

# The Impact of Land Uses and Circulation External Factors Influencing Action Area Planning AAP Actual and Broader Boundaries

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## Abstract

This research aims to highlight the importance of identifying the actual and comprehensive boundaries in action area planning AAP (broader AAP Boundaries), the larger the importance of the AAP the larger the external influences on the Spatial Planning process and methodology. Projects such as River Nile Waterfront Action Area Planning involve many parameters to be considered in identifying the impact of external factors that influence the actual process of Waterfront Spatial planning, the research discussing these factors to rationalize such process. The research's main results such as movement circulation, densities, activities and land uses in the broader boundaries represent important factors to be considered in spatial urban planning of action areas' formulation, to vitalize the efficiency and effectiveness of planning goals. The research methodology determines the theoretical external factors influencing AAP boundaries and then reflects the theoretical framework on a case study concerning the spatial planning of Cairo's River Nile Waterfront District.

**Keywords:** Spatial Planning; Waterfront Planning; Land uses; Movement Circulation; Urban Planning.

## 1. Introduction

Action Area Planning AAP represents the major instrument and transformation of strategic urban planning goals and objectives into actual spatial achievement to create a better urban environment. It is the tool for upscaling socio-economic and physical characteristics of the place. One of the challenges of AAP is identifying the external factors outside of AAP spatial boundaries that involve decision making in the final proposal plan, factors such as land uses, movement circulation and others contribute in decision making has to be taken into consideration inside AAP spatial boundaries. This research seeks to identify these external factors influencing the process of identifying the macro scope of AAP project. It is a topic not discussed much in literature which focused in the actual AAP process inside the actual boundaries, yet, it is vital during conducting analysis, decision making and alternative proposals.

The research compares two different AAP project in Greater Cairo , one is the brownfield site in the heart of old cairo ( Port Said street industrial Area). The second project is Nazlet Elsaman Heritage reallocation ( Giza Plateau) . the two project comparison indicated a high importance of the surrounding external land uses types and circulation movement that affect identifying the spatial scope of the project inside the actual and macro spatial boundaries, the research argues that external factors should be treated very carefully in order to contribute towards the efficiency and effectiveness of Action Area Plan .

## 2 Land use planning and urban form

The first part of the literature review discussed the theoretical concept of sustainable urban development in terms of urban design and urban form. The urban form of a city should be considered as an important factor in achieving sustainability (Aziz Amen, 2017; Aziz Amen & Nia, 2018; Olla et al., 2023)

. In fact, the shape of the settlement pattern determines the patterns of private transport, fuel consumption, emission and public transport. Breheny (1993) argued that urban form at all scales may be a significant determinant of the prospects for sustainability, Rogers (1998) argues that mixed land uses can be acceptable within the successful sustainable urban neighbourhood. It is possible to argue with some degree of certainty that some types of urban form are more sustainable than others. Maybe this is clear within metropolitan or large cities, where sprawl is a common ingredient. In that case, the urban form of the city will determine how successful sustainability will be Through exploring the international examples at the neighbourhood scale, especially in the case of San Jose and the London New Millennium Project, the focus of sustainability issues in these projects is characterised by environmental urban design and the ability to create a marriage between building and the natural environment.

## 3 Nazlet Elsaman Project

Change in cities is natural, but we must try in some areas with the nature of these cities to preserve the values and cultural heritage, otherwise, there will be a total transformation of the city and a complete break from its past. The Giza pyramids area is considered one of the most important World Heritage Sites registered in UNESCO and one of the world's seven wonders. There is no doubt that the establishment of the Grand Egyptian Museum in the region will double its global importance and support its heritage-cultural-tourism role.

Aware of the vital role played by the Giza pyramids area to rehabilitate the Cairo region to restore its competitive position by highlighting the landmarks of urban heritage and heritage values enjoyed by that region. The reformulation of the pyramids area, and the revival of the heritage of the surrounding area is the only way. To restore its position and strengthen its economic and political weight.

Therefore, it is necessary to try to achieve a continuous balance between the development of economic and human resources in the city as a whole and the development of the cultural climate in archaeological areas and historical monuments. All this necessitates reconsidering the planning of the area in proportion to its importance and returning it to its original state, preserving its heritage, and strengthening the link between the pyramids and the Grand Egyptian Museum.

It requires the revival of cultural, historical, tourist and craft values that have always characterized the region throughout history. By shedding light on the factors that lead to the deterioration in the broader scope, and how the revival of this scope contributes to the social and economic development of the region and the city, and the possibility of achieving this by maintaining the functional role of the region (tourist - historical). And the development of some existing crafts. In addition to improving the visual framework of the environment, whether natural or urban, as the sensory nerve that connects the tourist and the resident directly from Through the sense of sight in the place.

### **3.1 The relative importance of Nazlet Elsamman Macro Spatial Boundaries scope**

The scope of the project occupies the northern part of the urban block of the city of Cairo and part of the active heart of the Greater Cairo region and the logical extension of the center and center of Cairo. In the middle of the large area is a number of areas, each of which represents a semi-specialized functional center in the role it plays at the regional level. In the north is the Shubra El-Kheima area as a craft industrial center, in the west across the Nile project, the northern Giza area as a service center, in the east Heliopolis and Kena Nasr as an administrative service center for the region. The southern border is the heart of Cairo, the center of finance, business and historical tourism, and the western border represents the Nile façade, the natural extension of Cairo's administrative tourist center in the Rod El-Farag project and the real estate investment attraction area, which illustrates the importance of the project's location, scope and spatial and functional links that qualify it to be a major center for activities and services in the north of Cairo.

### **3.2 Methodology of Identifying Macro Spatial boundaries of Nazlet Elsamman Project**

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### **3.3 Cairo Vision 2050 and its recommendations to the region**

In general, the vision aims at a set of goals, including:

- To be a cultural and global center politically, administratively, culturally, touristically and economically
- Raising the rates of quality of life and human development. And to achieve social justice among the various groups of society.
- Achieving higher rates of economic growth.

The pillars of achieving this vision relied on:

- Preserving and rehabilitating historical areas in proportion to their value and integrating them within the strategic vision project for the Greater Cairo Region.
- Upgrading slums and slum areas.
- Create a network of public parks and open areas to create a lung and breathing space for the population.
- Identifying and creating a network of investment projects (cultural, administrative, tourism, social....) aimed at supporting economic development processes without burdening the state budget.
- The need to develop the area of Nazlat Al-Samman and turn it into an open museum.
- Resettlement of the population in alternative housing areas.

- Establishing suitable tourism activities to exploit the potential of the unique site
- Create themes to highlight these elements and emphasize the importance of the Khufu Plaza axis.
- Facilitating access to the archaeological area in Giza by providing direct communication elements between the area and the ring road to connect to the rest of the pivotal uses (airport, tourist attractions, .....)

#### 4 External factors to identify Macro Spatial Boundries in Nazlet Elsamman

- **Basic concepts (originality - contemporary - sustainability)**

The second half of the twentieth century witnessed a growing interest in cultural heritage. This interest in heritage has generated various attempts to preserve it. This period also produced different concepts of heritage value and the preservation of historical areas, including:

**Originality** : Ibn Khaldun pointed out that "each society has its own characteristics that differentiate it from others according to its historical and climatic conditions, including its national character. It reflects the privilege of the place over others with new qualities emanating from it. Therefore, originality requires preserving heritage values and trying to be able to create, innovate and excel in producing tools that add to the place.

**Contemporary** : It is a word stemming at the same time from the word originality, the word authenticity should not carry rigidity based on it as much as it depends mainly on development that keeps pace with the requirements of the times in consistency.

Hence, contemporary is defined as "means keeping pace with the times and living it, or the process of change according to which the development of the place occurs (socially - culturally - urbanly...). This concept was accompanied by rehabilitation policies , which aim to integrate historical areas with modern areas while ensuring continuity and vitality.

- Affirming the concept of historical and cultural heritage and its implications, considering that its protection and preservation is a public benefit and a first priority, which authorizes the competent authorities to take the measures they deem appropriate in accordance with the law and away from personal interests
- Strike a logical balance between preservation and change. Preserving does not mean stopping change, but how to exploit it in the future of the historical environment.
- Any maintenance or restoration must be subject to the national law of the state
- Work to stop the modern urban sprawl towards historical and archaeological areas
- Determining the heights of buildings in the direct range of the archaeological area in proportion to the general character of the area

- **Maximum protection zones as a protected area (Pyramids Plateau)**

Areas that are affected and affected by historical buildings, but they can be dealt with within the framework of the required balance and with special legislation and controls for the adjacent area

Areas that are allowed for development and change and in which proposed development projects are often proposed, Also, because this area has a privacy and historical value, it must be dealt with from the standpoint of being an integrated historical neighborhood and not isolated historical facilities, through a comprehensive plan and not partial solutions. Thus, it includes all sectors of impact, housing, services, mobility and infrastructure. The economic revenue of such historical areas imposes a method to deal with them as of double importance (historical value in addition to high economic value) and therefore historical buildings must be preserved with an emphasis on considering them as part of the tourist and commercial centers, and their continued vitality and activity must be emphasized. While working to ensure that there is no conflict between the development of what is old and what is new. And try to revive the craft industries as an essential component to emphasize the heritage value in the immediate region.

From this point of view, the combination of preserving the heritage value and the economic value of this region. By determining the quality of overlapping uses and classifying them according to their suitability for surrounding uses and the historical area. As the diversity of uses in itself is not prohibited (commercial, artisanal and touristic) unless there is a conflict with the heritage area or any polluting activities of the environment

One of the sensitivities of the region is its shrouding of an urban gathering associated with the livelihood of its people by sticking to its effects, they began their activities in selling souvenirs to the tourist and providing an opportunity to go to the camel and hiking by horse, and became of them the translator and tourist guides, and their activities, buildings and trade evolved until they considered it the pillar of the visit and their mercenary goal of bringing the tourist, and the impact seemed stable and the strength of its miracles is the neglected side in their equation to deal with the tourist.

- **Macro Spatial boundaries elements**

**Movement and circulation:**

The road network is one of the most important pillars and components that affect the development processes in general and urban development in particular and shows its direct and strong impact on the economies of the land and then on the uses it occupies, and based on this importance, we find that the road network that connects the region with its most comprehensive scope, which is represented in a set of existing axes and other proposed: such as the proposed Rod Al-Farag axis, which borders it to the north parallel to the Ismailia Canal and is expected to be linked to the study area with the ring road, the Egypt-Alexandria Desert Road, and the Sikka axis. Al-Waili Al-Qaim, which penetrates the heart of the region and connects it from east to west transversely, then the entrances to North Cairo linked to the Delta roads and the Egypt-Alexandria Agricultural Road through the Nile Corniche roads, Shoubra Street, Ahmed Helmy Street and Port Said Street.

The steps to determine this scope are based on the administrative boundaries of the pyramid neighborhood, where the presence of archaeological areas in this neighborhood played a special nature in the uses that require looking at these relationships within the framework of the pyramid district, and then a more special scope can be determined through:

Set of breakers and main movement network

Main uses in this domain and the interrelationships between the study area and the perimeter

Projects proposed from the strategic plan of Giza and Cairo Vision 2050

**Administrative boundaries**

Al-Haram neighborhood is one of the sections that achieve a population growth rate that exceeds the average governorate (2.1%) in the period 86-2006. Despite its cultural and tourist role, it is dominated by residential use by about 85% of the total uses in the neighborhood, while recreational activities do not exceed (4.81%) and services (4.48%) while the remaining percentage is represented in the activity of industry and storage. Despite the weak percentage of tourism and recreational uses, hotels record the largest number of tourist nights - by 44.8% of the total Giza Governorate - and the largest number of occupancy in the rooms, numbering 2946 rooms, and the occupancy rate reaches about 70.4%.

**Urban Structure Main land uses**

Figure 1 shows the main uses and axes of movement in the broader study area and can be summarized as follows:

**Tourist uses**

The pyramids of Giza played an important role in attracting tourist recreation institutions since ancient times along Haram Street and then soon extended to the Alexandria Desert Road. The location of the project area through the main traffic network is well linked to some sites of tourist activities, so there are many tourist activities in this range along Haram Street from Giza to the pyramids plateau and at the beginning of the Cairo/Alexandria Desert Road, and this axis includes hotels, casinos, cafeterias and art houses various and other recreational uses.

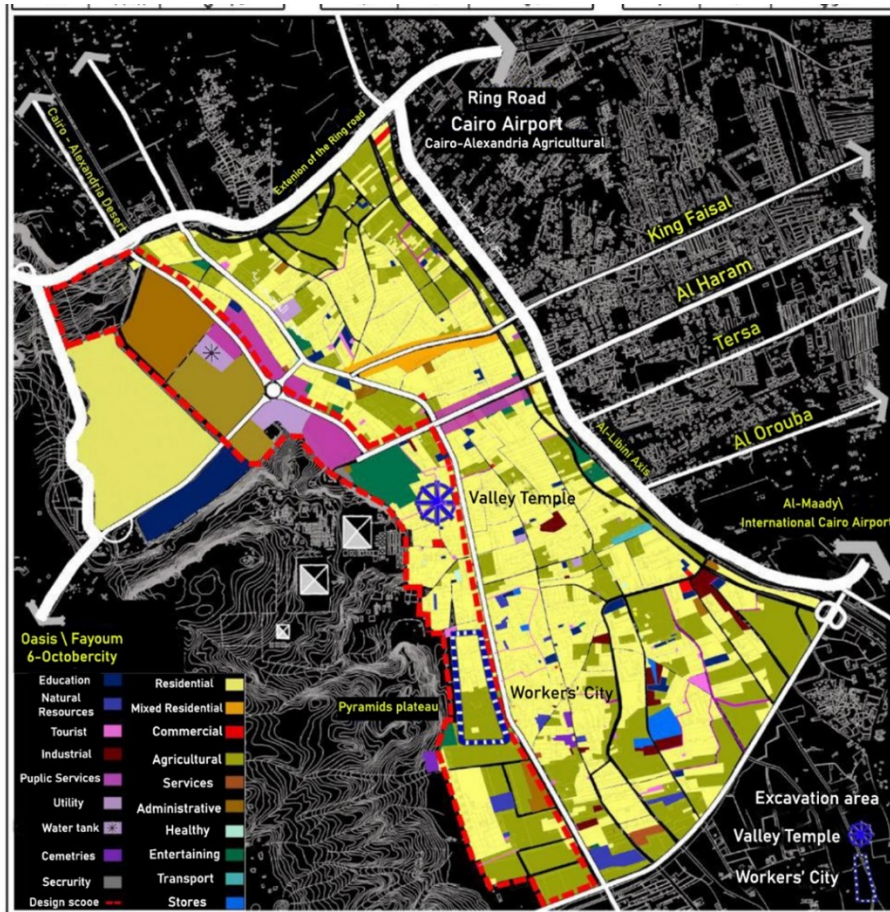


Figure 1. Nazlet Elsamman Macro Spatial Boundaries Land Uses ( Researcher, 2024)

**Tourist Hotels**

Where 27 hotels are endemic in this range (Haram and the desert road), which constituted 35% of the total number of hotels in Giza Governorate, which is characterized by a high percentage of hotels at the level of 3-5 stars, and this range contributes and shows the table of these hotels.(7)

**Business & Tourism Activities**

Al-Haram neighborhood is characterized by multiple tourist facilities represented in the activities of financial brokerage and insurance (banks), international organizations and embassies. There are also about sixty tourist shops and bazaars, which makes it a center for archaeological tourism services. In addition to more than thirty restaurants, cafes and cafeterias, and about a dozen tourism companies and travel agencies.

**Heritage Uses**

It is represented in the historical pyramids area and what it includes (the three pyramids, the Sphinx and solar boats). It also includes some heritage buildings such as the Mena House Hotel and the King's Rest House, in addition to some archaeologically registered buildings. The area is characterized by tourist and heritage uses such as horse riding, camels and stables, and there are some handicrafts, crafts and tourist gifts, in addition to carpets, kilims and ceramics.

**Movement and communication**

Cairo-Alexandria Desert Road from Remaya Square to its intersection with the Ring Road enhances the tourism investment job role of the governorate. The axes of the pyramid and Faisal, which connects the east of the city of Giza to the west, and the beginnings of these axes from the east - through the bridge and Giza Square - entrances to the city of Giza from the city of Cairo and penetrate the areas of Faisal and the pyramid until you reach the desert road towards the west through the shooting field. The axis of Mariotia extends from the ring road north parallel to the Mariotia Canal to the ring road south through the areas of Faisal and Haram planning in the western planning sector, an axis that takes relative importance due to the fact that it connects high-level recreational and residential areas and is expected to take greater importance as an entertainment axis west of Giza. Al-Labini axis enhances the commercial functional role of Giza Governorate, as the road is expected to link the size, locations and potential of tourism development in Haram with the size and potential of commercial activities in Faisal area and facilitate productive links between them. This axis takes on relative importance due

to the fact that it connects high-level recreational and residential areas and is expected to take greater importance as an entertainment axis west of Giza. Mansouria axis , which connects the axis of the ring road north and south. It separates the residential block of the city of Giza and the sanctuary of the archaeological logic of the pyramids plateau. It is considered the urban façade overlooking the entrance to Khufu. Bazaars, gift shops and some tourism-related activities are scattered on both sides.

- **Projects proposed in previous studies and their reflection on the study area**

The structural plan for the city of Giza recommended the work of the Pharaonic Tourism Development Center in Giza within the scope of desert development derives its components from the following:

- A hub for pharaonic antiquities from Abu Rawash, east of 6th of October City, north to Abu Sir in the south, passing through the pyramids plateau and its important archaeological landmarks such as the three pyramids and the Sphinx.
- An axis for tourist facilities from east to west along Haram Street from Giza to the pyramids plateau and at the beginning of the Cairo/Alexandria Desert Road, and this axis includes hotels, casinos, cafeterias, various art houses and other recreational uses.
- The axis of villas and palaces along the Mansouria Canal and moved north on the axis of the desert margin on the Egypt/Alexandria Desert Road and north of 6th of October City and the green belt that surrounds it.
- The Grand Egyptian Museum in the region, the first Alexandria Desert Road after the shooting range.
- The presence of important road axes at the confluence of the east-west axes with the north-south axes around the pyramids plateau area.
- The stature of the Egyptian Pharaonic Adiyat markets: as happened in the establishment of a market for the owners of bazaars from Khan Al-Khalili in the Haram area, as well as the Kerdasa market, as in the Khan Al-Azizia area on the Cairo-Alexandria / Desert Road
- Expansion of tourist entertainment services : such as golf, tennis and hockey courts, especially in the investment zone on the Cairo/Alexandria Desert Road
- Establishment of artistic entertainment facilities: such as plateaus, cinema cities and folk arts centers (such as the Media Production City) and it can be planned to collect these facilities in the tourist activities of the Pharaonic Center in development centers at the entrance to the Fayoum Desert Road, or in the tourist area and the proposed activities on the Cairo/Alexandria Desert Road from the shooting field to kilo 28
- The Greater Cairo Region 2050 Strategy also recommended the following:
- Museum area with pyramids plateau Archaeological reserve
- Establishing an alternative housing area for the village of Nazlat Al-Samman south of the current area and on an area of 200 acres, and the establishment of the open museum in the place of the current quail Nazlat, which will be removed on an area of 253 acres
- Establishing a tourist investment area east of the Mansouria Canal on an area of 200 acres with a capacity of 10 international tourist hotels
- Establishing an investment services area to serve the museum and the pyramids
- Khufu Plaza Project: Opening an axis along the Arab League Street with a width of 600 m and a length of 8 km opens the field of view of the pyramids and in the middle of it a garden with a width of 250 extended length, with the settlement of tourist buildings on both sides of it
- Maximizing the commercial tourist footpath from the Grand Egyptian Museum to the pyramids

### **Final Macro Saptial Boundaries of Nazlet Elsamman**

Through the analysis of the reciprocal relationships of the uses and activities surrounding the area of Nazlat Al-Samman, it can be said that it is not possible to prepare a schematic conception of this area without prejudice to the surrounding area, so the boundaries of the broader scope that interacts and affects the study area have been determined, and without it there can be no logical solutions. Figure (1) above shows the boundaries of the study area and the broader scope of the Nazlat al-Samman area

There are also activities that mainly affect the necessity of their presence in the study area, for example:

Cultural and heritage activities as the dominant use by virtue of the site. and their presence in the surrounding ranges

Green and open areas to deprive the surrounding area except for some few, and to discourage the work of green axes linked to the Nile and archaeological and heritage areas

Tourism activity in addition to the services of business centers due to its proximity to many tourist attractions

Commercial activities due to their lack of high-level commercial activities



**Figure 2.** Micro and Macro Spatial Boundaries of Nazlet Elsamman Project ( RResearcher, 2024)

- **Opportunities and determinants of Macro Spatial Boundries of the Project**

There are a number of determinants that can pose a risk to the heritage and cultural value of the region, including:

- Urban pressures: Through urban projects established in the desert range (which represents the vital visual field of the archaeological pyramids area) such as the "Pyramids Plateau Gardens Project", and Sheikh Zayed City, which caused the beginning of the occurrence of this range under the pressures of uncontrolled construction from any conscious control responsible for protecting this sensitive archaeological area.
- The decline in the number of palaces and villas and the emergence of closed residential communities in this area have helped to further distort the general character of this historical area.
- Slums have created a backward urban belt surrounding the urban mass of Giza Governorate and almost suffocating it urbanly. In addition to the deterioration of environmental and heritage consistency caused by the extension of urbanization on agricultural lands, especially on palm plantations.
- The intersections of the Ring Road on the Mariotia Canal and the Mansouria Canal is an incentive for random extension unless detailed planning for this scope is prepared and firm control for its implementation.
- The existing Ahram Gardens area (on an area of 952 acres and divided into 10,000 plots of land and expected to accommodate about 300-350,000 people) could represent a serious obstacle that contradicts its close proximity to the pyramids and the inevitable result will be environmental sabotage of the antiquities area. If the growth of this area is not controlled, it will encourage the extension of the urban mass, which contradicts the recommendations of the Giza city plan.

These determinants correspond to a set of opportunities that must be exploited in proportion to the value of the site, including: The state's orientation to work to revive the historical identity and restore the old luster. Packing the slum areas scattered in the range, in addition to the decision to remove quail and resettle in alternative places Establishing the proposed projects in the broader scope that will raise the cultural, urban and environmental value of the city in general and the scope in particular.

## 5. Port Said Industrial Action Area Plan

### - Development projects and plans in the broader scope

The area is functionally and traffic-related to many areas that include distinct development projects, and the most important of these projects are the development and development project of the Rod Al-Farag area, the development project of the North Giza area, the development projects of Warraq Island, the Khedive Cairo development project, the Maspero area development project, the Ramses Square development project. The Rod Al-Farag area is located west of the study area, and is directly linked to it through several traffic axes, the most important of which is the axis of the Ismailia Canal and the axis of the Waili railway, and the Ismailia Canal area is a natural extension of the Rod Al-Farag area and to complement the trend towards exploiting waterfront areas in providing investment uses, which contributes to the development of Cairo. The idea of the project to develop and develop the Rod Al-Farag area relied on the exploitation of unused land in the high-value area

(overlooking the Nile Corniche), and the reuse of some other lands (by changing their uses), in creating an administrative tourist area that represents the natural extension of the administrative center of Cairo, as well as improving the visual image and the built environment in the region by improving and developing the movement network, and the work of planning and construction requirements for the area that contribute to the re-exploitation of the area in proportion to the value of its visual and economic location.

The proposals for activities and uses that have been settled in the Rod Al-Farah area were in administrative and commercial uses, and the provision of spaces for hotel housing, in addition to providing some recreational and tourist activities by exploiting the Nile Corniche in the establishment of Nile marinas and public areas for picnics and entertainment. This requires taking into account these uses when planning the Ismailia Canal area to achieve integration between the two areas and avoid negative economic effects from one area at the expense of the other.

Also, the traffic modifications and the proposed traffic network in Rod Al-Farah area represent one of the most important outputs of the project, as it is expected to contribute to achieving part of the targeted traffic liquidity for Cairo, in addition to its expected impact on other axes associated with the region and linking it to the surrounding areas. Where the directions of some axes of movement have been modified and converted to one direction (Nile Corniche axis - Sea Bridge axis), which requires taking into account these directions when planning the surrounding areas that are related to those axes.

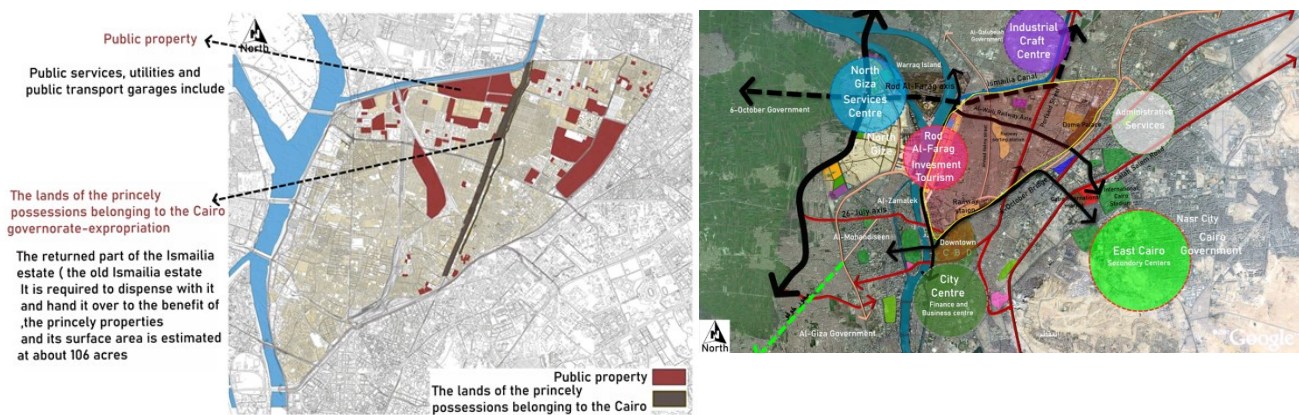


Figure 3. Port Said External Factors (Researcher, 2024)

- **Movement and circulation:**

The road network is one of the most important pillars and components that affect the development processes in general and urban development in particular and shows its direct and strong impact on the economies of the land and then on the uses it occupies, and based on this importance, we find that the road network that connects the region with its most comprehensive scope, which is represented in a set of existing axes and other proposed: such as the proposed Rod Al-Farah axis, which borders it to the north parallel to the Ismailia Canal and is expected to be linked to the study area with the ring road and Egypt Road - Alexandria Desert, and the axis of the existing Waili Railway, which penetrates the heart of the region and connects it from east to west transversely, then the entrances to North Cairo linked to the Delta roads and the Cairo-Alexandria Agricultural Road through the Nile Corniche roads, Shoubra Street, Ahmed Helmy Street and Port Said Street.

Through the analysis of the interrelationships of uses and activities surrounding the project area, it can be said that it is not possible to prepare a planning concept of the detailed areas without developing a future vision of the direct scope that interacts and affects the study area. The main problems and determinants affecting or hindering the development of the immediate scope:

- The Ismailia Canal area, as a result of its vital location as an extension of the heart of the capital, represents an area of different dimensions and has interrelated relations with many issues and problems, whether on the area itself, at the level of the heart of Cairo, or at the level of Cairo. Therefore, the process of preparing the planning vision and detailed plans can be affected and interact with many different determinants and influences, whether on the city of Cairo or on the downtown area, in addition to what is related to the facts of the current situation and its various problems and pressures.
- There are many problems and determinants that can pose a risk leading to environmental and urban degradation in the region, in contradiction with the capabilities and value of the site and the economic and functional values of the site.



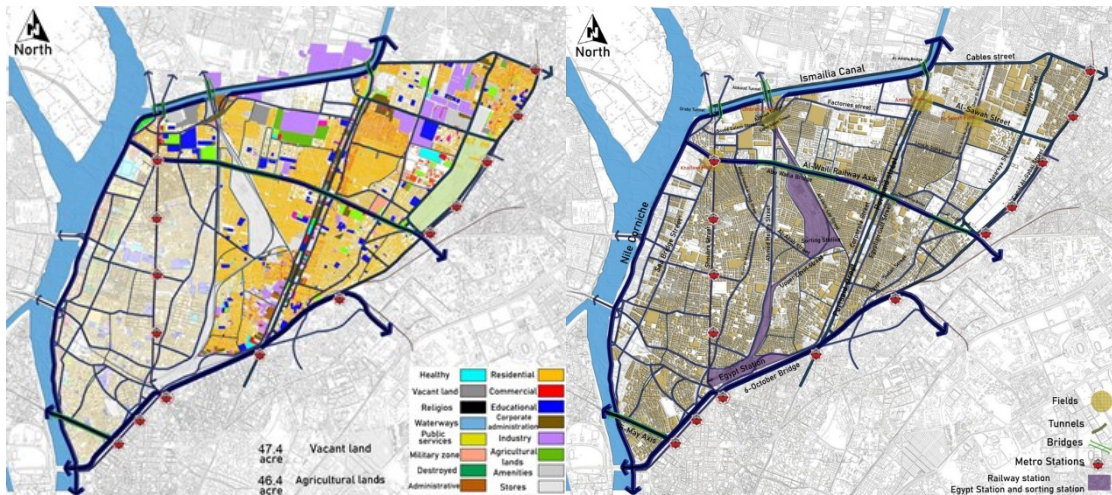


Figure 4. Circulation and land uses in Port Said Industrial Area ( Researcher, 2024)

These problems can be classified into groups represented in:

1. Problems related to uses and activities and their relationship to the value of the area.
2. Problems related to urban management.
3. Problems with the economic values of land
4. Environmental problems.
5. Movement and communication problems.

- **Problems related to uses and activities:**

- Urban pressures: through the spread of slum areas in the study area, which are almost strangled urbanly. In addition to the pressures of some uses (industrial uses - stores ...) uncontrolled environmental degradation, pollution problems, congestion ...
- The spread of commercial activity (retail, wholesale, stores ..) without controls and turned from the positives required for the survival of the population to a form of randomness, and the waste of large areas of land, especially with regard to wholesale trade, which negatively affected the value of the area as an extension of the city center.
- Mixing and overlapping land uses, where many land uses and buildings from industry and craft workshops are spread with commercial and residential uses. Public utility buildings and facilities also overlap with residential uses, as well as the presence of agricultural land remains.
- Functional and visual incompatibility between some waterfront uses and the Ismailia Canal, which is considered one of the branches of the Nile River. As most of these uses are not functionally or visually related to the canal and constitute a waste of the value of land, for example:
  - The power station north of Cairo, directly overlooking the Ismailia Canal, with a length of 600 meters, and the Amiriya water station, overlooking the canal, with a length of 400 meters, is considered one of the uses that visually contradict the value of the waterfront, despite its functional linkage to it.
  - Some public administrative and service buildings that occupy privileged locations on the façade of the area, such as the Department of Security Forces, the stores of the Public Transport Authority with umbrellas, and the Abboud station.
  - The low level of the area visually and economically resulting from the problems of occupancy on the main tracks such as Port Said Street, the Egyptian Gulf and the axis of Sikkat Al-Waili - represented by street vendors and daily and weekly markets who occupy the tracks intensively.
  - Exploitation of most of the land space in areas of urban depth such as garages and some craft activities or areas for garbage collection, such as a large piece of land located on the street of the factory complex estimated flat of about 21 acres storage scrap, which weakens the economics of the exploitation of those lands.
  - The high population densities of the area overlooking Port Said Street and the axis of the Waili railway and the south of agricultural lands, and the population density ranges from 200 she/acre to 500 she/acre, and the reasons for these high densities are mostly due to the small flat plots of built land and the high percentage of construction in the region with the lack of

public spaces and the lack of widths of the internal streets in the region, which refers to the size of the population weight that must be dealt with when intervening to develop the region.

- The narrowness of the internal streets of the depth areas and the lack of continuity of most of them as a natural reflection of the urban fabric
- The stack that characterizes most areas of urban depth.
- The interruption of communication between the regions due to the presence of railway lines and stores, which have a surface area of about 221 acres.

- **Problems associated with urban management:**

As a result of the legal problems associated with some land ownership that is at the disposal of Cairo Governorate (which is the land resulting from the backfilling of the Egyptian Gulf Canal and the parallel bank) along the current Port Said Street and Gulf Street. The consequent conditions of land disposal by the population (legal and customary), and the successive pressures to change uses with the absence of plans, controls and requirements in most areas, are only approved lines of organization. It led to overlapping uses and overcrowding of buildings in some areas with low rates of open areas and environmental considerations.

**Problems related to the economic values of land:**

Land varies according to its economic values as a result of a set of characteristics that distinguish it, and according to this criterion, the types of proposed uses are closely related to their economic values. For example, investment and economic projects can be encouraged in those lands with lower economic values in order to raise the economic values of these lands and their surroundings, as is the case in the canal area and the depth areas around the Gulf and companies streets. On the other hand, we find that the lands located on the main axes and achieve high connectivity make them of high economic values and therefore their powers to settle productive, service or recreational investment projects around the streets of Port Said, companies and the Gulf, as well as Al-Sawah Street and the factory complex ... .

As for the vacant lands confined within the urban block with limited connectivity to the road network, they have low economic values, and it is a suitable area for settling green areas and public parks to serve as a real outlet for the urban mass with high population densities.

- Environmental problems :
- Pollution problems resulting from the presence of many polluted industries and workshops in the region of various kinds, in addition to warehouses and railway lines.
- The presence of the power station, located directly on the Ismailia Canal, which leads to a negative impact by throwing its waste into the canal in addition to the exhaust resulting from the station, which may lead to air pollution.
- Air pollution resulting from gases emitted by cars of all kinds and resulting from traffic congestion in some streets and main axes.
- The spread of space lands used as garbage collection places in the region, which leads to the spread of diseases.
- The spread of many polluting industries north of the study area - Shubra Al-Kheima - overlooking the opposite side of the Ismailia Canal.

- **Movement and communication problems :**

The problems of roads and movement in the region come from the most important problems that govern the orientation when developing the region, because of its association with the problems of movement at the level of Cairo, and the occurrence of any defect in the performance of the axes of movement in the region affects the rest of the surrounding areas, and the problems of movement in the region are as follows: Figure (5/1).

- A noticeable increase in traffic rates and traffic jams - despite the presence of a number of main axes in the region or on its borders - with regard to the movement of vehicles, as a result of the volume of transit traffic penetrating the area, which constitutes a burden on the traffic network, especially in the following streets such as Ismailia Canal Street, coming from the northern entrance to Cairo and heading to the downtown areas, Port Said Street, Canal Al-Jabal Street, and the Waili railway axis linking East and West Cairo.
- The high intensity of commercial, industrial and administrative activities in the region and attracting a large number of hesitants, which constitutes a high traffic flow most of the time during the day.
- The volume of occupancy on the main and secondary roads associated with the spread of commercial activities, industrial activities and warehouses.

- Loading and unloading operations associated with workshops and factories scattered in the region lead to the entry and waiting of a large percentage of transport vehicles, which leads to more traffic inspection and increased traffic jams
- The region suffers from a problem of quantitative deficit in waiting places, and although there is more than one garage, but most of them are public transport garages or private garages, but they do not solve the problem of service with the increase in walking distances between waiting places and places of hesitants.
- Penetration of some railway lines to the area (single lines) as well as unused tram lines north of Port Said Street.

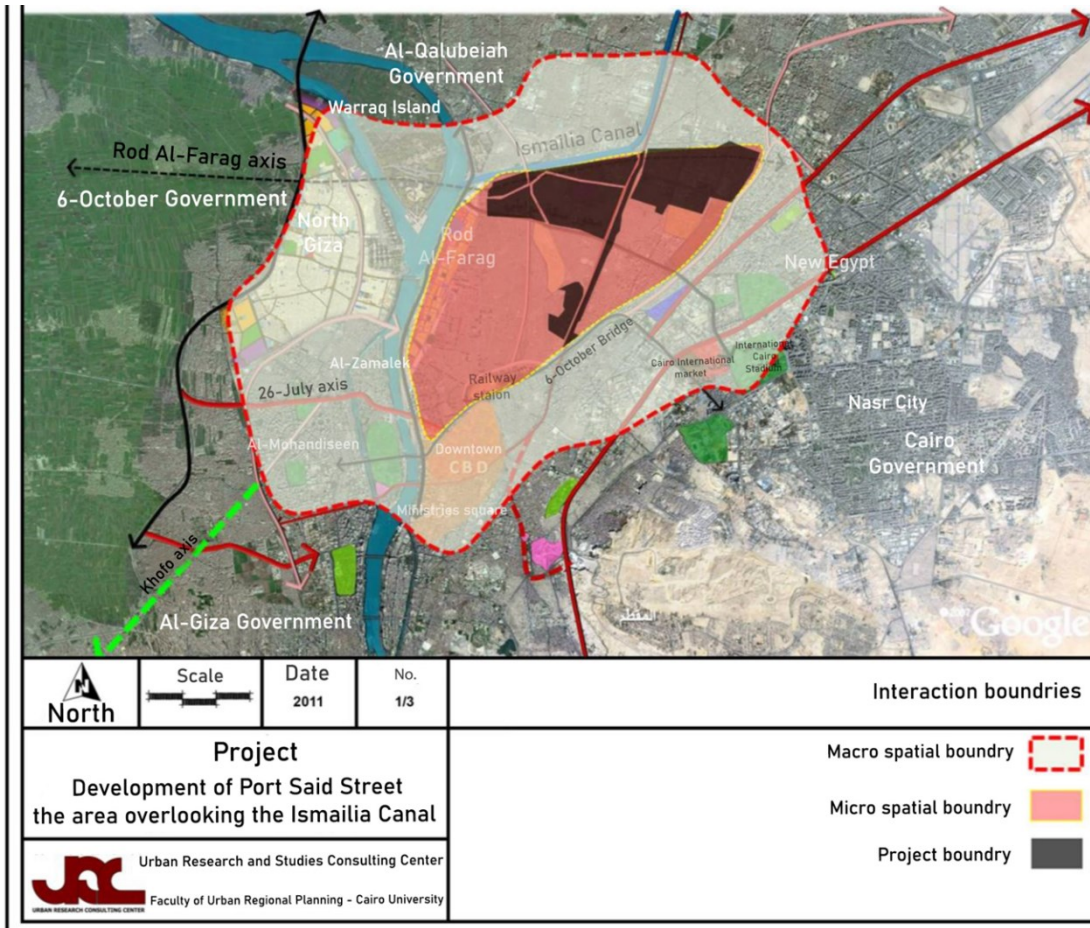


Figure 6. Port Said Project Macro Saptial Boundries identification (Researcher, 2024)

6.results

- Urban pressures: Through urban projects established in the desert range (which represents the vital visual field of the archaeological pyramids area) such as the "Pyramids Plateau Gardens Project", and Sheikh Zayed City, which caused the beginning of the occurrence of this range under the pressures of uncontrolled construction from any conscious control responsible for protecting this sensitive archaeological area.
- The decline in the number of palaces and villas and the emergence of closed residential communities in this area have helped to further distort the general character of this historical area.
- Slums have created a backward urban belt surrounding the urban mass of Giza Governorate and almost suffocating it urbanly. In addition to the deterioration of environmental and heritage consistency caused by the extension of urbanization on agricultural lands, especially on palm plantations.
- The intersections of the Ring Road on the Mariotia Canal and the Mansouria Canal is an incentive for random extension unless detailed planning for this scope is prepared and firm control for its implementation.

- The existing Ahram Gardens area (on an area of 952 acres and divided into 10,000 plots of land and expected to accommodate about 300-350,000 people) could represent a serious obstacle that contradicts its close proximity to the pyramids and the inevitable result will be environmental sabotage of the antiquities area. If the growth of this area is not controlled, it will encourage the extension of the urban mass, which contradicts the recommendations of the Giza city plan.

These determinants correspond to a set of opportunities that must be exploited in proportion to the value of the site, including: The state's orientation to work to revive the historical identity and restore the old luster. Packing the slum areas scattered in the range, in addition to the decision to remove quail and resettle in alternative places. Establishing the proposed projects in the broader scope that will raise the cultural, urban and environmental value of the city in general and the scope in particular.

### **7. discussion**

Change in cities is natural, but we must try in some areas with the nature of these cities to preserve the values and cultural heritage, otherwise there will be a total transformation of the city and a complete break from its past. The Giza pyramids area is considered one of the most important World Heritage Sites registered in UNESCO, and it is one of the seven wonders of the world. There is no doubt that the establishment of the Grand Egyptian Museum in the region will double its global importance and support its heritage-cultural-tourism role. All this necessitates reconsidering the planning of the area in proportion to its importance and returning it to its original state, preserving its heritage, and strengthening the link between the pyramids and the Grand Egyptian Museum.

It requires the revival of cultural, historical, tourist and craft values that have always characterized the region throughout history. By shedding light on the factors that lead to the deterioration in the broader scope, and how the revival of this scope contributes to the social and economic development of the region and the city, and the possibility of achieving this by maintaining the functional role of the region (tourist - historical). And the development of some existing crafts. In addition to improving the visual framework of the environment, whether natural or urban, as the sensory nerve that connects the tourist and the resident directly from Through the sense of sight in the place.

### **8. conclusion**

Action Area Planning AAP represents the major instrument and transformation of strategic urban planning goals and objectives into actual spatial achievement to create a better urban environment. It is the tool for upscaling socio-economic and physical characteristics of the place. One of the challenges of AAP is identifying the external factors outside of AAP spatial boundaries that involve decision making in the final proposal plan, factors such as land uses, movement circulation and others contribute in decision making has to be taken into consideration inside AAP spatial boundaries. This research seeks to identify these external factors influencing the process of identifying the macro scope of AAP project. It is a topic not discussed much in literature which focused in the actual AAP process inside the actual boundaries, yet, it is vital during conducting analysis, decision making and alternative proposals.

The research compares two different AAP project in Greater Cairo, one is the brownfield site in the heart of old Cairo (Port Said street industrial Area). The second project is Nazlet Elsaman Heritage reallocation (Giza Plateau). The two project comparison indicated a high importance of the surrounding external land uses types and circulation movement that affect identifying the spatial scope of the project inside the actual and macro spatial boundaries, the research argues that external factors should be treated very carefully in order to contribute towards the efficiency and effectiveness of Action Area Plan.

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### **Conflict of Interests**

The Author(s) declare(s) that there is no conflict of interest.

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