

## **The study of the use compatible with the beach facades (by applying to the area of Rawd al-Faraj in Greater Cairo)**

**Dr. Shery William Salama Sorian**

**Lecturer, Department of Architecture, High Institute for Engineering and Technology at  
Obour**

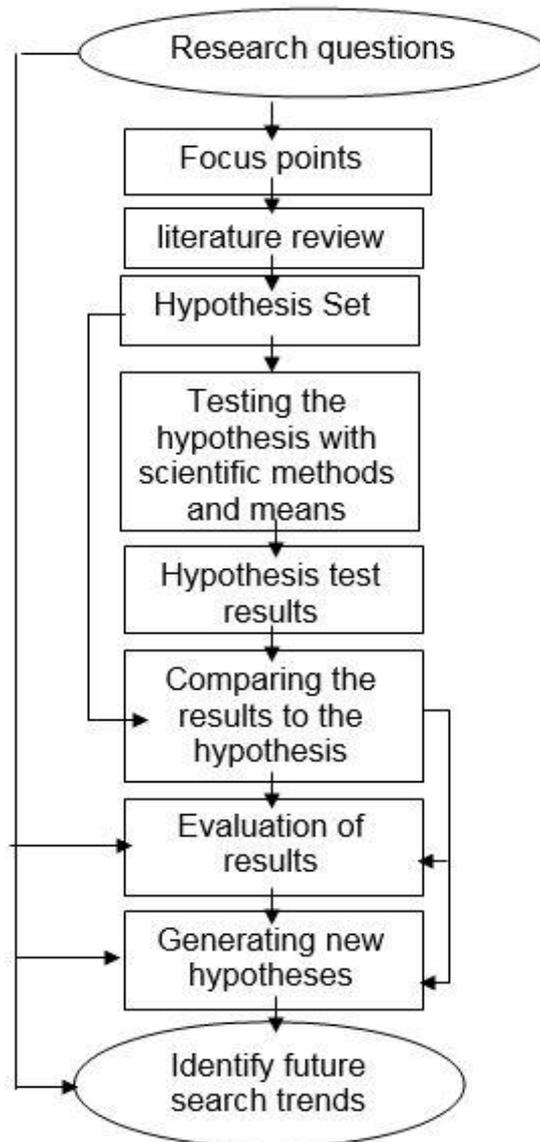
[Shery2010@yahoo.com](mailto:Shery2010@yahoo.com)

### **Abstract**

The city of Greater Cairo contains many well-exploited areas with recreational tourism that are located inside and outside the city, and here we mean the areas overlooking the Nile river, especially in the area of Rawd al-Faraj. Therefore, the use overlooking this Nile façade must be commensurate with this type of area and serve it and contribute to its development and tourism development. The characteristics of these areas and the full theoretical and applied background should be known. In order to know the extent of their relationship with their surrounding areas and the extent to which they affect them, whether with direct or indirect negative or positive effects. It is also worth addressing the characteristics of these recreational areas adjacent to the area of Rawd al-Faraj and how they fit the river and the Nile façade. We presented some of the global and local experiences that touched on this type of areas and how to make the best use of them. Through the previous presentation we can test the validity of the hypothesis and come up with meaningful results from the research.

The main objective of the research is to get the best use of the Nile façade. There is also a set of sub-objectives, namely, improving the visual image of the Nile façade area overlooking the Rawd al-Faraj area, learn about the types and specifications of the areas overlooking the Nile, find out how to optimize these areas. One of the objectives of the research is to analyze the study and reach the final results of its use in future researches. The research point is the study of uses compatible with the beach facades (applied to the area of Rawd al-Faraj in the Great City of Cairo). The purpose of the research is to study the impact relationship between the uses overlooking the Nile façade and how to exploit the Nile River as an important tourist hub. The problem discussed in the research is the validity of the Nile Cornice region for many uses, what is the best use of that area that achieves the best exploitation of the region? The research also raises many questions, the most important of which is - what are the specifications of the beach areas overlooking the Nile River? And Why do these areas be untapped?

The research is an explanatory research where it explains certain steps in the planning process. The research elements have been described by other exploratory, descriptive, researches. international and local experiences that have been discussed and several different approaches have emerged for the solution, then there's a theoretical and empirical entries, based hypothesis to answer the questions and prove the validity of the hypothesis. The general search structure or methodology of the research can be developed as follows:



### **literature review**

Waterfronts can be classified into a set of classifications that depend on the uses of these facades, which are as follows:

- Cultural waterfronts which include (artistic activities - culture - educational institutions).
- Natural or environmental waterfronts which include: (coastal line conservation areas - reserves - beaches) .
- Historic waterfronts which include (historical areas - archaeological buildings - sound and light - lighthouse - and some models of ancient ports).
- Mixed-use waterfronts include (projects of various activities such as: - residential administrative commercial and where the public spaces are multi-activity).
- Recreational waterfronts and includes (parks and tourist trails - open areas- water sports - rowing places - fishing piers).
- Industrial waterfronts which include (heavy industries - fish farms - repair boats - arsenals – ports) .

**The redevelopment of waterfronts is of particular importance and has several factors:**

- Movement of interest and historical preservation.
- Continued and growing interest in the redevelopment of downtown areas.
- Increased environmental awareness and attention to water bodies and cleanliness.
- The technological revolution that emerged after world war.
- Increased government interest in the theory of urban upgrading and renovation.

**International theoretical studies for the development of recreational river shores:**

The Theoretical Study by Claire Gunn 1995:

Summary of the study:

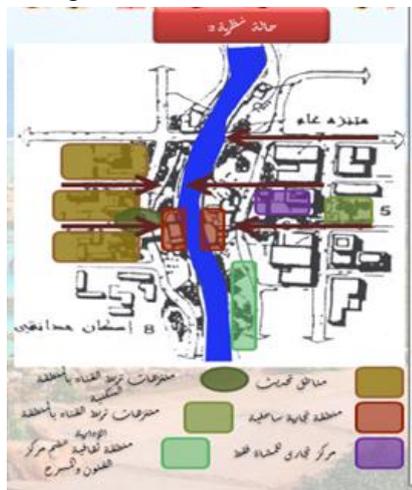
The study began with a presentation of a set of analyses on the use and development of coastal areas, in which it is clear that the region is divided into sectors which are different from each other on the one hand, and those sectors are as follows:

- Shallow water area: A mid-depth water area with aquatic life and coral reefs that is qualified for marine sports, diving and fishing.
- Beach area: The shallow water area, which is usually used for swimming and recreation, is characterized by visual contact that has an important visual effect.
- Camp grounds and activities: This sector is usually allocated to camps, sports venues, cafeterias and beach clubs.
- The area of tourist facilities: where tourist places and hotels are concentrated.

The use of seaports and river transport in the river has led to a conflict with tourism uses, especially when the two are converging and even sharing entrances and marinas, hence the idea of complete separation, usually creating an open area and a public park. Through differences of levels and flood protection, terraces have also been proposed in the downtown area to make the most of the river views and attention to the open and green areas of the site. It also opened the visual axes and it was taken care not to obstruct the afforestation or any element of the coordination of the site areas of vision and visual axes, both for pedestrians and for vehicles.

In his theory, Claire explained the uses that could overlook the waterway and be suitable for it, which is as follows:

- Convention Hall.
- Restaurants, clubs, boutiques.
- Invisible parking area.
- Terraced open areas.
- Commercial areas.
- Areas of wooded slopes.



**Lessons learned from the study:**

- Interest in preliminary studies so that the decision-making involves an integrated group of specialists including the architect and urban and environmental coordinator.
- Putting visual studies in the list of important projects.
- Work to open water ranges as much as possible for public uses and not limit them to private uses.
- Attention to service through roads parallel to the waterway and parking.

**Examples of International experiences for the development of recreational waterfronts:**The development plan of kotching – Sarawak River – MalaysSummary and results of the study:

- Attention has been paid to the development of dilapidated areas and to give a touch of beauty.
- Maintaining buildings and full awareness of the designer and the accuracy of studies in the field of waterfront development.
- Attention to the popular heritage in the development of the region in terms of popularization.
- Attention to simple operational details such as floor types, and detailed work to come up with the best river coast path.
- Attention to the opening of visual and kinetic axes, and to connect the general fabric of the city to the river area.
- To be concerned about turning the area into a public area and not allowing any private entity to invest.

Bicentennial commons at sawyer point – Cincinnati – Ohio River: -Summary and results of the study:

- The importance of integrating projects that are built on waterfronts to meet the needs of the largest population.
- Popular participation and conscious management are key factors for the success of the project.
- Developing the general taste and upgrading the concepts of beauty and artistic perception among the citizens.
- Take care of human gatherings and find open spaces that can accommodate them, such as squares and open areas.
- Use the beach path to educate and teach visitors things about the river they live on.
- Pay attention to details such as placing signs and maps in special places to make it easier for visitors.
- Choose the places of the lampposts and seating areas and choose their forms to suit the general nature of the project.

**Applied study:**

After presenting theoretical studies and studies of previous global experiments and analysis and applying the findings to the study area, we find that the shape of the area after the application will be as follows:



## Objectives and conclusions drawn:

### The general objectives learned:

#### Targets on the level of land use and open areas

- Increase the area of open areas and public recreation along the river.
- Connecting recreational areas and parks along the river.
- Work to gradually remove unwanted uses.

#### Traffic and transport network goals

- Develop visual and motor hubs and increase the connection to the river area and its water facades.
- Work to create a public river front for the population that is easily accessible.
- Working on the connection of the transverse axes, which are vertical on the riverbed.
- Finding solutions to the problems of service and waiting.

#### Objectives at the level of urban and architectural design

- To illustrate the impact of the river on the general mental image of the city.
- Exploiting the physical spaces on the river and the beach areas for longer periods of time throughout the day.
- Identify and categorize the distinctive signs on the beach area.

#### Environmental design and landscape design goals

- Maximize the use of the river and its banks.
- Maintaining sensitive resources in the waterfront area.
- Preserving both the ecological natural heritage and the built heritage.

## Abstract methodology

The following points are converted to outline anyone interested in the studies and analysis of waterfronts and beach areas:

- The first stage is the stage of exploratory studies and research.
- The second phase is the development of general and private objectives and the development of strategies related to the region.
- The third stage is the current situation studies and field survey as well as analytical studies.
- The fourth stage is the phase of reconciling the objectives and strategies of the beach area.

- The fifth stage is the diagnosis and identification of problems and the possibilities.
- The sixth stage is to prepare and evaluate alternatives and then put these alternatives to citizens and specialists.
- The seventh stage is the formulation of the final vision and the development of detailed proposals.
- The eighth stage is the implementation phase.
- The ninth and final phase, which is successive and monitored implementation, helps to solve the implementation problems.

### **The principles learned**

#### Principle of the level of land use and open areas:

- Increasing the area of recreational and open areas along the river.
- Make lists of desired uses at the river level.
- Taking into account the environmental impact of industrial projects and ports.
- Connecting all recreational projects and parks on the river.

#### Principle of the mobility and transport network level:

- Continuity of the river shoreline.
- Maintain the local character.
- Make up and down paths on the flat river.
- Riverside roads to serve the communities overlooking it.

### **Principles at the level of urban and architectural design**

- Avoid buildings that are obstructed or visually impaired.
- Study of night lighting elements of the beach path.
- Designing squares and spaces.
- Taking into account the preservation of the city's overall character.

### **Principles on environmental design and landscape**

- Reduce the solids used in flooring.
- Do not impair vision with dense plants.
- Too many shading trees.
- Use of rocks and local materials in the bank format.
- Allowing areas of open river areas for wildlife.

**References:**

Kfafi, Nezar Atalla : Osos Wa Tawgehat Tasmem Almanateq Al shate2ea wa Defaf Al Anhar , Master, Kolet el Ta5tet Elklemy wal Omarani , Gamet El kahera, ElGeza, misr, 2003.

3abd El Rahman, Do3a – El Nagady Ali Saleh – Abd El Kereem, En3am Abd El 3'any: Osos Tansiq El mowke3 wa asroh 3ala manzomet Al raha Al be2ea lel tasmem El da5ely, magalet el 3emara wa el fenon wa el 3elom elensania, El mogaled 5, El 3aded 23, September 2020.

El hotie, Eman Mohamed Mohamed: Dor El 3omara El Be2ea Almostadama fi Eltasmem Al Da5elie Lelmotaga3at Elseyahia, magalet el 3emara wa el fenon wa el 3elom elensania, El mogaled 3, El 3aded 12, 5aref 2018.

Hassan, Eman: Ta5tet Mawake3 Netakat Al magary Al ma2ea 3n Eldalael Al Ershadea Ieltanmea, Master, Handaset el Qahera, El Geza, misr, 1996.

Elbahesa Bele3tmad 3ala Elnazareat.

El Bawab, Mahmoud Fouad Mahmoud : Syasat El Tanmia El Omrania El Mostadama Leste3'lal Netaqat El magary El ma2ea Bel Modon El Masria , Architecture and planning Journal, El mogaled 23, El 3aded 14, Mars 2015.