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Analysis of spatial profile as a manifestation of Egyptian state's policy: El Maamura resort, Alexandria Port

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The Egyptian state's policy has passed through different periods of major transformations in the last 60 years. The paper registers the impact of such transformations on the spatial profile of El Maamura port and resort in Alexandria over time, up to the Privatization policy of Mubarak's Regime which started in the early eighties. Using photographs and satellite image data analysis for El Maamura's urban planning and urban change, the researchers tried to relate these building forms, ratios of solid to void in relation to the middle class citizens, their life styles related transportation using the comparative analysis of land use planning. The research argues that this great impact of policies is visually clearer on the first planned middle-high class resort called El Maamura as it is a more geographically controlled area in a small gulf with clear boundaries in Alexandria port. First, the urban pattern is studied as a whole starting. Then, each part is analyzed separately as a manifestation of each period State's policy. It will finally discuss some contemporary challenges and potentials in the future master planning of El Maamura's city and beach.

Keywords

El Maamura resort; spatial profile; urban planning, Alexandria; middle-class; Egyptian state's policy

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Introduction

This paper is based on a main assumption: "The Spatial Built Form in El Maamura resort reflects successfully an image of the State's applied political strategies for the last sixty years as the State's decisions had a great impact on the lifestyle of all Egyptians, housing policies and land values."

The researchers study briefly within this paper the different political decisions taken by the three presidents: Nasser, Sadat and Mubarak from the early 1950's through the 1970's till these days. The research focuses specially on the impact of these decisions on the Middle class Egyptian citizens' life styles consumption habits and how this was clearly reflected on the spatial form of El Maamura resort.

The built environment and spatial form of the Maamura resort are studied with area analysis in accordance to political and socioeconomic strategies adopted by State's leaders for nearly 60 years. The research focus on the idea of the spatial and built form as a manifestation of the state's policies, it registers the challenges that face this resort and analyses the existing resort pattern with its positive points and deficiencies. At last, it identifies strategies for the continued development of this beautiful resort. The background history of Maamura suburb in Alexandria city is a very clear case study which reflects such impacts. The patterns of transformation in the architecture of Mammura will be analyzed to show the influence of the changes in housing policies since the sixties.

The Maamura Resort as a Case Study to Prove the Paper's Main Assumption

Many cities in Egypt experienced several changes in the features of their built environment – due to heavy urbanization – during the current period of privatization which hardly reflects any previous transformations in the Egyptian State Policy within the last 60 years. Few cities have a built form that clearly reflects all the stages of the Egyptian state's policy and one of these cities is the resort of El Maamura which is a neighborhood in Alexandria, Egypt. It is located east of Montaza's royal gardens, and administrated by both the Governorate of Alexandria (Montaza Block) and the Maamura Housing and Construction Company. It is considered one of the main tourist attractions of Alexandria due to its beautiful beach and parks.

The researchers took this resort as a case study to prove the paper's main argument as it has the privileged distinction of:

- Having clear and limited geographical boundaries (See Location and Boundaries of El Maamura Resort analysis);
- Being the first Mediterranean planned resort and thus there was relatively no possibility for urban sprawl or drastic alternations in El Maamura's spatial profile (See the Map of Historical Urban Development of El Maamura and its analysis).

Location and Boundaries of El Maamura Resort Analysis

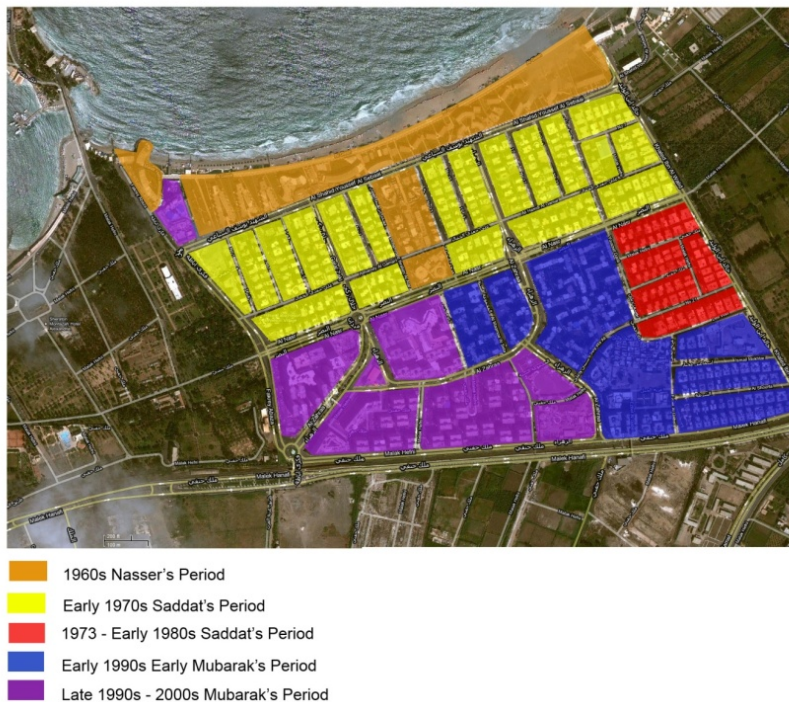
Figure 1. Source: Google Earth (March, 2011)



The “Maamura” resort is located between the suburb of “Hada’ek El Montaza” to the west and the suburb of “Abu Qir” to the east. It is connected to “Montaza” with a private gate and it is considered the last beach East of Alexandria on the Mediterranean Sea. The area of “Maamura El Balad” is situated outside of the resort towards the west and is considered the contradicting part of the resort as it lacks many of the major services like infrastructure and facilities although it is only separated from the beach with Abu Qir Railway line.

Historical Urban Development of El Maamura and its Analysis

Figure 2. Source: Researchers (March, 2011)



The historical development of Maamura resort is very crucial in this study as it is a clear reflection of State's policies in Egypt in the last three presidential eras. The history of development of the resort took place during the periods of Nasser, Sadat and Mubarak.

The first built form in the area began in the Northern part parallel to the beach expanding towards the south till Abu Qir railway acting as a physical separator of Maamura with other southern areas. During Nasser's period, the first building known as "Nasr Cabins" was constructed in the North West corner of the resort extending into the sea. These Nasr cabins were mostly rented by very prominent Officials in the Government. Afterwards in the same period, several three and multi storey buildings were constructed east of Nasr Cabins facing the beach (see photos). They consisted of studios for families to rent for few days in the summer. There was a main market place and a Mosque in the center (See the Dark yellow colored part on the Map).

East and West of the central market area are the residential buildings which were constructed in Sadat's period in the early 1970s. The majorities of the buildings were residential and consisted of three storey height mass (See the Bright yellow colored part on the Map) which expanded till Nasr road, the main road dividing Maamura into North and South. In 1973 after the Egyptian Israeli war, a cluster of residential buildings were built (The Reddish part to the right of the Map) known as "War fighters block" or "Mokateli Ramadan" block, these buildings were owned by the Egyptian Army. They were rented during summer apartments for the military officers who participated in the 1973 war. Most of the development of the southern area of Maamura was constructed during Mubarak's period. In the early 1990s, a group of residential clusters were built south east of the resort. They are eight to ten storey heights. Some clusters have high building density than the others (The Blue colored part on Map). In the late 1990s and early 2000s, most of the residential buildings were characterized by being towers and bulk masses. They are blocks of fifteen to twenty storey height and their ground floors being reserved as retails and shops (see photo of The Plaza Mall). They are located in the South West corner of the resort.

El Maamura Streets Grid Lines Analysis

Figure 3. Source: Researchers (March, 2011)



By analyzing the urban pattern of Maamura resort, it is mostly modular except for the zone parallel to the beach where all the buildings have free forms and the urban pattern is more organic. The area consists of approximately thirteen zones of equal sizes. The main axis is Nasr road which separates the area into North and South. The recently built districts lie in the south and have more compact modular pattern than other districts in the north. This is due to the increase in the land value of the resort, so the building plots became smaller in size and hence the pattern is more compact.

El Maamura Solid & Void Analysis

Figure 4. Source: Researchers (March, 2011)



The analysis of the Solids and voids Map of El Maamura shows that the percentage of the voids is a little larger. The scale of the buildings is not very large and human and the masses are distributed on a modular grid.

By comparing the Historical Evolution Analysis with the solids and voids map, there are different pattern of clusters which reflects each era of history. The research will trace a sample cluster in each era and analyze the forms, scale and the pattern of mass distribution.

El Maamura Land Use Analysis

Figure 5. Source: Researchers (March, 2011)



By roughly studying the land uses of the resort, it appears that 90% of the resort is residential, around 8% is commercial with central Mosque and the remaining 2% is divided into hotels: Maamura Palace Hotel and Paradise Inn Hotel. There are some workshops in the southern part. The resort lacks public green areas as the percentage of the green space is around 5%. The main beach that represents the main attraction open space – as there are no public or private swimming pools – that was lately privatized as a result to state's Policy in the late 1990's as will be discussed later.

Figures 6,7,8. The Maamura Palace Hotel; the Old Market with the main Mosque at the background used from the 60's till Early 80's; a closed gate indicating the entrance of one of the small parcels of the main privatized beach since late 1990's (Source: Researchers, November 2010)



Maamura Spatial Analysis as a Manifestation of Egyptian State's Policy

This relatively modern city called "El Maamura" in Alexandria witnessed different political Regimes. The paper argues that each period left a distinct spatial imprint on the city's built form, spatial profile and beach. The history of El Maamura is marked by abrupt shifts in political status: During Arab Communist Nasser's Regime, the resort was the only city in Alexandria to be housed only in summer by middle class state officers, to a center of larger and prosperous High class resort during Sadat's Regime, then to a less privileged resort after the booming of other more Modern resorts on the Northern Coast during Mubarak's Regime.

Egyptian State's Adopted Policy within the Period of Nasser Leadership & its Socio Economic Impact during the Late 1950's and 1960's

On the 23rd of July 1952, the Free Officer Movement - created by a group of young officers who felt that they had been betrayed in the 1948 Palestine war by their own government - led by Gamal Abd El-Nasser seized power in a bloodless revolution against the British occupation, the Political regime, and the social system. In June 1953, Egypt was declared a Republic and Mohamad Naguib became the first President. At that time, the Egyptian middle class constituted less than 20 percent of the Egyptian population. As soon as President Gamal Abdel Nasser rose to power in 1954, he sought to build a larger middle class that would spearhead his development plans and serve as a social base for his regime. He invested national resources in enlarging this stratum by increasing the size of the bureaucracy. At the apex of the socialist era, he opened the university system to students from lower class backgrounds by abolishing tuition fees. In the meantime, he adopted a state employment policy to guarantee jobs to all graduates. Ultimately, the number of civil servants jumped from 250,000 to 1.2 million between 1952 and the early 1970s (Al-Masry Al-Youm Newspaper, English edition, 12 March 2011). According to renowned economist Galal Amin, educated, middle-class citizens constituted at this time between 40 percent and 50 percent of Egypt's population.

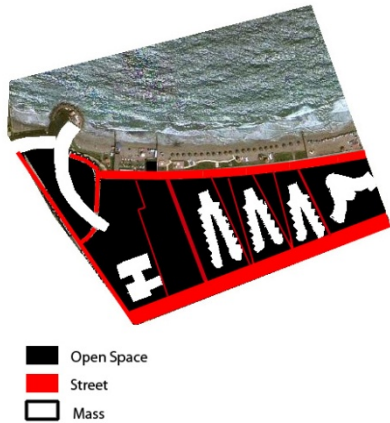
In the early 1960's, most Egyptian white-collar fathers got back to their homes around 3:00 pm after spending six hours in government offices. Families got to eat lunch together, listen to the limited affordable National radio channels. Same programs resonated through houses in cities all over Egypt and as 8:30 Evening news came on, with Arab nationalist and socialist slogans, the bulletins offered a one-sided coverage of Nasser's news.

The Period of Nasser & its Impact on the Spatial Profile of El Maamura

El Maamura's built form during this period reflects Egyptian state's Policies & lifestyle of a Middle Class that was once the backbone of Nasser's society. El Maamura was first planned as a middle-class resort, after the Revolution opened the Montaza Royal Palace's doors to citizens who were allowed for the first time to have promenades at affordable prices in its spacious gardens with unique species of trees, palms and flowers. In the first stage, the Maamura 500-feddan area was cleaned up and leveled and three main apartment blocks were built, including hundreds of chalets overlooking Maamura beach. Along the seafront, the mass of buildings were free standing blocks. Nasr Cabins organic in shape building - parallel to Montaza fence adjacent to the palace- is contrasting with other buildings in the zone. All the rest of the buildings are also organic in form responding to the free outline of the sea shore. The building density is low and the ratio of open space to solids is much larger.

Forms of Residential Blocks in Neighborhoods during Nasser

Figures 9, 10, 11, 12. Residential Block and Apartment buildings (Source: Researchers, November 2010)



State's Policy within the Period of Sadat Leadership in the 1970's

In the 1970's, Egypt embarked on economic liberalization, departing from the socialist model in favor of a freer market economy. This change required the government to withdraw gradually from the economy and eventually abandon the middle class. The Sadat period witnessed changes in the political, social and economic domains. The private sector was given a greater share in the country's economy through the implementation of the "Open Door Policy" (Feiler G.,1992).

Under the economic liberalization of President Sadat, the configuration of this particular class evolved. Some slipped down the social ladder while others went up grooming themselves as a class of professionals who were fully integrated into the new order. And the same order has persisted since the 1970's. Their names are no longer on the state's payroll. Private investors, foreign companies and banks are their new employers - an opportunity that has allowed these professionals to earn unprecedentedly high incomes. (Feiler G.,1992) This, combined with the abundance of available goods has allowed them to develop a completely novel lifestyle that has little in common with that of the early post-revolution era.

Impact of State's Policy on the Maamura's Spatial Profile in the 1970's

Residential buildings used during this period, were mainly located East and West of the central market area, are the residential buildings which were constructed in Sadat's period in the early 1970's. The majorities of the buildings were residential and consisted of three storey height mass which expanded till Nasr road, the main road dividing Maamura into North and South. The building cluster in early Sadat period has higher building density than at Nasser period. The forms are rectangular in shape and modular. The setbacks of each land plot are quite big. The inner residential streets are wide. The scale of mass is not very big and the buildings are distributed in sequence according to the modular grid. Rectilinear buildings facing the main streets and back internal yards are facing the neighbors' sides. Most residential units had simple block shapes, some guards put refrigerators in front of their buildings to sell soft drinks for passing by pedestrians.

Each year a number of buildings, owned by the State were rented by civil state employees for a period of one to two weeks starting from the Month of May to the Month of September. For summer vacations, families used to pack and prepare to spend the summer holidays in a rented cabin overlooking the beach or an apartment in the Mediterranean city of Alexandria or a reed house in the Delta resort of Ras el-Bar. The whole family would take public transport or drive a locally assembled Fiat for transportation. Maamura became a fashionable summer place to show up and show off if you were a top state official, a cultural symbol, a public figure - and they all owned seafront properties there. With such an eclectic crowd in town and only a stone's throw from each other, the district was a magnet for paparazzi seeking candid pictures of celebrities vacationing. It was the venue to exhibit the latest trends in fashion, bathing suits, haircuts, cars or anything else. Newsmakers often spotted there included prime ministers, cabinet ministers and music legends. The Resort became the star of many movies, as more filmmakers chose it as the backdrop for their plots. The sands of Maamoura bear witness to many fictionalized love stories, and almost certainly many more genuine ones. It came to life on the screen in movies including; *Abi Fawq Al-Shagara*, *Wa Saqqat fi Bahr Al-Asal*, *Agazat Seif*, etc.

Forms of Residential Blocks in Neighborhoods during Sadat in the 1970's

El Maamura resort was generally characterized by architectural coherence even within individual precincts. Simple building shapes which define external spaces and perpendicular main and secondary streets, with the minaret of the main Mosque – located in front of the main resort market – providing distinctive way finding for the first-time coming visitors to the resort. Maamura apartments were 2 to 3 bedroom, summer visitors could find umbrellas and seats within rented apartments to use during the period of renting, and then they would leave them.

Figures 13, 14, 15, 16. Residential Block; view showing the form of buildings overlooking Youssef El Sebayi street; shape of apartments (Source: Researchers, 2010-2011)



Service & Accessibility

The main service area is a market place built in the same period. The market is a pedestrian street located south of the beach in the center; it is characterized by a big mosque acting as the main Landmark of Maamura. All services are located within the market precincts, are easily reachable to pedestrians and bike riders. El Maamura resort – especially during this period – has generally been characterized by recessive buildings dominated by their landscape setting small gardens in the ground floors giving them an appearance of villas (see picture).

Figures 17, 18. Front garden yards; building looking like villas with logo owned by Misr Insurance
(Source: Researchers, November 2010)



There were no car parking plots because most of the summer visitors renting the apartments for one or two weeks generally did not own a private car and usually buses used to transport families from gathering points to the resort. Families used to go walking to the beaches –which were designed to be reachable- as well as the central suq and the Friday mosque all accessible within a walking distance. There were limited numbers of local Egyptian cafeterias and restaurants, as families used to cook.

The main Maamura beach has been known for its beautiful sands and blue sky water. Children could enjoy playing on the beach, and families enjoyed walking freely on the extensive walking long beach.

Figure 19. Service and Accessibility map (Source: Researchers, March 2011)



■ Service
→ Accessibility & Distance

Families had to carry their amenities and umbrellas – that were available in rented apartments – to the easily reachable beach (located within a walking distance as analyzed in the next Map). Defined strong semi enclosed spaces between buildings.

Many government institutions organized trips to Maamura by buses where people can rent an apartment for a week or 10 days. During this time, all vacationers could travel to the resort by buses, only few used their private cars.

During Nasser and early Sadat periods, the northern part of Maamura was the built environment north El Nasr road. The only service area was the central market which is located in the middle of the north part. The end of the pedestrian street is the main mosque of the resort towards the south.

Surrounding the streets there are different types of retails like restaurants, markets, clothes, household, etc. Everything was available in the markets for the vacationers and its location was a walking distance from all residential buildings. The normal walking distance was around 200 m to reach the market. The maximum walk from the further buildings in the resort to either the market or the beach was between 300 and 400 meters. The beach – the main attraction as there were no swimming pools – used to be opened freely to the public from early morning.

Everything was accessible by walking even the beach where they rent chairs and umbrellas everyday from the beach itself. The renting policy was the dominant notion during this period. The resort was family friendly and safe for children where they can rent and ride bikes everywhere.

In shopping, there was less choice and there were fewer things to buy. All amenities – especially commercial services- were reachable to middle and high-class summer visitors.

Public and Private Space

Figure 20. Public and Private Space map (Source: Researchers, March 2011)



Since the early sixties till 1980's, the percentage of the public space in comparison to private space was significantly more. During this time, the rent policy in summer vacations was very dominant responding to the paradigm of Socialism which was prevailing in the Sixties. Very few people owned their apartments; almost all were renting the Chalet or

apartment for a week or 10 days in the summer. The beach was opened to the public except for the beach directly facing El Nasr Cabins. Vacationers rent all their needs for the beach time like the seats, tables and umbrellas.

State's Policy within the Period of Mubarak Leadership in the 1980's & 1990's

During the Late 1990's and Early 2000, the private sector was given a greater share in the country's economy through the implementation of the "Open Door Policy", which was the first step along the road toward economic and political liberalization which is the main characteristic of the current administration of President Hosny Mubarak, who succeeded Sadat as President, in October 1981. The situation of middle-class citizens worsened after the State decided to move forward with structural adjustment policies and privatization in the early 1990's. Eventually, the State abandoned its employment scheme and cut expenditures on welfare services. The characteristics of the middle class had thus changed, it became more frustrated and its level of education has worsened especially among the lower-middle classes that could not afford private schooling.

"It is worth noting that a few skilled segments of the middle class bore the fruit of the open market economy by working for foreign companies and banks and eventually earning high salaries" (El Hennawy N., 2011).

Impact of State's Adopted Policy on the Maamura's Spatial Profile in the 1990's till Today

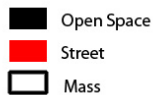
In the early 1990s, a group of residential clusters were built south east of the resort. They are eight to ten storey heights. Some clusters have high building density than the others. More recently built blocks – mainly located in the South West corner of the resort- were fifteen to twenty storey height with ground floors being reserved as retails and shops (local and American fast food chains). As there are no playing grounds for children, an empty land in the south is used today by young youth play football in.

After three glorious decades, Maamura fell from grace in the 1990's. North Coast compounds have eclipsed Maamura. Rapid competition from fashionable resorts mushrooming up and down the North Coast stole the thunder of this unique location - to the extent that some locals sold their properties and bought fancy new villas outside town. On the other hand although El Maamura had lost its glamorous old days-as there were no added values to services that already existed since the 1950's- the city became more inaccessible. Today, El Maamura is a gated community; residents have free passes, but the one day visitors – who are mainly from the lower middle class families-, have to pay tickets to gain entry.

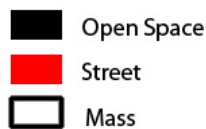
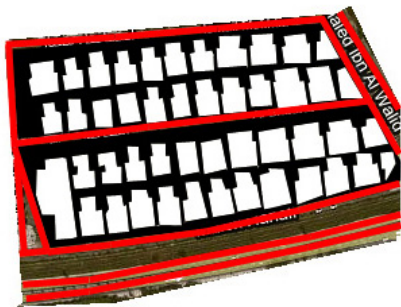
Unsurprisingly, before the late 1990's the beach was a public free accessible space, except the private beach between the Montaza and the Nasr cabins which were exclusive to chalet owners. Maamura beach which was considered the main public space turned into a private space and middle class families find it difficult and expensive to access it. The researchers consider the State's Policy of privatization of the main Beach as the most important decision that had negatively influenced El Maamura's visitors. Now, the long beautiful beach – that used to be opened freely to the public from early morning till sunset – is divided into smaller parcels of private beaches. Vacationers are now deprived from enjoying a nice walk along the beach. It costs LE 5 a person to access the beach; LE 3 to rent a chair; and LE 7 for the privilege of shade under an umbrella.

Forms of Residential Blocks in Neighborhoods: Late 80's, 90's till Now

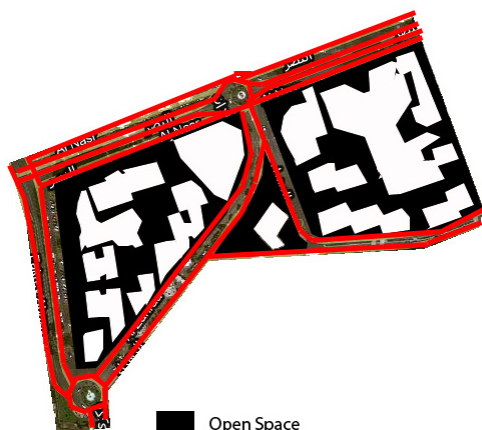
Figure 21, 22, 23. Residential Block (Source: Researchers, March 2011)



The buildings in this cluster are grouped around an open space. The shape of the buildings is L-shaped and long. The grid is modular and much less compact. The land plots are larger and the setbacks are bigger. The scale is human scale in comparison of the building heights which is around 8 to 8 storey height.



The building cluster in the beginning of the 1990's is characterized by having a higher building density. The cluster have more compact modular grid than the early Mubarak cluster. Forms are all rectangular and scale of the masses is smaller. The land plots are small and building setbacks are less, so the masses are more compact and closer to each other.



The building cluster in the late Mubarak period has much higher density. The building forms are rectangular and bulky. The plots are bigger and the setbacks are smaller so, the pattern is very compact and massive. The scale of masses is much larger and characterized by being high rise. This is due to the increase in land value of the land, so the buildings are higher and massive. The scale of the buildings is not very human.

Building Shapes of Residential Clusters (1980's till Now)

Figures 24, 25, 26. The Apartment Buildings of Cluster 11; the Plaza Mall
(Source: Researchers, November 2010)



Services & Accessibility

Starting from the late 1980's and 1990's, when the development in the resort expanded to the south, most of the commercial areas are located in Nasr street and around Lappas square. The main attractions of the vacationers other than the beach are: Zahran market in Nasr road, Maamura amusement park, the shopping mall “Maamura Plaza” and “The Military Supermarket” in the south west. There is also baker shop in the North West and workshop area in the south. All the service area is accessible by car as the walking distance became longer. It reached 700 or 800 meters and sometimes it reached 1 kilometer. Nowadays, almost 95% of the people travel to the resort using their private cars for their needs around the area. Many apartments are privately owned and beaches are private and need a membership card to enter responding the general policy of privatization. The simple family friendly resort is no longer the case; it became a more car oriented resort.

Figure 27. Service and Accessibility map (Source: Researchers, March 2011)



■ Service
→ Accessibility & Distance

Towards the end of 1980's and the beginning of the 1990's with the change towards "The Open Door Policy," the general approach was directed more towards ownership and privatization. Responding to this policy gradually all the public beaches became private and vacationers need to pay a ticket to use the beach. The main public space which is the pedestrian walkway along the beach is just a paved area with seats. Bike riders may injure elder people or young children walking along with their families. There are other public spaces such as the central market and the mosque, the square known as "Lappas Square" and open spaces like the area of exhibition and food court in the north of the amusement park.

Figure 28. Public and Private Space map (Source: Researchers, March 2011)



The semi public space lies in the open areas in the residential clusters. These spaces are mostly used by the residents of the surrounding buildings for their children play football or ride their bikes which may injure elder people or children walking in the main streets and sidewalks.

Generally the resort lacks a green public space or park for the Maamura community instead this public space was the public beach till the early nineties. Nowadays there is no open public space for the community.

Shots of Main Public Areas & Services (1980's till Now)

Figure 29, 30, 31. The main pedestrians walk way; the barrier separating the main beach into small parcels 11; The now privatized beach with barriers all around (Source: Researchers, November 2010)



Conclusion & Recommendations

El Maamura resort was first planned as a middle-class resort, satisfying to a great extent – by its design – all the needs of the summer visitors. From the analysis of the El Maamura resort built environment now, it was found that this planned resort do not satisfy the needs of middle-class families any more.

The resort lacks public green areas as the percentage of the green space is around 5%. The company of El Maamura should provide resort facilities that offer recreational activities (Kota Funfair Park area is not yet totally developed). There is no playing or football ground for children, the empty land in the south where young youth play football is unsafe. There should be simple barriers to separate between the bike riders, the seating and walking vacationers along the main pedestrian walkway along the beach.

The beach which represents the main attraction open space in the area is no longer free to the public who are denied to have a nice walk along it. As a middle-class resort, exaggerated fees for entering the beach should be only to a limited part of the beach, it should be provided with services (offering soft drinks, play ground to kids, etc.). Other parts of the beach – especially those situated in front of residential cabins – entrance should be restricted to cabins' inhabitants without extra fees. For the safety of cabins' residents, no coming visitors should be allowed to access these beaches.

Planners' ideas – who should consider that the satisfaction of visitors is a main goal not the Policy of exploitation of the only available open area "the beach" not just "selling" units is most important and the only target. Future resort plans should be made in accordance with the social needs and economic aspects of its visitors. All agricultural areas surrounding the resort from the Eastern side are future resort development potentialities. Investments of all agricultural areas of land for agricultural purposes in addition to the reclamation and cultivation of land around the resort should be encouraged.

Developers and residents must be made aware of the circumstances resulting from resort development. Although the development plans could be faced with differences of opinion from its residents concerning resort development, the benefits that can be derived from resort development may be optimized and the adverse affects minimized. Citizen participation, awareness, and most of all, [citizen] understanding are vital in resort development, as in all phases of the future extension and planning process.

Bibliography

- Ahmed, B.M.A. (2001). Sustainable Beach Resort Development: A Decision Framework for Coastal Resort Development in Egypt and the United States. Doctor of Philosophy in Environmental Design and Planning. Virginia Tech Virginia: Blacksburg
- Brill. (2006). The Changing Consumer Cultures of Modern Egypt
- Crouch, C. (2000). Modernism in Art Design and Architecture. New York: St. Martins Press
- El Hennawy, N. (2011). Al Masry al Youm. English ed. Cairo. In Press. 20 January 2011 Press
- Feiler, G. (1992) Middle Eastern Studies: Housing Policy in Egypt. Taylor & Francis Ltd. 28: 295- 312
- Ginat, R. (1997). Egypt's Incomplete Revolution: Lutfi al-Khuli and Nasser's Socialism in the 1960s. The Cummings Center Series. Routledge
- Lawrence, L. D., Low, S. M. (1990). The Built Environment and Spatial Form. Annual Review of Anthropology. 19: 453 -505
- Metz, H. Ch. (1990). Egypt: A Country Study. Washington: GPO. The Library of Congress
- R. McClure, W., Bartuska, T. J. (2007). The Built Environment, a Collaboration Inquiry into Design and Planning. 2nd ed