

Cultural Heritage Management and Sustainable Tourism in Historical Cities (Case study: Durrat Al Nil Park, Station square and the old tourist market in the historical Aswan City – Egypt)

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Abstract

This paper aims to study cultural heritage management and sustainable tourism in historic cities and display the Experiment of the historical Aswan city in Egypt to rehabilitate and develop Durrat Al Nil Park, the Station Square, and the Old Tourist Market. This is presented through a theoretical study of the cultural heritage management's concept and its stages in integration with the principles of sustainable tourism, commercial, historical markets, and streets. As these sites are one of the most valuable sites in city centers, to reach a successful relationship between human and his needs, whether as a tourist or a resident in the city; and a sustainable visual image of the historical cities. As a result, similar criteria between cultural heritage management and sustainable tourism will be easily set to develop the historical cities' downtowns. These criteria help to prepare a field study to develop Durrat Al Nil Park, the Station Square, and the Old Tourist Market within 2020-2021, as Aswan city was chosen with another 30 cities all over the world to win Guangzhou International Innovation Award for civilized innovation. Also it will help to analyze before and after the development. This paper is carried out within these criteria and principles of cultural heritage management, to see if they are matching to reach an approach that helps to reserve the sustainable visual image of the city and the authenticity of its heritage within the framework of cultural heritage management concepts and sustainable tourism.

Keywords

Cultural Heritage; Cultural Heritage Management; Sustainable Tourism; Aswan City.

1. Introduction

Aswan is one of Egypt's most historically valuable cities, which locates on the shores of the Nile River, as it has some of the most famous and significant archeological places (for example: the temple of Philae, Abu Simbel, and Kom Ombo). Therefore, there are many challenges to develop such an important historic urban area because it is necessary to find the balance between protecting the cultural heritage and meeting the needs of the residents and the visitors now and in the future.

Developing this city requires extreme caution because such historical cities are witness and symbol of a country's history and act as an identity among other countries and nations. So, poor planning causes to damage and lose these amazing culture and identity. As a result, this research will help to find the optimal approach for developing this important city. The research procedures will include collecting data about cultural heritage of this city and how to integrate with the principles of sustainable tourism. The research will too collect data about commercial and historical markets ; as one of the important and influential places in the city. A mutual set of rules and a specific criterion were set to be followed to compromise a successful relationship between people and their needs whether are tourists, city residents, or employees to achieve the targeted sustainable visual balance in this historical remarkable city.

1.1. Research problem

Historic cities such as Aswan in Egypt suffer from urban deterioration and inappropriate visual image with its historical value, especially in public squares and important areas such as Durrat Al Nil park. This park has two

different views, the governorate building, the Nile River, as well as the station square.. As well as, the tourist market, which is considered one of the most important attracted place for tourists in the city, because of its popularity for the retail trade of local Aswan products (such as spices, perfumes, nuts, and souvenirs). Thus, such an important city requires studying it to reach a balanced and decent visual image that reflects the value of this important historic city.

1.2. Research Aim

Achieving standards that help in the visual reformulation of important areas (such as squares and public areas) in historical cities such as Aswan, Egypt, within the framework of cultural heritage management and sustainable tourism.

1.3. Research Methodology

The research depends, first, on the inductive approach in the theoretical study to reach specific criteria that help in achieving a decent visual image in the important areas of historical cities within the framework of the sustainable cultural heritage management of the touristic streets. Second, the analytical method is applied to study valuable places in the historical city of Aswan in Egypt (such as Durrat Al Nil park, the station square, and the tourist market), finally, the collected data are analyzed through the criteria excluded from the theoretical study, and this is to reformulate the visual image of the important places in Aswan such as a sustainable touristic areas.

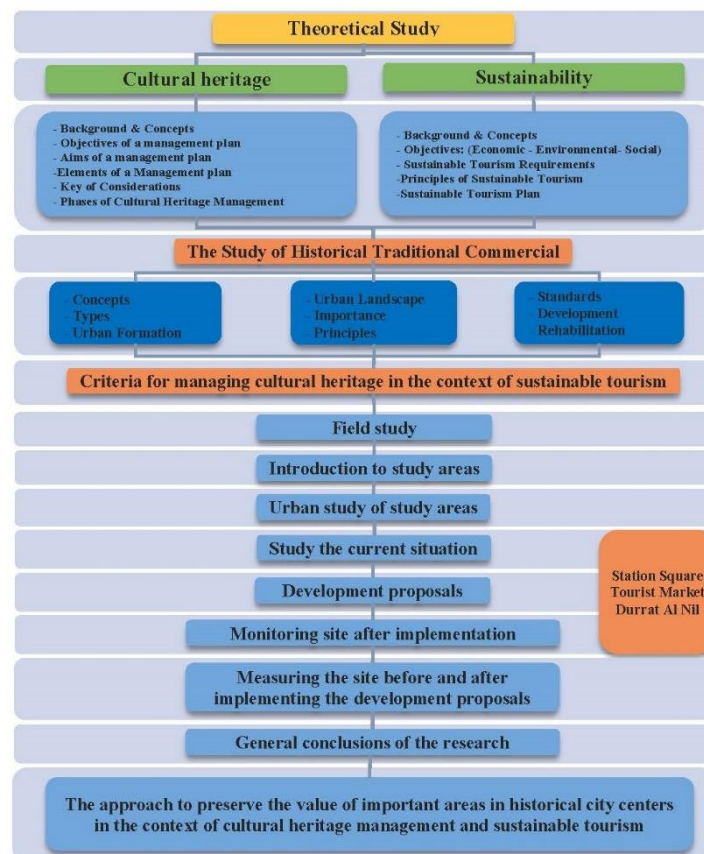


Figure 1. Shows the research methodology (researcher, 2021)

2. Cultural heritage management

Conservation of historic places is essential; the concept of cultural heritage management is based upon the insurance of the effective protection for the historical and cultural values for current and future generations and delivering grand benefits to the society. Conserving heritage locations are very resourceful for anyone responsible for the management of these culturally valuable places (UNESCO,2013) (IUCN. 2008).

According to the UNESCO's world heritage resource manual (2013), all heritage management systems have nine basic common characteristics that are grouped into three processes (planning, implementation, and monitoring); three elements (Legal Framework, institutional framework, and resources); and three results (outcomes, outputs, and

improvements). these nine components operate at the macro level such as (the legal framework) and others at a site or regional level such as (the heritage processes), the elaboration of the three groups are:

Definiton of the three processes:

- **Planning:** comprehending the decision-making process and deciding the objectives, necessary actions, and the timeframe corresponding to the community requirements.
- **Implementation:** investigating the planned actions to deliver the prerequisite objectives, making changes mid-way to the actions, and how and when to take the necessary.
- **Monitoring:** collecting and analyzing data to examine the effectiveness of the management system to achieve the right results.

Definiton of the three elements:

- **Legal Framework:** it defines what heritage is and the criteria for its preservation and management, usually through legislation.
 - **Institutional Framework:** setting the operational structure and working methods to provide the required action as planned.
 - **Resources:** creating operational capacity and facilitate processes by knowing the financial and intellectual inputs.
- Defining the three results:

- **Outcomes (Achieving Objectives):** the aim is to focus on the outcomes to check if the management system is achieving its objectives.
- **Outputs (Deliverable Results):** setting the operational structure and working methods to provide the required action as planned.
- **Improvements to management systems:** this is done by collecting feedback, monitoring processes, and assessing outputs and outcomes, the continuous improvement process leads to achieving more effectiveness and efficiency.

2.1. Aims of Management Plan

The aims of management plans for places of high cultural heritage importance are wide-ranging, but some aims are significant for the creation of effective management plans (OEH.2017) (DECCW.2010):

- Encouraging long-term protection of the cultural values of the city.
- Helping city residents to protect and preserve areas of high worth to them.
- Discovering the complications facing (residents, tourists, employees) and coming up with suitable resolutions.
- Increasing and promoting greater outcomes for the communities.

2.2. Elements of Management Plan

The management plans of cultural sites include some key elements that are put together to ensure the collection of enough data about the sites, its complications, areas of high importance and risks that threaten the safety of the city. Some of these elements are (OEH.2017) (DECCW.2010):

- A statement of the cultural values of the site.
- An assessment of the risks that threaten the safety of the city and effective solutions for them.
- A study of the land uses of the site.
- Appropriate fire regimes.
- A study of the activities and a map for their locations in the site.
- Ensuring that the local communities and tourists are encouraged to continue visiting the place.
- Landscape areas should be protected, restored and beautified.
- Road and pedestrian planning to ensure effective walkthrough and user experience in the site.
- A monitoring and recording process for the site and its nature.

2.3. Key considerations

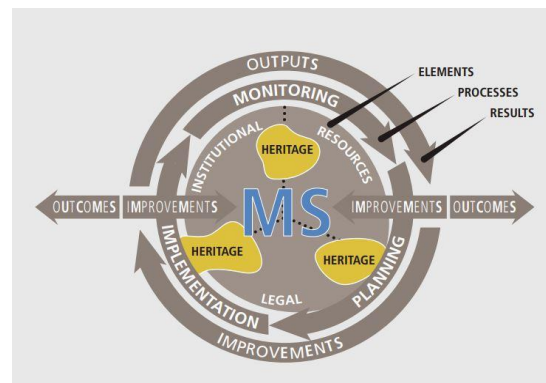


Figure 2: definitions of the three process.

(UNESCO, ICCROM, ICOMOS AND IUCN)

When designing a management plan, a diversity of users, local community needs, cultural context, more social, economic, and environmental factors should be deliberated. A value-led management system must be adopted assessing the cultural setting of the site and the intangible qualities embodied in it, with clarity and coordination to ensure the protection of ongoing and future activities. The management system needs to be sufficiently flexible to deal with unpredictable events, such as natural disasters or instabilities in human or financial resources available to it, to always be risk prepared and prevent the growth of disasters (DECCW.2010).

A shared understanding of the city and its significance by all those involved in the management process can drastically change how the functions of the management system are settled; it makes heritage processes more responsive and delivers outputs and outcomes that are better aligned with the actual needs of the property and its residents; establishing an active role for heritage in sustainable development delivers numerous benefits, enabling the management system to balance different and competing needs more effectively, and to locate new forms of support that are likely to reinforce the heritage values.

2.4. Phases of Cultural heritage management

Cultural heritage management systems contain four main phases that some up the whole management process, starting with knowing and understanding the site, (its important areas, constraints, etc.), planning and implementing the management system, monitoring and evaluating the site before and after the implementation of the management system. following that developing the aspects that need improvement, after that comes the phase of reporting and communicating cultural heritage performance to areas of management. In the bellow chart, the four phases of cultural heritage management are thoroughly explained as the shown figure (3) (Bradshaw, E., Bryant, K., Cohen, T., Brereton, D., Kim, J., Gillespie, K., & Lilley, I. 2011).

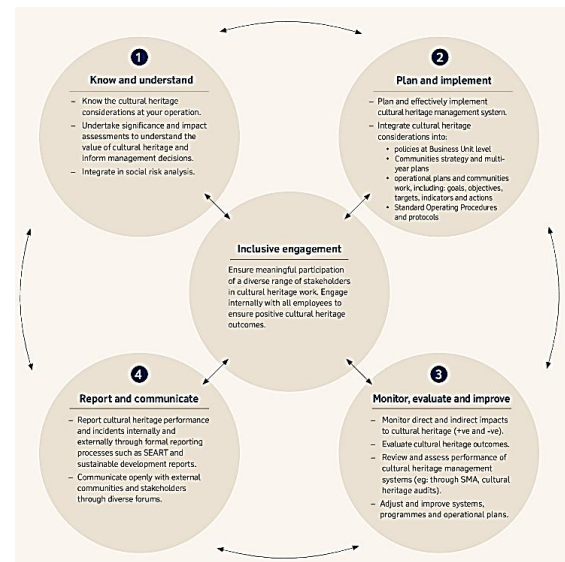


Figure 3: Shows the phases of cultural heritage management . (Bradshaw, E., Bryant, K., Cohen, T., Brereton, D., Kim, J., Gillespie, K., & Lilley, I. 2011).

3. Sustainable tourism

The World Tourism Organization defines sustainable tourism in the following manner: “Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment, and host communities.”(UNWTO.2017) Sustainable tourism has three essential objectives, namely :

- **Economic:** The economic principles of sustainable tourism are summed up in the production of goods and services, with the aims of improving the economic well-being of residents through providing more job opportunities, which helps in the generation of economic profit for local people. (Bradshaw, E., Bryant, K., Cohen, T., Brereton, D., Kim, J., Gillespie, K., & Lilley, I.2011). In addition to, strengthening tourism and its development, because of the foreign direct investment and exchange it generates. Also, maximizing developmental benefits and building partnerships that minimize and share risk (Dumbraveanu,2007) (Holden,2005).
- **Environmental:** The environmental principles of sustainable tourism aim to minimize negative human impacts on the city to keep it in good shape for current and future generations, in addition to preserving the natural and cultural areas; which promotes the continuity of cultural, religious, and social practices. Also, one of the most important aims of environmental sustainability is promoting the efficient use of resources whether touristic, economic, cultural, etc (McKercher,2003).
- **Social:** The social principles of sustainable tourism aim to allow communities to pursue more meaningful tourism experiences, promote visitor cultural observation, education awareness, meaningful encounters with people, heritage, and enhancing residents’ capabilities (hitchcock, M., & king, V., & parnwell, M. 2010).

3.1. Sustianable tourism requirments (Livina, A., & Berzina, I. 2012)

- Sustainable tourism decisions need to be long-term to allow communities to be able to anticipate and prevent problems and to be prepared for any risks that might threaten the safety of the site.
- They need to include people from all categories and natures, whether city residents, tourists, or employees including all ranges of interest and activities on the site.
- Ecosystem-based recognizing the effects of all the actions and activities in the short and long run.
- Integrated, identifying the impacts of actions on other sectors regions, and communities.
- Aware of the causes and consequences of the problems that residents seek to solve.

3.2. Principles of sustainable tourism

Sustainable tourism includes some key elements and principles that are put together to ensure effective sustainable management of the site, and ensure that tourism is positively affecting the site by increasing its outputs, outcomes and benefiting all city residents, stakeholders, and employees. Some of these elements are (Jamieson, W., & Noble, A.2000):

- Tourism should be initiated with the help of broad-based community inputs and the community should maintain control of tourism development.
- Tourism should enhance and increase employment opportunities and form a linkage with the local businesses.
- A code of practice should be established for tourism at all levels: national, regional, and local based on internationally acceptable standards.
- Tourism and its operations should follow a set of guidelines while monitoring the cumulative impacts and limiting the amount of acceptable change.
- Ensuring all visitors experience a high-quality touristic experience.
- Ensuring that tourism does not negatively affect the lives and daily activities of city residents.
- Development to ensure that productivity can be sustained over the long term for future generations.
- Minimizing the impact of tourism activity on the environment in order to acquire ecological sustainability.
- Minimizing the negative impact of tourism activity on the culture/traditions/customs of the local communities so as to obtain cultural sustainability.
- Ensuring the maximization of economic benefits to the local population resulting from the development of tourism.

3.3. Sustainable tourism plan

Sustainable tourism plans of cultural sites include some key elements that are put together to ensure the success of the plan. Some of these elements are (Jamieson, W., & Noble, A.2000):

- An analysis of the area's needs, whether social, economic, ecological or cultural.
- An analysis of an area's tourism assets and the constraints on future tourism development.
- A discussion of how tourism could be used as a factor of escalation for social, economic, ecological and cultural regeneration.
- A measurement of the rate of participation of the local communities both in ongoing processes and plan-making.
- Analysis of the visitor capacities, the suitable development for each area, and decisions on the accessibility of each area.

4. Markets and Traditional Commercial Streets

Historic markets are considered one of the most important places among historical cities; they act as a vital historic and cultural image of the city, with their different forms, functions, and patterns. Markets present multiple significant roots of societies; culturally, socio-economically, and physically. They are considered as focal valuable areas in old cities where history and culture are well established.

There is no difference between the Commercial Street of any city and the old marketplace since the commercial Kasbah in an Arab city often takes linear form and was also called the market. The Commercial Street is a road or corridor lined with shops providing a range of options, business, shopping, and services, which attract tourists and offer entertainment by the vitality of its commercial activities (Embaby, M. 2014).



Figure 4. Shows Vernacular markets and traditional products (researcher, 2021).

There are three types of markets, each type of them has a special character and outstanding identity. These markets have a special urban character which can promote the diversity value of heritage types and enhance the cultural significance of the historic cities, namely:

- **Historic markets of craftsmanship:** Most Arab cities are famous for craftsmanship markets which characterized the old Islamic capitals. In the center of these areas are the great economic activities, these markets' values lie in the promotion of industrial and economic role of Arab civilization over the world, referring directly to the political vitality, increasing economic benefits, and meeting the needs of people. The urban pattern of the historic markets of craftsmanship is widely famous with multi types of architectural buildings that reflect and match with the crafts function and needs. There were three patterns (Al-Sheikh.,2014);
 - The open courts pattern “Wekala”: Shops are attached together at the ground level and workers and craftsmen rent the upper level. This type of pattern is famous for respecting privacy of both craftsmen and local residents.
 - The linear pattern “Kasaba”: Shops are aligned on either side of the main streets or open-ended wide secondary streets. The main character in this pattern is the importance and effects in the urban tissue and visual character of Islamic cities.
 - The caesarean pattern “Sakaef”: This type is settled in the city center and consists of rows of shops aligned narrowly and connected by shaded streets.
- **Historic commercial markets:** This type of markets returns to the Greek and Roman city centers, which is characterized by connected shops, paths with colonnade, wide social spaces, and squared or circular patterns. (Hammad, M.1995) (Sayed, A.1997).
- **Historic vernacular markets:** These markets are opened or covered sites at the city centers or edges, where commodity trading and heritage products, agricultural and craft folk, aromatic plants, etc. They consist of two groups of shops facing each other and separated by a covered passage. (SCTA. 2010).

4.1. Urban formation of traditional markets

The general composition of markets or commercial streets is a set of parallel module cells of shops that forms a central void in which visitors walkthrough. Linear markets are located on the main streets of the city and take the shape of the street. This pattern of market formation is divided into the following patterns (Mehanna, W.A.E.-H., & Mehanna, W.A.E.-H.2019) (Ministry of Municipal and Rural Affairs.2006):

- **Pedestrian commercial streets** have paths for pedestrians only for their safety. Such streets are usually located in historical city centers and are usually shaded by shading devices or other elements.
- **Pedestrian and automated traffic streets** have paths that combine both pedestrians and vehicles either at restricted times of at all times. These paths should be designed to prioritize pedestrian movement by increasing the size of pedestrian space ,also it should calm the movement of cars by decreasing the size of vehicle roads and preventing car parking on sides of the road.
- **Commercial streets for pedestrians and transport** are intended for pedestrians and public transport (buses, Metro, etc.) and are closed to private vehicles. Car parking is not allowed on the side of streets but

provided at a distance. Pedestrian paths should be increased and complementary elements should be added to both the market and pedestrian traffic. These types of streets appear in city centers and may use bridges and tunnels for cars.

- **Ramified markets** are subdivided into linear markets characterized by a specific activity and branched from it, ensuring that important commercial routes that make up the market lead to this point.
- **Aggregated markets** are commercial markets grouped around urban space. The Pedestrian consumer movement is encouraged including transaction spaces.

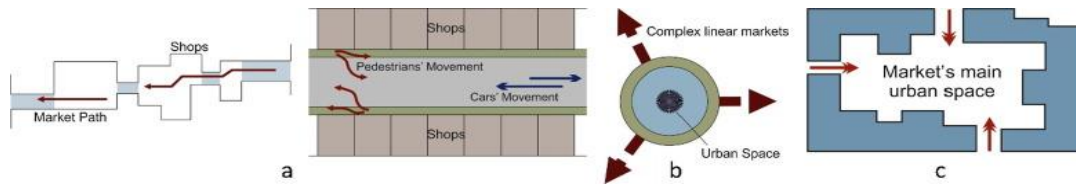


Figure 5: Shows the different patterns of market formation (Aggregated Markets- Ramified Markets- Linear Markets) (Ministry of Municipal and Rural Affairs,2006)

4.2. Market's urban patterns

The three types of historic markets have a distinctive urban character which can enhance the cultural significance of the historic cities, plus it will improve the heritage diversity worth. The main urban patterns of these three types of markets are (SCTA. 2010):

- **Extended bazaar pattern:** The shops are facing each other on either side of a covered passage, this bazaar pattern is famous for its architectural harmony and the types of heritage goods it offers. This pattern is the most relating to the city's urban tissue.
- **Open yard pattern:** The shops are made of wooden structures or tents that are isolated from each other around an open yard which forms the market center and activity forum.
- **Ruler pattern:** The shops are attached together and straight aligned, facing a square for the commercial activities. This pattern is often located in the edge of the cities and specialized in the wholesale trading.



Figure 6. Shows the different patterns of market patterns (Extended bazaar -Open yard- Ruler pattern). (Embaby, M. 2014)

4.3. Importance of historic markets

The historic commercial markets are the structural evidence of the city's heritage, having historical value and an architectural and urban character, compatible with all the environmental features that people require. Commercial activity is a vital part of a range of activities that form the basic life of societies and reflect their culture and values. The importance of these markets depends on (Embaby, M. 2014) (Youssef, A. S., & Soliman, I. N., 2014):

- **Aesthetic value:** Historic markets have intentional aesthetic appeal because of their picturesque qualities; apparent in their architectural forms, offered goods, physical comfort, harmony of visual image and colors, solid and void, proportions, and their distinctive character locally and regionally.
- **Value for architectural diversity:** Each type of historic market provides a unique powerful character, their architectural character results from the strong visual image which combines both individuality and personality through the unity of internal spaces and the harmony with the urban context. The beauty and importance of these markets is apparent in their architectural style and unique urban scene.
- **Value for environmental diversity:** Historic markets can have scales smaller than surrounding architectural forms providing this environmental diversity through this scale contrast and the use of natural construction materials, natural ventilation and lighting, and shading types.

- **Value for functional diversity:** Markets have different functions resulting from different types of spaces in buildings of varying ages, which enables a mix of uses in an urban context. As a result the functional diversity of markets result from the diversity of their surroundings either the market or the city.
- **Resource value:** Historic markets have their resource value in the tangible and intangible heritage contents.
- **Value for continuity of cultural memory:** Historic markets contribute in protecting and representing culture through its visual image, offered goods and urban pattern.
- **Economic and Commercial value:** Historic markets also contribute in the economic growth of cities through increasing the outputs and outcomes of the city.

4.4. Criteria for determining market type

The following table is showing the major urban characters and values which will determine the market type , these characters sorted between (craftsmanship market – commercial market- vernacular market):

Table 1.the criteria for determining market's type (Embaby,M. 2014).

| Urban character & values | Historic market of craftsmanship | Historic commercial market | Historic Vernacular market |
|--------------------------------------|--|---|---|
| Location | Inside historic cities | Historic city centers | Historic city edges, centers |
| Uses & activities | Industrial, commercial, social | Commercial, recreational | commercial |
| Architectural elements & streetscape | Authenticity of historic elements; gates, buildings, materials, styles structures orders | Historic buildings, orders, sheds, colors landmarks, modern development | Temporary, light structures, sheds, entrances, colors |
| Sense of place “identity” | Strong cultural image | Commercial-cultural image | Commercial image |
| Visual character | Strong harmony with the old shops and crafts | Moderate harmony with new shops style & goods | Harmony with the same good types |
| Urban tissue | Spontaneous, irregular, small private spaces | Regular pattern, wide squares, private paths | Wide yards, spaces and streets |
| Community needs | Cultural and socio-economic needs | | |
| Aesthetic value | Based on visual harmony, architectural order, and historic elements | | Based on simplicity |
| Architectural value | Each type presents a historic architectural style in markets & commercial buildings | | |
| Environmental value | Human scale & environmental treatments | Mixed of human and monumental scale & limited environmental treatments | |
| Functional value | Industrial, commercial, social | Commercial, recreational | commercial |
| Resource value | Strong human & man-made resources | | |
| Cultural value | Heritage crafts and buildings | Heritage buildings | Heritage goods |
| Economic value | Industrial, commercial, and touristic development | Commercial and touristic development | |

4.5. Rehabilitation principles of historic markets

The concept of urban rehabilitation has been emerged, which means determination of some policies to the historic commercial streets and markets such as; creative use and re-use of older parts, structures are repaired and elevations are modernized, to facilitate their continued use, especially as shops and warehouses. This often includes upgrading of infrastructure services, but on a modest scale, allowing the preservation of the existing urban pattern and fabric. Where necessary, some change of use may be incorporated, but on a small scale. The main aspects related to rehabilitation policies are (Embaby, M. 2014):

- Conservation of the built heritage and historic crafts and the revival of unique urban fabric, structures and skills.

- Promoting sustainable investments and increasing employment opportunities.
- Improving the quality of life of local residents.
- Revitalization of the historic image, memory, and social value of the market. Represent the market as a showcase of traditional architecture and local heritage.
- Conservation of the market heritage resources and values, promote their role in the economic and touristic development.
- Re-planning the market with promoting the traditional architecture and enriching the visual image and cultural values.

5. Criteria for Managing Heritage in the Context of Sustainable Tourism

The following table is showing the main three criteria and its relation to the elements ,by explaining it further:

Table 2.the criteria for managing heritage corresponding to the sustainable tourism (researcher, 2021).

| Criteria | Elements | |
|--------------------------------------|--|---|
| Economic And Urban | Diversity of land uses | - Commercial - Social - Entertainment |
| | Distribution of job activities to suit all age groups | - Elderly - Children |
| | Encouraging sustainable investments and increasing job opportunities | - Providing new commercial places - Take advantage of the possibilities available on the site that increase job opportunities. |
| | Preserving commercial heritage resources | - Preserving domestic products - Providing domestic product production |
| | Infrastructure rehabilitation | - Infrastructure rehabilitation |
| | Urban structures repair | - Re-updating heights |
| | Re-use of old parts | - Re-use of all discarded spaces, places and buildings |
| | Risk & disaster preparedness | - Providing appropriate fire regimes - Providing rain and flood drainage network |
| | Strategically marketing for activities | - Providing visual, audible and readable means that work on marketing local products |
| The Natural and Cultural Environment | Availability of green areas | - The presence of green areas - The availability of maintenance elements for green spaces |
| | Respecting local communities | - Preserving the city's identity |
| | Respecting the aesthetic value | - Preserving traditional aesthetics |
| | Revitalizing the historical image | - Encouraging the spread and improvement of the historical image |
| | Re-planning in the traditional historical framework | - Use of historical items and elements |
| | Providing climate protection elements | - Providing passage coverings and shading - Providing climate soothing elements |
| | Integration of the heritage and cultural plan with the government plan | - The city adopts the development plan within the framework of heritage preservation |
| | Respect the daily activities of the population | - Avoiding negatively affecting local residents residing in the area |

| | | |
|---------------|--|--|
| Social | Respect cultural value | - Avoid influencing the local cultural environment |
| | Preserving traditional crafts | - Providing places to sell traditional crafts products |
| | Meet the needs of different types of users | - Appropriate development that fits all types of users |
| | Community and qualitative participation | - Presenting development proposals to the local community |
| | Respecting local communities to reach cultural sustainability | - Respecting customs and traditions |
| | Social risk analysis | - Respect the privacy of communities |
| | Improving the quality of life for local residents | - Giving attention to areas of residential population surrounding the areas of development |
| | Preserving the cultural memory | - Providing elements of cultural identity |

6. Field Study (The historical Center of Aswan City)

6.1. introduction

An important area was chosen in the center of the historic city of Aswan in Egypt, which is one of the most important cities in southern Egypt located on the eastern shore of the Nile and is Egypt’s southern gate. Its population is 1,480,284 people, and it includes the most important tourist attractions such as the Temple of Philae, Elephantine Island, and the cemeteries of the Nobles, the Temple of Abu Simbel, the Monastery of St. Simeon, the Unfinished Obelisk, the Island of Agilkia and Amon Island. This research study is concerned with the area of the Station Square, which faces Aswan’s railway station as well as the old tourist market and is considered one of the most important areas for tourist visitors. The study also covers the Old Tourist Market and Durrat El Nil Park adjacent to the station square as well. As this area is considered one of the most important areas in the historic center of Aswan, the study area was developed during the year 2020-2021 and this research monitors the situation before and after the development.



Figure 7. Shows the three places of Field Study (researcher, 2021)

6.2. Urban Studies for Selected Areas

- **The The Station Square:** It is considered the first urban interface with which any tourist or visitor of Aswan sees first through the railway, and therefore it greatly effects the mental image of the visitors. The station square is one of the most influential part of their evidentiary impressions of that ancient city.
- **The Old Tourist Market:** The tourist market axis is one of the important landmarks in the city of Aswan, which has a large traffic volume of visitors. Its importance appears from its quality and how near it is to Aswan’s railway station, as it is considered a first choice for all visitors and the travellers to the city.
- **Durrat Al Nil Park:** It faces directly the governorate building. It has two views; the Nile, and the station square, so its importance comes from its location. Most visitors of Aswan like to visit this park as it is near from the Nile.












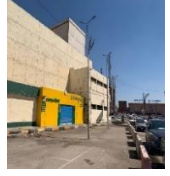


Figure 8. Shows the selected areas (researcher, 2021)

6.3. Studying the Current Situation

6.3.1. The Current Situation Study

Through the field study of the station square, some problems were identified, which will be listed as follows:













Table 3.the station square' field study (researcher, 2021).

| | | | |
|--|--|---|--|
| <ol style="list-style-type: none"> 1. Many traffic intersections between pedestrian paths and vehicles. 2. The traffic intersection at the entrance of the square, on the Nile road side leads to severe crowds. |  |  |  |
| <ol style="list-style-type: none"> 3. The lack of dedicated places to wait for the tourist buses; thus, causing traffic jam in the square. 4. Visual distortion around the distinctive signs in the square and the lack of taking care of it. |  |  |  |
| <ol style="list-style-type: none"> 5. The lack of assembly places, waiting areas, and seating spaces suitable for visitors, even though there is more than enough space. 6. The absence of a unified or distinct character for facades overlooking the square. |  |  |  |
| <ol style="list-style-type: none"> 7. Visual distortion due to the spread of cafes, the prominences of shops and stalls, lacking the optimal utilization of space in terms of Urban aspects even though the site is in a distinguished location and large space. |  |  |  |

6.3.2. *The Old Tourist Market*

Through the field study of the Old Tourist Market, some problems were identified, which will be listed as follows:

Table 4.the Old Tourist Market' field study (researcher, 2021).

| | | | |
|---|---|--|---|
| <ol style="list-style-type: none"> 1. The lack of good architectural and urban treatment for entrances. 2. There is no unified character for storefronts. |  |  |  |
| <ol style="list-style-type: none"> 3. Randomness of storefront banners. 4. Visual and psychological disturbance and for upper levels within the market axis. |  |  |  |
| <ol style="list-style-type: none"> 5. Overlapping of car and pedestrian roads at main intersections. 6. The spread of street vendors on the market axis. 7. The lack of recreational activities. |  |  |  |
| <ol style="list-style-type: none"> 8. The absence of grouping and seating spaces for buyers and users in the market. 9. Shopkeepers exhibit their goods on the market axis. |  |  |  |

6.3.3. *Durrat Al Nil Park*

Through the field study of Durrat Al Nil Park, some problems were identified, which will be listed as follows:

Table 5. Durrat Al Nil Park 'field study (researcher, 2021).

| | | | |
|---|---|--|---|
| <p>1. Many traffic intersections between pedestrian paths and vehicles.</p> <p>2. The lack of designated parking spaces.</p> |  |  |  |
| <p>3. The randomness of urban planning, where buildings are not directed to the most important local view, which is the governorate building.</p> |  |  |  |
| <p>4. Wasting space and not making good use of it.</p> |  |  |  |
| <p>5. Landscape randomness such as in palms and trees.</p> |  |  |  |

6.4. Development Proposals

6.4.1. Station Square Development

A set of design decisions have been taken to develop beautify and raise the efficiency of the Station Square area, which will be listed as follows:

- A visual study of the urban perimeter of the station square. As a result, the work is done to remove visual distortions and restore its formulation using some traditional elements and adding arcades that include commercial and entertainment areas inside and above them.
- Paying attention to the distinctive visual mark in the square through visual initialization for it through hardscape and soft scape elements.
- Preparing the visual entry of people coming from the Nile side road, by adding some elements like arcades that stresses the coaxial and direction of the station.
- Creating gathering places in the square for visitors and providing shaded seating areas along the square.
- Solve the traffic intersections between pedestrian and vehicle paths found in the square, by diverting the movement of cars around the square and emptying the main square for pedestrians only.
- Re-planning planning the roads in the square area and its surroundings, where parking spaces for tourist buses were provided in front of the station.
- the facades of buildings overlooking the square by trying to unify the character and remove the visual distortions in it, such as protrusions of shops and cafeterias.

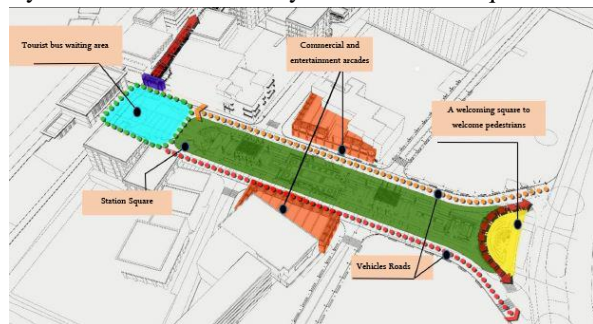


Figure 9. Shows the set of design decisions to upgrade the square (researcher, 2021)

- Using the size of the large square and its distinguished location in creating distinct spatial urban solutions on both sides of the field that are used as investment areas (historical Arcades), cafeterias and restaurants that feature a visual view of the square field as well as the Nile.



Figure 10. Shows the design features used in the station square (researcher, 2021).

Figure 11. Shows the traffic intersections in the station square (researcher, 2021)



General site layout of the Station Square.



A perspective shot showing the Station Square.

Figure 12. Shows the different perspectives and details in the station square (researcher, 2021)

6.4.2. The Old Tourist Market Development

A set of design decisions have been taken to develop, beautify and raise the efficiency of the Station Square area, which will be listed as follows:

- The market starts from the Station Square, and the main gate of the market is placed directly on the square.
- Transforming the street linking the beginning of the Old Tourist Market and the Station square into a pedestrian area only
- Creating nodes in places that allows and provides open areas to set in.
- Working on creating intersections between pedestrian and vehicle paths by relieving the pressure of the movement of vehicles and through the development of a traffic plan that reduces the pressure on the roads that cross the axis of the market
- Putting speed bumps in places of intersections between pedestrian and vehicle paths to help calm the traffic of vehicles.
- Repairing the tiles in the entire market through the use of granite and basalt.
- Refiguring the character of storefronts so they can be standardized by using traditional elements conveying the history of the city of Aswan.
- Placing signs bearing the names of the stores, as it the most important part of the storefront.
- The spaces between stores must be clear.
- Studying the storage of each store according to its type.
- Covering the tourist walkway with a canopy of wood that is held up on wooden trusses separated from the construction work of neighboring buildings.

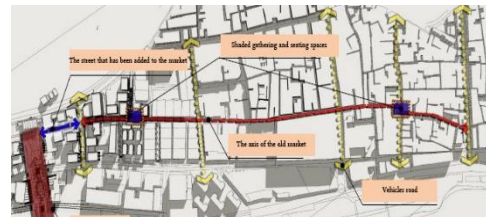


Figure 13. Shows the details in The Old Tourist Market (researcher, 2021)

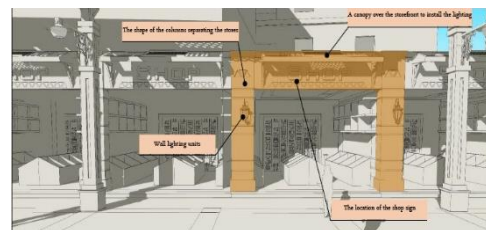


Figure 14. Shows the Gate feature of The Old Tourist Market (researcher, 2021).

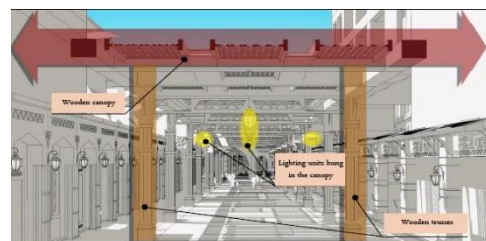


Figure 15. Shows the shading details in The Old Tourist Market (researcher, 2021)

- Studying the shading during the period of sunrise.
- using water sprinklers that humidify the air.

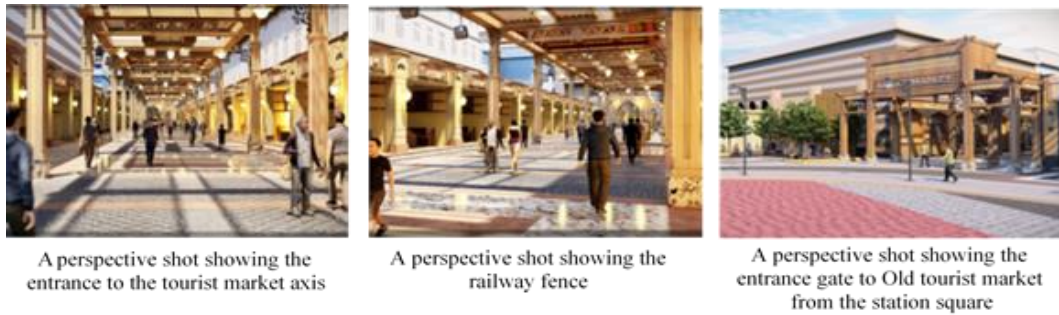


Figure 16. Shows the street shading details in The Old Tourist Market (researcher, 2021).

6.4.3. The Durrat Al Nil Park Development

A set of design decisions have been taken to develop, beautify and raise the efficiency of the Station Square area, which will be listed as follows:

- Giving a symbolic significance to it as a memorial space in front of the governorate building.
- The philosophical idea was based on the symbolism of the Nile River represented in the circular square that has statues of the most important figures in Egypt, such as leader Gamal Abdel Nasser, leader Anwar El Sadat, the current leader El Sisi, and the most famed current scientists such as Dr. Magdi Yacoub
- Emphasising on the perpendicular axis on the governorate building, which gives support to the entrance of the square from the Nile side road to the direct access of main entrance of the governorate building.
- Providing car parking areas on both sides of the square.
- Sufficient distribution of seating areas shaded by pergolas.
- Sufficient distribution of green spaces.



Figure 17. Shows the prespective of Durrat Al Nil Park (researcher, 2021)

6.5. Monitoring the reality after implementing the development proposals

In this part of the research, what has been implemented will be checked and measured through the criteria that have been reached in the theoretical part to find out the points of strength that have been reached and to know the incomplete points and recommend applying them in other future plans. Depending on the previous, the criteria are tested through the theoretical study and formulated to become a method for preserving important areas in historical city within the framework of cultural heritage management and sustainable tourism.

6.5.1. The Station Square

By observing the Station Square, the following have been noticed:

- A welcoming gate are built facing visitors coming from the Nile road side.
- The visual image of the current biosphere in the front of the square have been adjusted and adding arcades (shops and bazaars) with respect to the heritage style.
- Car parking areas have been provided next to the station building.
- Yards, seating spaces, nodes and a dancing fountain have been made.

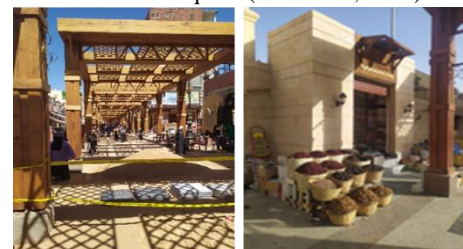


Figure 18. Shows the shading in the station square (researcher, 2021)

6.5.2. The Old Tourist Market

By observing the Station Square, the following have been noticed:

- A main gate exists to enter the tourist market, directly in the front of the Station Square.
- The character of storefronts are unified to have a heritage connotation.



- The tourist market has wooden shades.
- Suitable lighting exists for the walkway of the tourist market..
- Provide the appropriate lighting for the path of the tourist market.
- Paving the market with Aswanite granite, which gives an indication of the local use of raw materials, that further emphasizes the identity of the city.
- The air is humidified by using fans and water sprinklers .
- The air temperature is humidified by fans and water sprinklers .

Figure 19: Shows some details in the old Tourist Market (Researcher, 2021)



Figure 20: shows some details in Durrat Al Nil Park.(Researcher, 2021)

6.5.3. Durrat Al Nil Park

By observing the Station Square, the following have been noticed:

- A circular waterway has been observed, which gives symbolic significance to the Nile.
- A memorial martyrs’ monuments have been observed with the names of the martyrs on it.
- Arcade gates has been observed to emphasize the axially square entrance.
- Making pergolas and seating spaces exist in the front of the waterway.
- Making pergolas and seating spaces are equally distributed in the square, emphasizing on the square symmetry.
- car parking areas exist.

6.6. Reality measurement before and after implementing development proposals

In this part of the research, the measurement is made through the criteria that have been reached in the theoretical part; the criteria of managing cultural heritage in the context of sustainable tourism. This helps to figure if these criteria are really exist or not which helps to find the difference between before and after development proposals. Have these criteria conserved the value and the importance of these historical areas or not? As a result, the weakness points can be presented to have a general satisfied perspective depending on the importance of these areas.

6.6.1. Reality measurement before implementing development proposals

The following table is showing the main three criteria application before implementing development in the three study areas:

Table 6.measuring the reality before implementing in the selected study area (researcher, 2021)

| Criteria | Elements | | Station Square | | Old Tourist Market | | Durrat Al Nil Park | |
|---------------------------|--|-----------------------------------|----------------|----|--------------------|----|--------------------|----|
| | | | YES | NO | YES | NO | YES | NO |
| Economic And Urban | Diversity of land uses | - Commercial | ✓ | | | ✓ | | ✓ |
| | | - Social | | ✓ | ✓ | | ✓ | |
| | | - Entertainment | | ✓ | ✓ | | | ✓ |
| | Distribution of job activities to suit all age groups | - Elderly | | ✓ | ✓ | | ✓ | |
| | | - Children | | ✓ | ✓ | | ✓ | |
| | | - Providing new commercial places | ✓ | | | ✓ | | ✓ |

| | | | | | | | | |
|---|--|--|---|---|---|---|---|---|
| | Encouraging sustainable investments and increasing job opportunities | - Take advantage of the possibilities available on the site that increase job opportunities. | | ✓ | | ✓ | | ✓ |
| | Preserving commercial heritage resources | - Preserving domestic products | | ✓ | | ✓ | | ✓ |
| | | - Providing domestic product production | ✓ | | | ✓ | | ✓ |
| | Infrastructure rehabilitation | - Infrastructure rehabilitation | | ✓ | | ✓ | | ✓ |
| | Urban structures repair | - Re-updating heights | | ✓ | | ✓ | | ✓ |
| | Re-use of old parts | - Re-use of all discarded spaces, places and buildings | | ✓ | | ✓ | | ✓ |
| | Risk & disaster preparedness | - Providing appropriate fire regimes | | ✓ | | ✓ | | ✓ |
| | | - Providing rain and flood drainage network | | ✓ | | ✓ | | ✓ |
| Strategically marketing for activities | - Providing visual, audible and readable means that work on marketing local products | | ✓ | | ✓ | | ✓ | |
| The Natural And Cultural Environment | Availability of green areas | - The presence of green areas | | ✓ | ✓ | | ✓ | |
| | | - The availability of maintenance elements for green spaces | | ✓ | | ✓ | | ✓ |
| | Respecting local communities | - Preserving the city's identity | | ✓ | ✓ | | | ✓ |
| | Respecting the aesthetic value | - Preserving traditional aesthetics | | ✓ | | ✓ | | ✓ |
| | Revitalizing the historical image | - Encouraging the spread and improvement of the historical image | | ✓ | | ✓ | | ✓ |
| | Re-planning in the traditional historical framework | - Use of historical items and elements | | ✓ | | ✓ | | ✓ |
| | Providing climate protection elements | - Providing passage coverings and shading | | ✓ | ✓ | | | ✓ |
| | | - Providing climate soothing elements | | ✓ | | ✓ | | ✓ |
| | Integration of the heritage and cultural plan with the government plan | - The city adopts the development plan within the framework of heritage preservation | | ✓ | | ✓ | | ✓ |
| | Respect the daily activities of the population | - Avoiding negatively affecting local residents residing in the area | ✓ | | ✓ | | ✓ | |
| Social | Respect cultural value | - Avoid influencing the local cultural environment | ✓ | | | ✓ | | ✓ |
| | Preserving traditional crafts | - Providing places to sell traditional crafts products | ✓ | | | ✓ | ✓ | |
| | Meet the needs of different types of users | - Appropriate development that fits all types of users | ✓ | | | ✓ | | ✓ |
| | Community and qualitative participation | - Presenting development proposals to the local community | | ✓ | | ✓ | | ✓ |
| | Respecting local communities to reach cultural sustainability | - Respecting customs and traditions | | ✓ | ✓ | | ✓ | |

| | | | | | | | | |
|--|--|--|--|---|--|---|---|---|
| | Social risk analysis | - Respect the privacy of communities | | ✓ | | ✓ | ✓ | |
| | Improving the quality of life for local residents | - Giving attention to areas of residential population surrounding the areas of development | | ✓ | | ✓ | | ✓ |
| | Preserving the cultural memory | - Providing elements of cultural identity | | ✓ | | ✓ | | ✓ |

The result of the previous table appears as in the following:

Table 7.the measurement results of the preformed criteria before the development proposals (researcher, 2021).

| Selected areas | The station square | The Old Tourist Market | Durrat Al Nil Park |
|--|--|--|--|
| The total number of criteria | 33 | 33 | 33 |
| The total number of standards achieved before implementing the development proposals | 8 | 7 | 9 |
| The total number of unfulfilled criteria | 25 | 26 | 24 |
| The situation before development of the ststion square | $100 \times 8 / 33 =$ approximately 25% | $100 \times 7 / 33 =$ approximately 21.2% | $100 \times 9 / 33 =$ approximately 27.2% |
| Total measurement results | | | |

6.6.2. Reality measurement after implementing development proposals

The following table is showing the main three criteria application after implementing development in the three study areas:

Table 8.measuring the reality after implementing in the selected study area (researcher, 2021).

| Criteria | Elements | Station Square | | Old Tourist Market | | Durrat Al Nil Park | |
|---------------------------|--|-----------------------------------|----|--------------------|----|--------------------|----|
| | | YES | NO | YES | NO | YES | NO |
| Economic And Urban | Diversity of land uses | - Commercial | | ✓ | ✓ | | ✓ |
| | | - Social | ✓ | | ✓ | | ✓ |
| | | - Entertainment | ✓ | | | ✓ | ✓ |
| | Distribution of job activities to suit all age groups | - Elderly | ✓ | | ✓ | | ✓ |
| | | - Children | ✓ | | | ✓ | ✓ |
| | | - Providing new commercial places | | ✓ | ✓ | | ✓ |

| | | | | | | | | |
|---|--|--|---|---|---|---|---|---|
| | Encouraging sustainable investments and increasing job opportunities | - Take advantage of the possibilities available on the site that increase job opportunities. | ✓ | | ✓ | | ✓ | |
| | Preserving commercial heritage resources | - Preserving domestic products | | ✓ | ✓ | | | ✓ |
| | | - Providing domestic product production | | ✓ | ✓ | | | ✓ |
| | Infrastructure rehabilitation | - Infrastructure rehabilitation | ✓ | | ✓ | | ✓ | |
| | Urban structures repair | - Re-updating heights | ✓ | | ✓ | | ✓ | |
| | Re-use of old parts | - Re-use of all discarded spaces, places and buildings | ✓ | | ✓ | | ✓ | |
| | Risk & disaster preparedness | - Providing appropriate fire regimes | ✓ | | ✓ | | ✓ | |
| | | - Providing rain and flood drainage network | ✓ | | ✓ | | ✓ | |
| Strategically marketing for activities | - Providing visual, audible and readable means that work on marketing local products | ✓ | | | ✓ | ✓ | | |
| The Natural And Cultural Environment | Availability of green areas | - The presence of green areas | ✓ | | | ✓ | ✓ | |
| | | - The availability of maintenance elements for green spaces | ✓ | | | ✓ | ✓ | |
| | Respecting local communities | - Preserving the city's identity | ✓ | | ✓ | | ✓ | |
| | Respecting the aesthetic value | - Preserving traditional aesthetics | ✓ | | ✓ | | ✓ | |
| | Revitalizing the historical image | - Encouraging the spread and improvement of the historical image | ✓ | | ✓ | | ✓ | |
| | Re-planning in the traditional historical framework | - Use of historical items and elements | ✓ | | ✓ | | ✓ | |
| | Providing climate protection elements | - Providing passage coverings and shading | ✓ | | ✓ | | ✓ | |
| | | - Providing climate soothing elements | | ✓ | ✓ | | | ✓ |
| | Integration of the heritage and cultural plan with the government plan | - The city adopts the development plan within the framework of heritage preservation | ✓ | | ✓ | | ✓ | |
| Respect the daily activities of the population | - Avoiding negatively affecting local residents residing in the area | ✓ | | | ✓ | ✓ | | |
| Social | Respect cultural value | - Avoid influencing the local cultural environment | ✓ | | ✓ | | ✓ | |
| | Preserving traditional crafts | - Providing places to sell traditional crafts products | | ✓ | ✓ | | | ✓ |
| | Meet the needs of different types of users | - Appropriate development that fits all types of users | ✓ | | | ✓ | ✓ | |
| | Community and qualitative participation | - Presenting development proposals to the local community | ✓ | | ✓ | | ✓ | |
| | Respecting local communities to reach cultural sustainability | - Respecting customs and traditions | ✓ | | ✓ | | ✓ | |

| | | | | | | | | |
|--|--|--|---|--|---|---|---|---|
| | Social risk analysis | - Respect the privacy of communities | ✓ | | ✓ | | ✓ | |
| | Improving the quality of life for local residents | - Giving attention to areas of residential population surrounding the areas of development | ✓ | | | ✓ | | ✓ |
| | Preserving the cultural memory | - Providing elements of cultural identity | ✓ | | ✓ | | ✓ | |

The result of the previous table appears as follows:

Table 9.the measurement results of the preformed criteria after the development proposals (researcher, 2021).

| Selected areas | The station square | The Old Tourist Market | Durrat Al Nil Park |
|---|--------------------------|--------------------------|--------------------------|
| The total number of criteria | 33 | 33 | 33 |
| The total number of standards achieved after implementing the development proposals | 27 | 25 | 26 |
| The total number of unfulfilled criteria | 6 | 8 | 7 |
| The situation after development of the ststion square | 27/33= approximately 81% | 25/33= approximately 75% | 26/33= approximately 78% |
| Total measurement results | | | |

6.7. General conclusions of the research study

1. By conducting the measurement process for the heritage areas before the development, which was based on **the criteria derived from the theoretical study the following was noted:**

The measured heritage areas (Station Square - Tourist Market - Durrat al-Nil Park) are dilapidated due to obtaining low percentages in terms of economic and urban standards such as (rehabilitation of infrastructure - repair of urban structures - reuse of old parts - lack of Risk Preparedness - etc.)

The inappropriateness of the visual image of the three areas because of obtaining low percentages in the measurement criteria of aesthetic values, the respect for the historical image and the preservation of the identity.

There is respect for craftsmanship, heritage and local products, as these elements are available in these areas prior to development.

Thus, it is really clear that these areas are not suitable, whether in urban, economic, social or cultural terms with the nature of this ancient historical city.

2. After conducting the measurement process for the three areas, after the development process, which was **based on the criteria drawn from the theoretical study, the following was noted:**

The success of the development process, as the measurements of the three regions obtained high rates after implementing the development proposals.

After implementing the development proposals and reaching a sustainable visual balance in the three areas (Al Mahatta Square - Old Tourist Market - Durrat Al Nil Park). Thus, it becomes clear that the development proposals serve the principles of cultural heritage management in the context of sustainable tourism.

6.8. Results

The cultural heritage management criteria have been found through the tourist sustainable and which have been proved. Where these achieved criteria after the implementation have presented high rates (the field of the station 81% - the old tourist market 75% - the Durrat al-Nil Park 78%) and these criteria were based on covering the dimensions and axes of cultural heritage in the context of sustainable tourism and it is (economic and urban - the natural and cultural - social environment. All the previous can be presented in the following form:

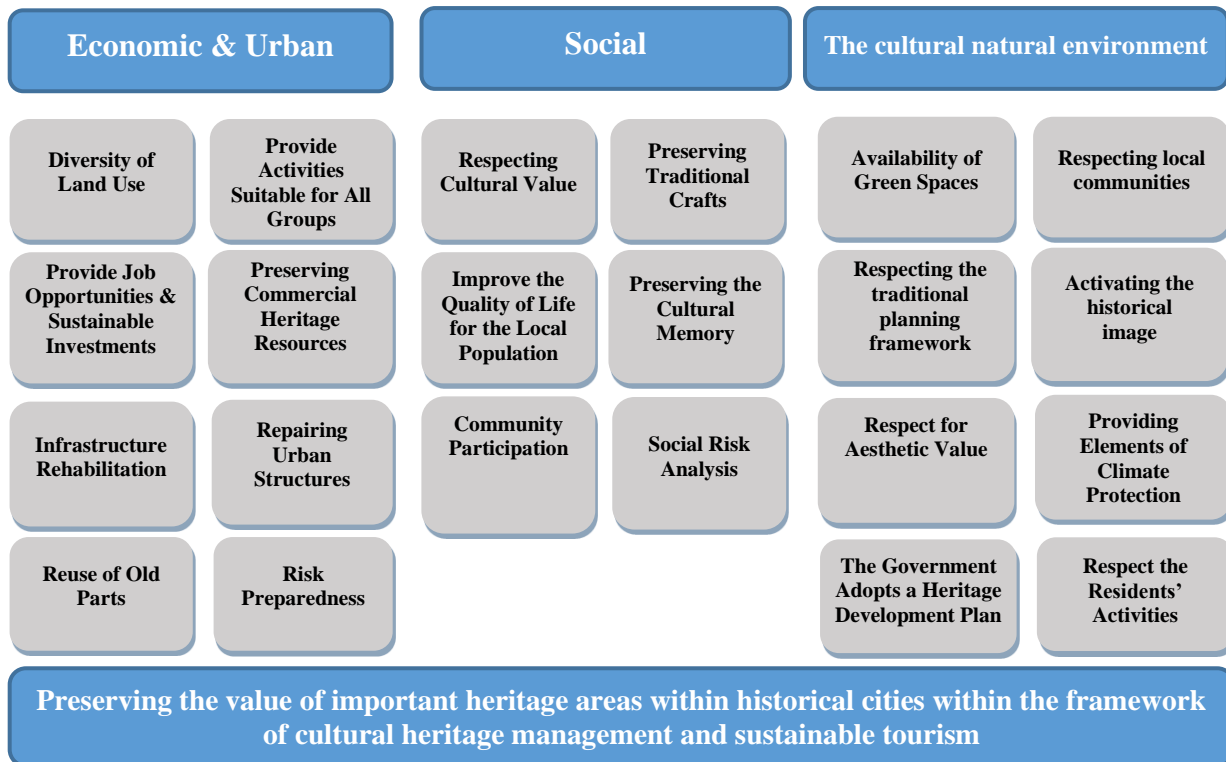


Figure 21. Shows the criteria for value preserving within the framework of cultural heritage management & sustainable tourism (researcher, 2021)

6.9. Recommendations

The three areas are still in a need to overcome their weaknesses points, Such as:

- Encouraging Encouraging sustainable investments and increasing job opportunities.
- Providing visual, audible and readable means that work to market local products.
- Encouraging the awareness among the residents of these areas to maintain development and focus on improving the quality of life for the local population.
- Re-study the immediate biosphere in the three study areas, as a result of the difference between the areas that have been developed and their immediate vicinity.
- The three areas are still in a need to more entertainment elements and providing areas for children, especially in the old tourist market.

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