economic mix and balance and the care given to attract the labour force to settle in those new communities. Thus the ignored lower income groups were to stick to the densely populated informal stretches and deteriorating twilight areas in the nearby major urban centers, (18).

- Allowing extensive linear urban developments in the vicinity and very close to the new communities. A policy and trend reflecting a serious lack of vital development control and coordinated planning. This is clearly evident in the Greater Cairo Region, along the Western stretches, Cairo Alexandria desert road, Cairo Fayoum regional road, and axes/links to: 6 October, settlement # 7, Sheikh Zayed new city, and Settlement # 6. Regional roads were allowed to serve as access roads to formal fragmented developments competing with the struggling planned new communities. Similar conditions prevailed in the Eastern stretches, around the Gt. Cairo ring road and regional roads (leading to the cities of: Ismailia, Suez, and Kattamiya), (14), (15).
- Endorsing changes that contradicted and challenged: the conceptions, objectives and initial development features of many of the new communities. This is evident in many cases; e.g. 6 October city, Sheikh Zayed city, Menya new city and the New Urban Settlements in the Gt. Cairo Region. The said changes ignored the original studies, regional determinants and the implemented initial phases, (18).
- Advocating a "huge" number of new communities in the 4th generation, without enough assessment of the fortunes of the earlier 3 generations and the outcome of the development experience to-date; hence repeating the deficiencies of the pioneering communities and opening new demanding fronts before efficiently solving the problems of the existing, (13), (14), (18).

With the above controversial decisions and actions in mind, this section briefly reviews the fortunes and present status of the selected five New Cities presented earlier in section 2.

3.1 Sadat City

Recent satellite images taken in 2005, Google (16), showed a serious decline in the curve of development, Fig. (3). After three decades from its initial development only the first phase of development for the residential areas and related services was implemented. On the other hand, the industrial areas were extensively developed. It seems that regional commuting is the prevailing living pattern; the residents of overpopulated areas in the Delta are commuting to work in the industrial area.

Reasons for this distorted development need to be monitored analysed and evaluated. The satellite images simply show an unmistaken waste of resources. The capital invested in the planning and development studies and in the execution of infrastructure networks has not been properly utilized.

3.2 New Ameriyah City – New Borg El Arab

Similarly, the relatively new Google satellite images taken in 2005 (16), show a clear slowing down of the development process. Figure (4) shows that only the first district is developed, the second district is hardly developing and the industrial zone is relatively more active. This may suggest that the workers of the factories in the active industrial areas are not necessarily living in the city and are likely commuting from and to neighboring existing cities and settlements.

An assessment of the present situation is highly needed in order to clarify the reasons for the slowing down of the development programme. The slow pace of development simply means that the capital invested in the studies and the execution of infrastructure network is largely wasted, although it represents a great asset/potential that should bring the expected return.

The proposed phases of development took into consideration the importance of simultaneous development of industrial areas, residential areas and needed services, see Fig. (4.1). The said balanced development was meant to provide the inhabitants with the necessary community services and job opportunities that would encourage settling and discourage commuting to other existing cities.

3.3 6 October New City

The 2005 satellite images, Google (16), show the active development of the settlement. Some districts are totally developed, especially those with completed housing projects, and the rest are gradually developing according to a scenario of plot subdivisions to be incrementally built by the owners. The satellite images also show the doubling up of the area of the industrial zone with its road network completed, Fig. (5.2). It further shows some new residential areas developed outside the ring road that defined the boundaries of the original Master Plan urban mass.

The development boom was further exploited by the Ministry of Development and New Communities decision to double the size of the settlement by increasing the target population figure from 500000 inhabitants to one million. The said decision was not backed up by fresh comprehensive regional studies covering both 6 October City & Gt. Cairo Regions.

3.4 New Menya City

The recent satellite images of the new city, dating back to 2005, Google (16), Fig. (6.2), show that the main roads and the infrastructure networks of the whole city have been implemented. It is possible to detect from the aerial images the spatial distribution of the City's main elements, i.e. the general-urban and residential districts, local areas and industrial areas. Only the first phase of the city has been completed, to date. The slow rates and status of development support the need for a critical assessment of the present situation in terms of development scenarios and urban management, in order to secure the development goals and to efficiently deploy the invested capital.

3.5. Urban Settlement #3, Greater Cairo Region – "New Cairo"

The late 1990's witnessed some radical changes in the Ministry of Development and New Communities Greater Cairo Region development policies, without the backing of documented in-depth studies or critical investigation. The vision and proposals of "the Greater Cairo Region Strategic Plan and Long-Term Development", (9), were shaken, contradicted and abandoned. The Ministry of Development and New Communities decided to develop a huge new city called "New Cairo" to swallow within its boundaries the Eastern Arc the three new urban settlements number (1), (3) and (5), (15).

The new grand settlement ignored the concept of: the "Homogenous Sectors", limited scale detached urban settlements and the ecological green belts surrounding the ring road and separating new developments. The size of "New Cairo" is almost three times the collective size of the three originally planned urban settlements and it contradicts (without good logic or an objective rationale) the main objectives of the studies completed, assessed and endorsed earlier, see also Rageh (18).

The Google satellite image, Fig. (7.2), points-out some interesting facts; the three original urban settlements (1, 3 &5) are steadily developing while the mega settlement engulfing them is lagging behind. This present situation means that the government thinly-spread its resources in the development of the main roads and infrastructure network of the mega new

city, instead of supporting and enhancing the development of the appropriately planned and located, the detached three urban settlements (1, 3 &5).

The satellite images also show some deviations and inconsistency in the functions and landuses of the implemented settlements. The integrated industrial areas for settlement #3 were replaced by residential areas. Luxury residential developments for higher income groups (e.g. the "Kattameya Heights" luxury residential resort, is located between settlements #3 and #5) were developed in the buffer zones separating the new urban settlements; in areas designated as open spaces and shelterbelts to protect and control urban sprawl.

The briefly reviewed new communities together with most of the rest-belonging to the three generations of Egypt's new Communities, Fig. (1) - present conditions are characterized by a chain of related problems and features, namely:

- Slow growth rates (even in the cases of the relatively active cities), in terms of target population, percentage of resident labour-force, land development, community facilities completion
- Imbalanced development and deviations from the planned, in terms of the relation of the present status of the four key urban components; i.e. housing, community facilities, industry and infra structure.
- Distorted population mix and demographic structure/balance, i.e. percentages/ratios of the socio-income groups: upper, middle and lower.

4. On deviations and remedies.

The Egyptian new communities' experience does represent a daring and a serious endeavour as well as a difficult and demanding undertaking in a developing context; in a country burdened by chains of challenging priorities and limited resources. The New Communities present scene, briefly highlighted in the previous section, through the selected examples – pointed-out the limited success of the new communities in achieving and securing their objectives and delineated targets, in terms of:

- Securing target "resident" population.
- Accommodation of the (thought) socio-economic mix-specially the lower income groups.
- Effective alleviation of existing (designated) urban centres/cities; primate and major.
- Independence and autonomy (relative).
- Provision of quality (balanced) living settings.

The said limited success in securing planned objectives and meeting development programmes, could be attributed to an array of factors and reasons that lead to the deviations and shortcomings of new communities development, including:

- Management deficiencies and casual decision-making; lacking objectivity and reason.
- Poor monitoring, lack of proper documentation and continuous evaluation.
- Centralization; i.e. imbalance between central government (the Ministry and affiliated bodies) and new communities' authorities.
- Inappropriate allocation, distribution and provision policies of development urban land for housing, community facilities and industry.
- Abandoning approved planning strategies and development rationales.
- Un-coordinated development and clashes of priorities.
- Inappropriate housing policies and strategies.

The said shortcomings, limited success and deviations should and could be seriously addressed and dealt with. Numerous studies and researches advocated solutions, remedies and courses of actions to better the misfortunes of the resourceful new communities' movement, see for example Rageh (18), Aly (19), Rehan (19), Shalabi (20), Ettouney & Abdel Kader (17).

Key actions and remedies to address the said problems are arguably to include (some or all of) the following:

- Respect to completed and approved Master Planning strategies and related studies; changes should follow rational evaluation and in-depth investigations.
- Autonomous/independent new cities development organization and management; i.e. treating the new cities as a comprehensive civil development, and not merely as grand-scale physical construction and execution projects.
- Serious regional and national coordination of development rationales and strategies; to avoid fragmentation and clashes. Treating new communities as an integrated network.
- Discouraging, freezing, and relocating fringe and "casual" developments, in the vicinity of planned new communities and related regional roads and access "axes".
- In new developments, priority should always be given to the "majority", the "masses", the "needy", the "urban poor", and to "lower income groups" representing 50% 60% of the target population in all the original (documented, assessed and endorsed) studies for Egypt's new communities.
- "Settlers" attraction is a prime target and a key action in new communities' development. It can be achieved through the integration of the trio: appropriate **housing** supply, attractive and efficient **community facilities**, and rewarding **job opportunities**.
- Careful considerations should be given to land allocation policies. Quick returns to maximize profits and open urban-land auctions should be resisted and avoided. Land allocation should primarily target residents and prospective settlers.
- Readdressing the target sizes and population of the new communities small may still be viable and more efficient.
- Revitalization of the mixed economic bases of new communities, including agriculture and services besides industry.

5. Epilogue.

The present paper attempted to draw attention to the fortunes (and lack of) of the comprehensive and arguably unparalleled (in recent history) developing experience of the new urban communities in Egypt.

It followed the notion, conception and its partial realization through the relatively short course, extending over three decades from initiation in the mid Nineteen Seventies till the present. Most of those new settlements were planned to reach target size and population within 15 to 25 years. The reviewed satellite images showed that most of the new urban

settlements are clearly lagging behind the planned targets. The few that are actively developing, mostly in and near Greater Cairo, reflect serious deviations from original policies and development plans; hence adding to the problems rather than alleviating the burdens of the Primate City and region.

The present discourse highlighted the gap between: the original visions, substantiated by serious studies, in-depth investigation, carefully formulated development frameworks and comprehensive general and detailed plans and actions on the one hand, and the present status of the new communities nationwide, especially those belonging to the first three generations on the other.

The truly extensive, rich "Development Library" of the Egyptian new communities' development studies, should be revived, digitally stored and publicized. This crucial step will provide comprehensive bases and benchmarks to all serious endeavours; to monitor development and current status, to analyze and assess performance and achievements and to diagnose problems and shortcomings and to propose solutions, alternative strategies and appropriate courses of action.

Detailed, comprehensive, up to date and continuously refreshed data-bases covering all the physical and non physical aspects of new communities should also be established and made readily accessible to all concerned. This would enable better understanding, allow objective analysis, rational solutions and hence secure better futures.

Furthermore detailed studies are also needed in to reach accurate assessments and to provide reliable diagnosis and rational courses of action. Those studies would secure benefits from the potentials of the settlements and would assure better returns from the invested capital.

New communities represent an invaluable asset and a promising potential, they deserve attention and a prominent place as magnets and focal points in the national and regional development strategies in the coming decades.

Till such national and regional rationales are formulated, five key **Action Plans Studies** should be undertaken by top specialists in the realms of: urban planning, management, housing, infrastructure and related areas - under the auspices of the related central and local institutions and authorities - to address and cover the following **crucial** issues:

- New communities **management and financing** (beyond construction and towards autonomy)
- **Targets' reassessment**, in terms of: size, population, development phases, etc.
- Land and assets **allocation policy**, to avoid using new communities as mere treasury revenue sources.
- **Socio-economic groups mix**, current status and future: demographic structure-current and prospective.
- **Harmful formal developments** in the vicinity of new communities (along regional access routes and the designated areas).

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Key Economic Base **** Serv Agri Inds 3 Location, Region, Mother Cities 4 3 Fable (1) Selected Egyptian New Cities - General Profiles 3 Classification: Ind: Independant; Sat: Satellite; Twin; Spe: Special Nature
Location Region: (1) Greater Cairo, (2) Alexandria, (3) Suez Canal, (4) Delta, (5) Upper Egypt and New Valley
Key Economic Base: Inds: Industrial; Agri: Agricultural; Serv: Services; Con: Construction; Tour: Tourism Ξ Target Population × 1000 person 500 500 500 500 500 70 250 250 60 100 500 130 450 140 213 75 Designated Area (km²) 398 35 35 408 100 102 163 28.2 45.5 134 73 40 1 Urban Mass (km²) 96.1 64 12.5 63 295 29 17 19 5.2 10 20 51 23 39 Spe Classification Twin Sat End 3. 15th May
4. (N.A.C) Borg El Arab
5. 6th October Settlement (3) Settlement (5) Settlement (1) 4. New Beni Sweif 6. Al Amal 7. New Damietta New Cities 3. Shaikh Zayed . 10th Ramadan 8. New Salehia 3. New Menya 2. New Assuit 1. Shourouk 1. El Obour 5. Nobaria 4. Thebes 2. Badr Cairo 2nd Generation * * 3rd Generation

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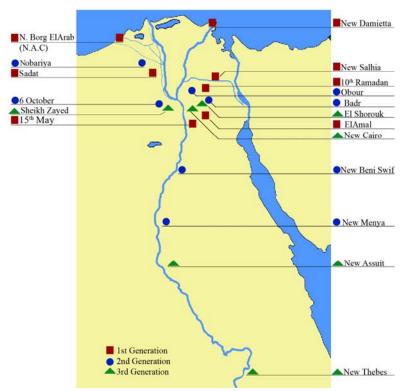


Figure (1): New Urban Communities, Egypt, 1976-1989, Generations and Locations, (13)

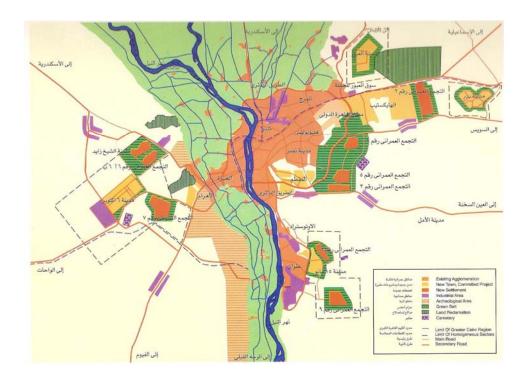


Figure (2): New Urban Communities, Greater Cairo Region, Egypt, (1989), (13)

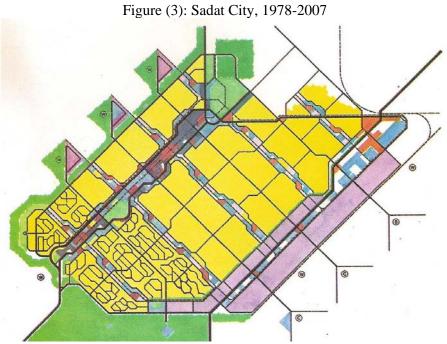


Figure (3.1): Sadat City Master Plan, (4)



Figure (3.2):Sadat City Satellite Image, Google, (16), 2007

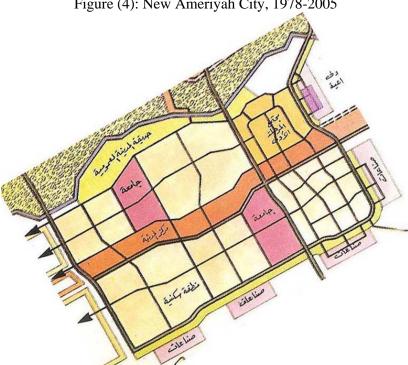


Figure (4): New Ameriyah City, 1978-2005

Figure (4.1): New Ameriyah City Master Plan, New Borg El Arab, 1978, (5).



Figure (4.2):NAC Satellite Image, Google, (16), 2005.

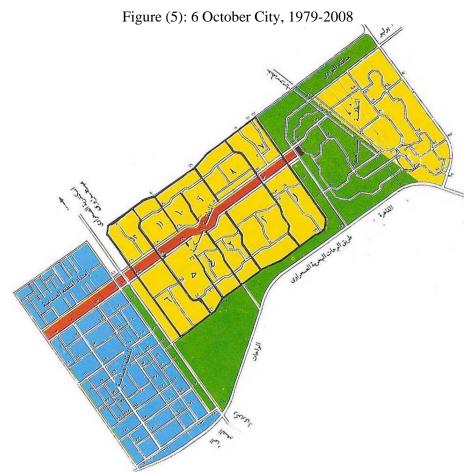


Figure (5.1): 6 October City Master Plan, 1979-1980, (6).



Figure (5.2): 6 October Satellite Image, Google (16), 2008

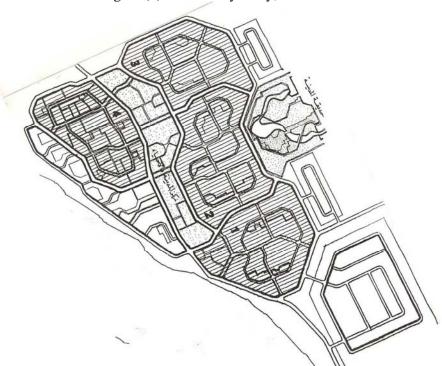


Figure (6): New Menya City, 1986-2005

Figure (6.1): New Menya City Master Plan, 1986, (8).



Figure (7): New Urban Settlements 1, 3 & 5, Greater Cairo Region, Egypt, 1989-2009



Figure (7.1): New Urban Settlements 1, 3 & 5, Greater Cairo Long Range Development Scheme, Egypt, 1989.



Figure (7.2): New Cairo, Google, (16), 2009.

Figure (8): New Urban Settlement # 3, Greater Cairo Region, Egypt, 1989, 2009.

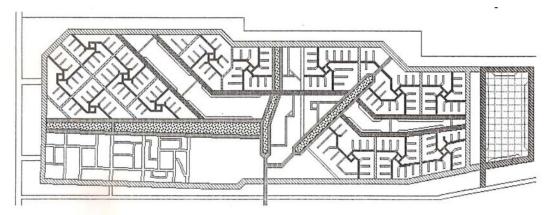


Figure (8.1): Master Plan of Settlement # 3, 1989, (10).



Figure (8.2): Settlement # 3 Satellite Image, Google, (16), 2009.

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