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APPLIED STUDIES ON ENHANCING PUBLIC OPEN SPACES OF THE COASTAL CITIES: THE CASE OF TRIPOLI CITY_ URBAN COMMUNITY OF AL-FAYHAA

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APPLIED STUDIES ON ENHANCING PUBLIC OPEN SPACES OF THE COASTAL CITIES: THE CASE OF TRIPOLI CITY_ URBAN COMMUNITY OF AL-FAYHAA

Abstract

Over the past three decades there has been a tremendous transformation in cultural heritage, both in terms of practices and in the understanding of cultural heritage. These changes are very much connected to wider changes in the very nature of culture and reflect major social and political transformation. They are also very much evident in the re-shaping of public space in more inclusive ways for diverse histories and experiences (Gerard Delanty). Furthermore, having cultural features in the public spaces of the cities contributes in bringing communities together and strengthening the local economy as well. Thence, enhancing heritage and innovations in public spaces may act as an effective key for building more sustainable societies. Lebanon is suffering from shortage of natural and urban public spaces due to the Lack of planning and regulations that protect these spaces and the increase in population diversity leading to the expansion of unorganized urban growth. The Aim of the study is developing guidelines in order to evaluate the influence of technology in conserving the cultural heritage and creating the conditions for increased urban development in Tripoli coastal cities precisely Qalamoun town. The main Objectives of the study is to determine the ability of technology tools in improving the urban development of coastal cities associated with cultural heritage, and to deduce the applicable technology tools for conserving and managing cultural heritage in Al-Fayhaa cities. This paper is based on literature review, analytical quantitative study. In addition to a comparative analysis of international case studies done in an earlier stage that helps in deducing the convenient tools that can be relied upon in the Qalamoun case. The purpose of this paper is to emphasis that integrating technologies into the open public spaces of the old cities with cultural heritage identity is a must to maintain the resilient and continuation of these cities. Moreover, the interfering of such kind of tools must be used to both conserve cities identity, and to provide new conditions to match the requirements of the current era inhabitants.

Keywords

Cultural Heritage, Public open spaces, Community of Al-Fayhaa Union, Technology Tools, Qalamoun, Sustainable development.

1. INTRODUCTION

Public spaces are important elements for the proper functioning of cities. Old cities are characterized by the presence of long and interesting history. These historic spaces consist of tangible cultural heritage and historic connections and feelings engraved in the mind of citizens. It was stated by Dominika HOLUJ in her article *“Public Spaces and Cultural Heritage in Community Projects”* that if we assume that the resources existing in public spaces can work on boosting the development potential of the cities, then the question that shall be put up is: In what situations and cases these resources may act as an efficient element in increasing historic cities development potentials?

Moreover, in an article published by UNESCO in the 2016 and under title *Culture in Public Spaces – Key for Shaping a New Urban Agenda*, had been mentioned that urban open public spaces are getting demised day after day due to man action and behavior, leading to neglecting these spaces and this is due to the appearance of new needs. Thus, changing these spaces to places with no shape and no name. This phenomenon has damaged the identity of these spaces especially the ones with cultural heritage values.

The Journal of public spaces, an online resource, in partnership with UN-Habitat and in regards to the Lebanese public spaces, had indicated in its article *“Lebanon Cities’ public spaces”* that the percentage of these spaces has dropped to less than the recommended area in the city Beirut. Moreover, Tripoli’s situation is considered similar to that of Beirut, and its losing its spaces as well. Tripoli is considered as the country’s second capital and one of the most important cities in the region. The city of Tripoli has several features and characteristics as its cultural heritage identity, its geographic centrality and topographic locality. The city of Tripoli is characterized by its cultural heritage identity and enjoys both a geographic centrality and topographic that should have guaranteed it significant advantage over most of its neighboring coastal cities.

Therefore, the current situation of public spaces in Tripoli can be summarized as: the privatization of public spaces, the lack of spaces dedicated for public benefit, the plurality of actors and policies, the lack of maintenance and the lack of awareness when it comes to the rights and obligations of citizens.

All in all, the Lebanese cities are suffering from severe shortage of open public spaces, green spaces and spaces that are distinguished by historical and cultural values. Thus, the aim is to develop effective guidelines to conserve the cultural heritage identity and to increase the urban development process in the Lebanese coastal cities.

Moreover, the composite and the content of public spaces form the cultural identity of a region, add a unique character and create the feeling of sense belonging to the place for local communities. For this to be achieved, integration of new techniques is therefore a necessity.

2. METHODOLOGY

This study is based on literature review and on analytical, qualitative study. Also, a comparative analysis of similar cases from Portugal and Austria was carried out earlier in a separate research to support the intended guidelines and findings that shall be attained.

Literature review on digital technology tools in the public spaces and type of digital practices that could be included in these spaces associated with cultural heritage. In addition, definitions are stated to cultural heritage, its values and role and the public spaces transformation in the digital era.

As the study inquiries the phenomenon of degradation of open public spaces, using the theoretical framework and reviewing existing knowledge and descriptive memory to collect data required to understand the causes that leads neglecting of these spaces, mainly Northern Lebanese cities, and to identify elements affecting on the transformation of Tripoli and the surrounding towns urban public spaces.

At last, conclusions and guidelines based on the AFSDS study, Al-Qalamoun strategic plan and the comparative analysis to appraise the application of this approach on Tripoli coastal cities, Al-fayhaa community union, and on further cases to improve the Lebanese cities current situation.

3. LITERATURE REVIEW

3.1. Cultural Heritage (Ch)

Cultural Heritage is an expression of the ways of living developed by a community and passed on from generation to generation, including customs, practices, places, objects, artistic expressions and values. Cultural Heritage is often expressed as either Intangible or Tangible Cultural Heritage (ICOMOS, 2002). Cultural Heritage is a reflection of people's ever-changing values, beliefs, knowledge and traditions that have reached today.

The heritage value of a site, building or object lies in its cultural significance, which is a combination of historical, symbolic, spiritual, aesthetic and social values (cf. Sable & Kling 2001; Throsby 2001, 84–85):

Table 1: Values of Cultural Heritage **Source:** Researcher based on: cf. Sable & Kling 2001; Throsby 2001, 84–85.

Historical value:	It gives sense of continuity and create a strong connection with the old past.
Symbolic value:	It enhance the cultural identity and enforce/strengthen the power of certain places.
Spiritual value:	It arises new ideas and thoughts in regards of religion and sacred practices.
Aesthetic value:	It shows the aesthetic quality of an object or place, and it may develop more creative and inspired elements.
Social value:	It contribute in promoting social cohesion in communities through the exchange of social experiences.(e.g., “pride of place”)

3.2. Cultural Heritage Protection And Urban Development

A publication in the 2014 “Bridging the gap between urban development and cultural heritage protection” the author highlighted on the urban and cultural heritage monitoring tools and their possible co-creations and it is as following:

On the Strategic level: Recommendations to integrate heritage conservation in urban planning and policies:

- To achieve the social equity, based on the identity and the conservation of the natural and cultural diversity.
- To preserve and enhance the tangible and intangible cultural heritage that exist in the cities communities; as heritage has been identified as a key element in shaping the city identity.
- To develop the capabilities of cities to compete globally.
- To include development practices “that recognize and manage environmental and cultural heritage and values in a more sustainable way”.

On the Operational level: By referencing the integration of heritage conservation and urban planning as best practice:

- To reactivate the urban economy and refinement of public spaces.
- To improve the physical status of conservation in World heritage cities.
- To comprise heritage management; Consequently, supporting the promotion of the local heritage to enter into the World Heritage List.
- To activate urban economic along with the local and international tourism but also enhancing the local identity.

3.3. Interactive Technology In Public Spaces

Interactive public displays and interfaces are becoming a new digital layer that is redefining public spaces. Designed with a high tech infrastructure, interactive public displays create a new kind of habitable, alluring, and viable public spaces introducing new forms of multimedia presentation and a new user experience with which people want to engage. Below are some important developments facilitating the adoption of interactive technology in public spaces:

Table 2: List of technology tools in public spaces Source: Researcher based on: Katie Rogina, A Collection of Expertise, Advice & Musings October 18, 2017.

New display technology such as LED technology with strong colors and impressive performance, projections, digital signage with system-on-chip displays and 3D displays.
Customer intelligence gathering software, which gathers and analyzes information in regards to customers. Thus, to build a deeper and more efficient customer relationships and improve strategic decision making.
Mobile integrations such as custom apps that allow customers to access additional product information, purchase items, provide feedback, or share across social media.
Touch-screen object recognition software coupled with object-recognition software that interacts with objects placed on their surfaces.

Technology needs to be thoughtful and able to speak to every walk of life it encounters. People of all ages are using technology and are plugged in more than they even speak to one another. The more technology is able to have the user interact with an organization’s products or messaging, the more users will be engaged.

3.4. Technology & Cultural Heritage For Urban Development

Considering that technology is a tool that makes the processes of production and development more efficient and effective; therefore, the use of applicable technologies shall provide solutions to the different threats that might affect the diverse tasks and actions which propitiate the competitiveness of the cities. Below are technologies that may be used in conserving and monitoring cultural heritage:

- **Architectural, cultural and artistic heritage in the cities:** In order to protect the heritage of cities there are several tools that are considered useful and might help in the task of conservation, preservation and restoration:

Digital photogrammetry:	Takes measures to feed the urban information systems in cities.
Technologies of laser cleaning:	Technique that is used to remove grime & noxious layers that sticks to the surfaces of old buildings.
Bio-remediation:	Convert toxic materials that harm and may causes environmental issues.
Isotopic technologies	Incorporation of ancient and original materials to use it for the conservation and rehabilitation of historic places and spaces.

- **Use of urban soil:** Technologies that can be used to promote the sustainable development process of the cities in regards of the use of urban soil:

Table 3: Technology tools in relation to urban development. Source: Hernández-Moreno, Current technologies applied to Sustainable urban development.

Geographic Information Systems GIS:	As stated by Tomlin in the year 1990, that GIS can help in visualizing geographic development and conceive characteristics by using the geographic and statistical databases.
Virtual Reality Technologies VR:	As defined by Rosindo in the year 2006, it is a 3D model that can evaluate the impact of the environment on a place and promote the decision making in term of urban regional planning.
“Airborne” type laser measurement systems :	Help in creating a virtual construction process that includes virtual planning, controlling and monitoring for the use of soil of the urban areas in the cities.
“Remote Sensing” systems (RS):	It allows the following: <ul style="list-style-type: none"> • Detecting the changes in the use of soil, • Identify the urban sprawl & natural resources, • Help monitoring and controlling the city’s random growth.

Based on the above, it means that the use of new technologies available today which are considered applicable to achieve urban sustainable development in cities rely on the level of growth of each country, depending on its infrastructure system, available specialists, its management programs of urban development and other methods and tools that support their application. Also, rules and codes play an important role in the proper operation of these hi-tech tools as well.

4. APPLIED STUDY: AL-QALAMOUN TOWN

4.1. Methodology

The study is an evaluation of the situation in the Qalamoun town, identifying various aspects and highlighting on the characteristics of the area in order to elaborate a strategic plan for Al-Qalamoun town along with in the AFSDS (Al-Fayhaa Sustainable Development Strategy). The study includes the following:

Diagnostic phase and needs: In this phase study of 16 sectors was done to understand the nature environment of the town. Thus, to determine the critical issues in order to develop a strategic plan to develop actions and activities that will turn the town to a pulsing pole. Based on the transversal reading, **SWOT matrix** was elaborated based on SWOT analysis of each sector.

Theoretical Framework: includes the vision of Al-Qalamoun and on this basis, two strategic axes of development are proposed with the actions that shall be applied in order to achieve the vision stated.

Strategic Framework/Action Plan: This plan, which constitutes a vision for the region, was developed by setting a future sight for the town which is translated into strategic axes, each of which includes a group of actions that shall be applied in order to elaborate the strategic plan.



Fig.1: Study sectors of Al-Qalamoun.Source: Researcher.

Based on a detailed study done for Al-Qalamoun, in a separate research, the following information included in the below section was derived. However, this paper will include and analyze the following sectors from the list determined above:

- Historic and geographic sector
- Social and cultural sector
- Economic activities sector
- Public spaces sector

4.2. Al-Qalamoun Strategic Plan

Historically, Al-Qalamoun had been considered as the center of brass and metal works since a very long time ago. When the metal workers shifted from Tripoli traditional souk known as souk an-Nahassin to Al-Qalamoun. Along the coastal line there are small shops well recognized in the production of handicrafts done on the traditional old way. Also, along the sea at the coastal road, citizens of Al-Qalamoun are best known in selling olive oil, lemon and orange syrups.

Prior this transformation, Al-Qalamoun considered as an agricultural village several decades ago.

Moreover, in modern times Al-Qalamoun has become a center of metal work intended by residents of neighboring area and the surrounding.

Geographically, the shape of the town is rectangular, its length is 3.55 km and its width is 800 meters along the water front. The heights vary between zero meters at the sea level to maximum of 135 meters. The existing of hills with height that exceed 260 meters are located beyond the administrative boundaries of the town.



Fig.2: Photographs from Al Qalamoun. Source: 1997-1999, Børre Ludvigsen

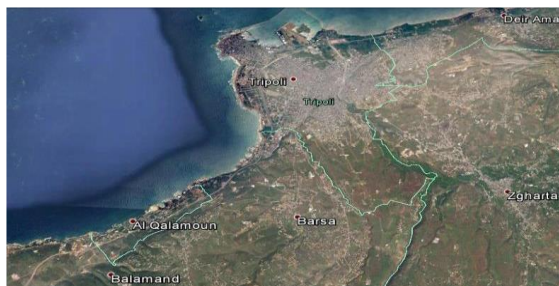


Fig.3: Locality of Al-Qalamoun in its geographic context. Source: AFSDS 2020 plan review.

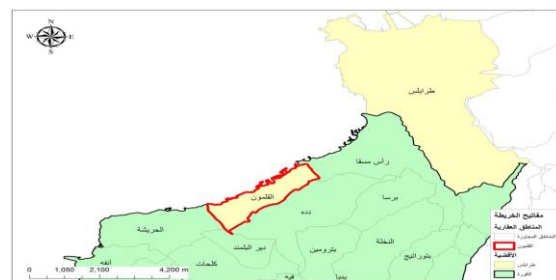


Fig.4: Location of the town in relation to the surrounding towns Source: Researcher

Al-Qalamoun number of population is about 15,000 inhabitants, with nearly 5,000 syrian refugees. The habitants are mainly distributed between the coastal line and the northern highway, mostly at the old center. Families from Tripoli settle at the northeast side of the town in a region composed of scattered villas. The existence of Beirut-Tripoli high way that was constructed in the 1990s led to the separation of the town by cutting it into two parts. Prior the construction of the highway, people heading towards tripoli were using the coastal line and the center of Al-Qalamoun to reach their destinations which helped in supporting the local economy of the town.

Thus, the 3 main arteries in the town are: Beirut- Tripoli highway, the coastal line and the old rail road at the center.



Fig.5: Main axes crossing Al-Qalamoun.
Source: AFSDS 2020 plan review

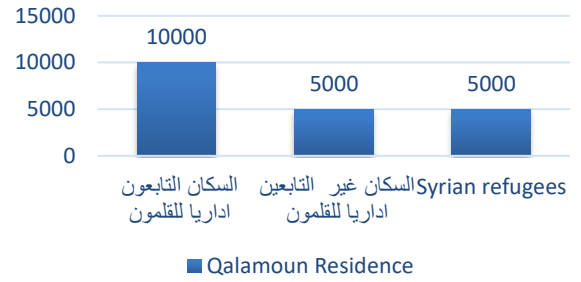


Fig.6: Chart showing population. Source: Researcher

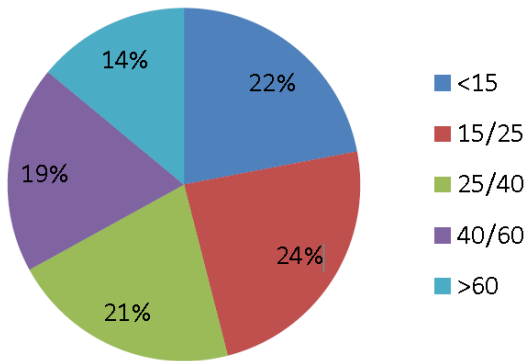


Fig.7: Chart showing Age categories. Source: Researcher

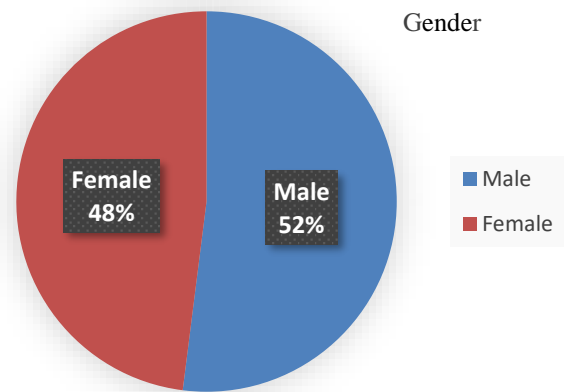


Fig.8: Chart showing Gender ratio. Source: Researcher

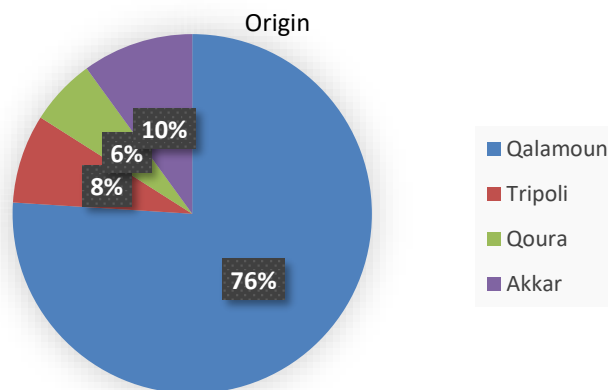


Fig.9: Chart showing Origin of residence. Source: Researcher

In regards to the economic sector, Al-Qalamoun depends mainly on the following:

- Agriculture: the cultivation of citrus fruits and olives.
- Fishing: distributed and sold to the marina resorts located on the coastal line.
- Industry: producing oil, soap, salt, flower water and rose water.
- Trade: shops are located along the coastal line and specialized in hand crafted copper that is still active and considered as a center of attraction for the surrounding until today.

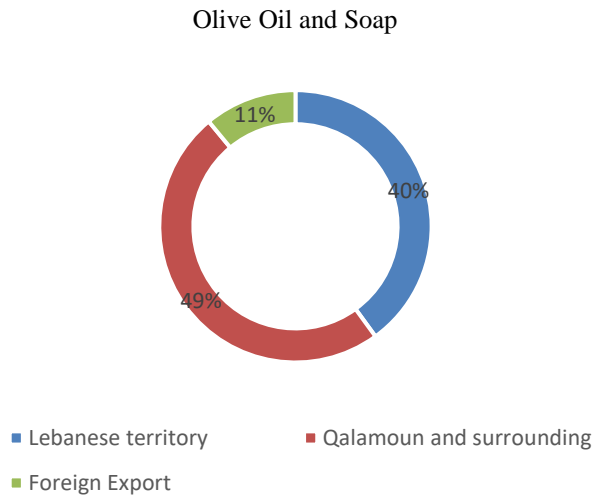


Fig.10: Chart showing Olive production distribution. Source: Researcher



Fig.11: Al-Qalamoun Olive oil products. Source: Researcher

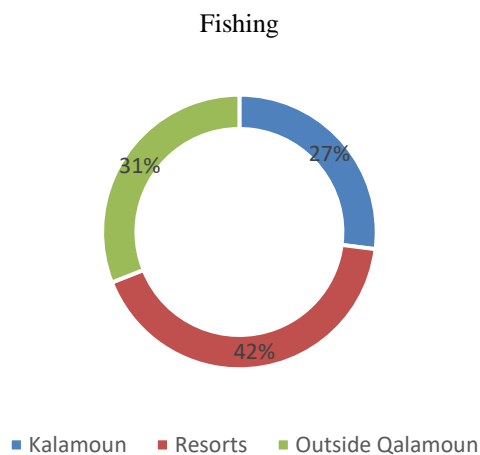


Fig.12: Chart showing Fishing distribution. Source: Researcher



Fig.13: Al-Qalamoun Pier. Source: Researcher

Agriculture

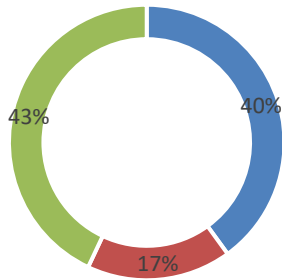


Fig.14: Chart showing Agriculture ratio. Source: Researcher.



Fig.15: Al-Qalamoun Agriculture. **Source:** Researcher

Crafts Profit

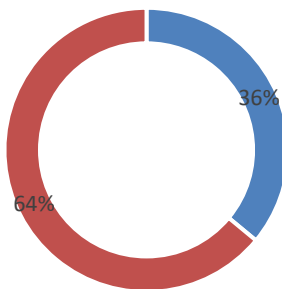


Fig.16: Chart showing Crafts Profit. Source: Researcher



Fig.17: Al-Qalamoun Al-Nahhaseen Souk. Source: Researcher

With reference to the existing public spaces in the town, for the Qalamoun people, the public space is the place where they can spend time and act freely without disturbing others, even if this place is not considered a public place.

In addition, they have advanced in many majors, but without losing the traditions that distinguish Lebanese villages from cities. The Qalamoun men and their meet daily in Al-Qahwi around a card game or table, while the women and children are present in the “Jadidah road” (newly executed street) or in other common places known among the Qalamoun people.

Based on the survey study done among qalamon residence, we concluded that there are certain places in the town that they prefer to spend their time. But this percentage does not exceed 60% and it is distributed as following:

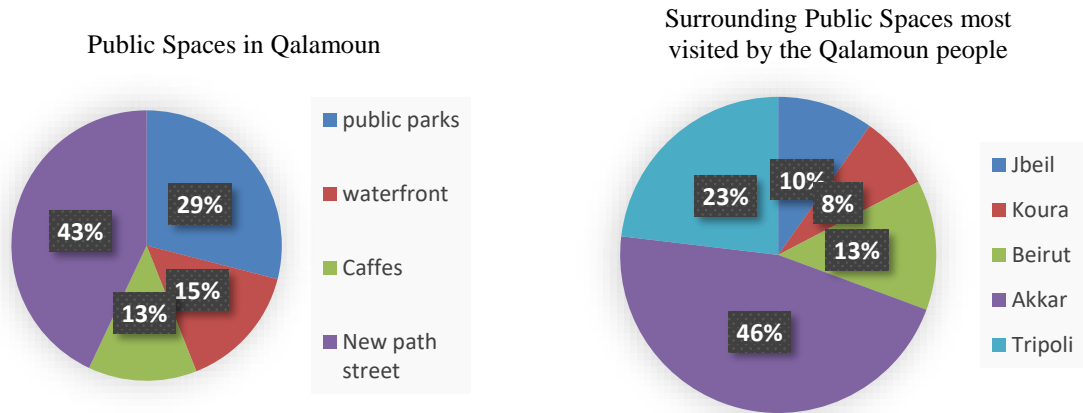


Fig. 18: Chart showing public spaces in the town.
Source: Researcher

Fig.19: Chart showing the surrounded public spaces.
Source: Researcher



Fig.20: Al-Qalamoun Water front. Source: Researcher

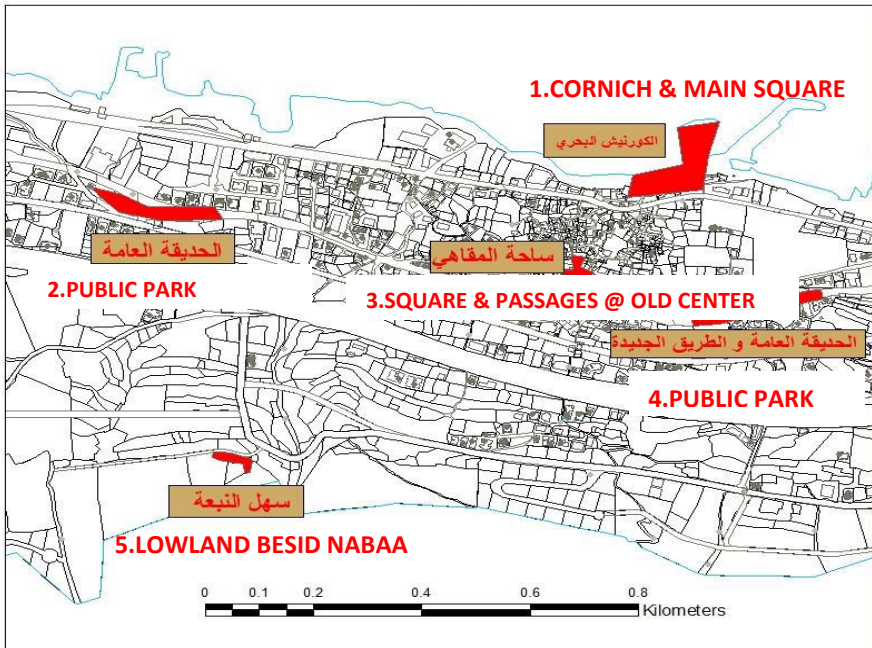


Fig.21: Map Locating Main Public Spaces of Al-Qalamoun. Source: Researcher

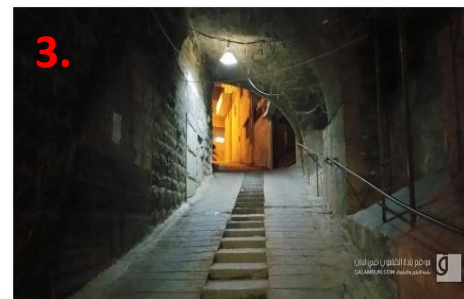


Fig.22: Al-Qalamoun Public spaces. Source: Researcher & Kalamoun Homepage

Public spaces in Al-Qalamoun are classified as Natural and Man-made public spaces:

- **Natural public space** includes forests, green areas, waterfront ...
- **Manmade public space** includes gathering spots, part of neighborhood, downtown, beaches...

With reference to the above, the table below will show the different types of public spaces in Al-Qalamoun:

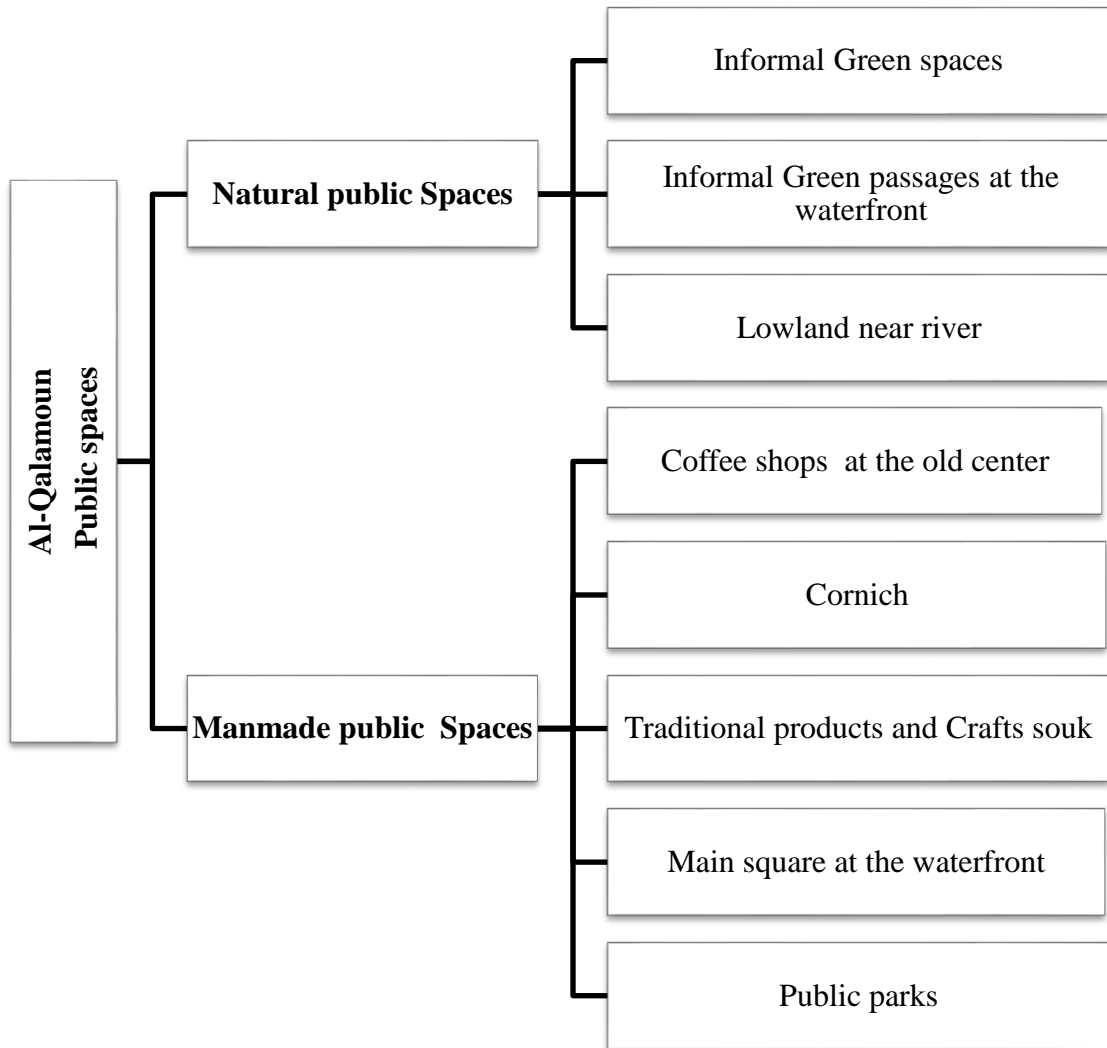


Fig.23: Types of public spaces in Al-Qalamoun. Source: Researcher

The transversal reading of the sectors resulted in the identification of **3 Problematic Axes**:

Uncontrolled urban growth with a narrow geographical area.

Exploitation of natural capabilities and the influence of internal factors and external.

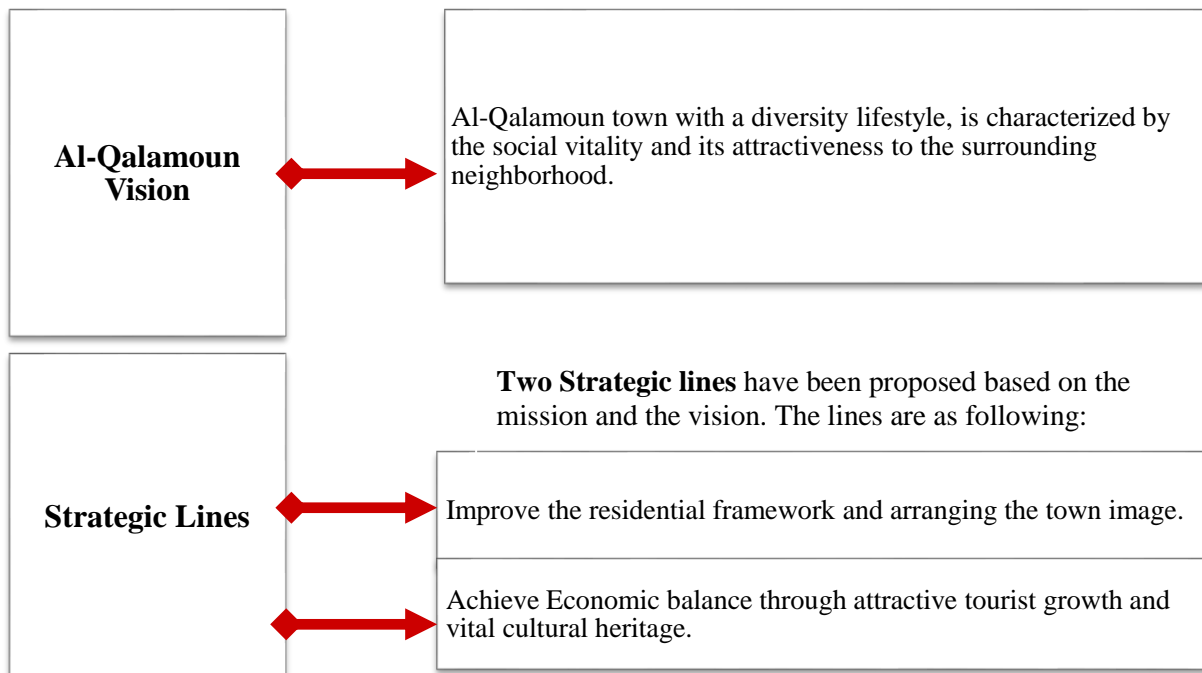
Relation with the surrounding between the interaction and presence of obstacles.

With reference to the three transversal axes, a general **SWOT matrix** was performed based on SWOT analysis of each sector axis:

Table 4: SWOT matrix of Al- Qalamoun based on the sectorial SWOT analysis. Source: Researcher

STRENGTH (S)	WEAKNESS (W)
<ul style="list-style-type: none"> •Qalamoun waterfront enhance the commercial and touristic sector. • Economic dynamics through the traditional products (fishing, crafts, olive oil...). • Civil society with a high degrees of achievements is supported by educational facilities. 	<ul style="list-style-type: none"> • Unorganized urban growth affecting the green areas reflected on the architectural character of the town. • Poor planning and governance at the local level and the absence of cooperation projects with Tripoli and the surrounding. • Old infrastructure networks unable to meet the growing needs.
OPPORTUNITIES (O)	THREATS (T)
<ul style="list-style-type: none"> • Future projects as PACEM that include the waterfront of Qalamoun for rehabilitation and development. • Qalamoun joining the fayhaa municipal union enabling the town to benefit from development programs. 	<ul style="list-style-type: none"> • Increase in population due to Syrian refugee within limited boundaries contribute to the deterioration of the infrastructure. • Absence of policies that protect agricultural areas and heritage buildings and consuming resources in a better way.

The Theoretical Framework of Al-Qalamoun is composed of a vision and strategic axes. The proposed vision and strategic lines are the following:



The table below shows the proposed actions according to each strategic lines:

STRATEGIC LINES	ACTIONS
<p>Improve the residential framework and arranging the town image</p>	<p>1- Follow a residential policy that integrate with the strategic plan of the town. 2- Upgrade the public spaces to enhance the interaction between people and the physical space. 3- Promote the Co-creation approach between people and governance to make effective decisions.</p>
<p>Achieve Economic balance through attractive tourist growth and vital cultural heritage.</p>	<p>1- Activate the tourism sector through applying variable projects in the old center and at the water front of Al-Qalamoun. 2- Revive the traditional and agricultural products of Al-Qalamoun.</p>

5. GUIDELINES

Based on what had been mentioned in the literature review, the analytical study and referring to the comparative analysis done at earlier stages, it had been noticed that the use of technologies in the field of development is necessary at the current digital era. Applying technology tools in urban public spaces can improve the situation and condition of these spaces in the old cities. Thus, creating more livable and resilient cities.

However, the use of technologies that will serve to improve the development process of spaces shall be combined with the traditional participation tools such as written questionnaire in order to obtain the best results of this approach. Proposed Questionnaire created accordingly to get feedback from the inhabitants regarding the open public spaces existing in Al-Qalamoun.

The proposed Questionnaire is attached in the Appendix section.

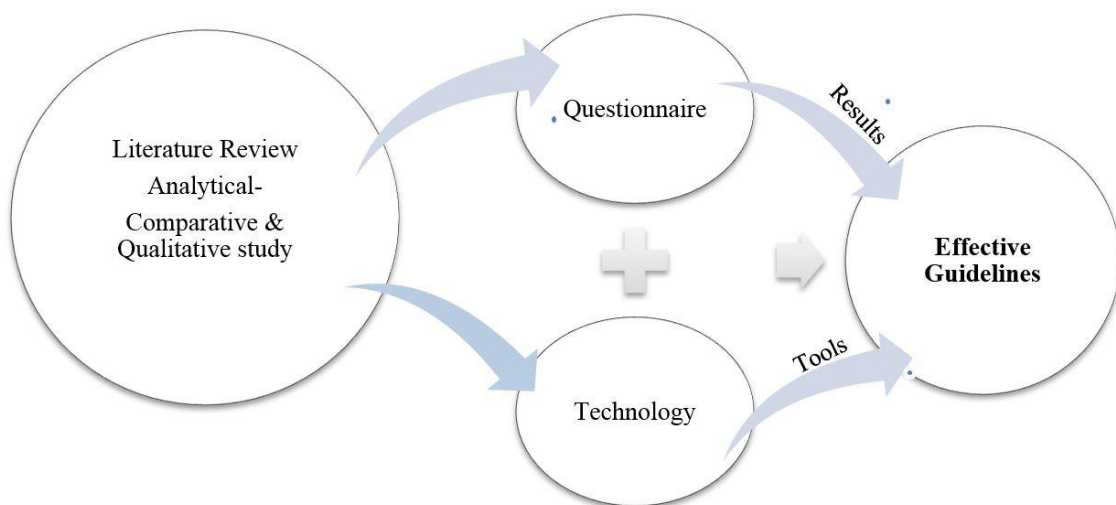


Fig.24: Diagram showing the combination of information and data collected on which must rely in order to attain effective Guidelines. Source: Researcher

In regards to the selected local case study (Al-Qalamoun Town) and to achieve the stated aim: Develop guidelines to estimate the influence of technology in conserving the cultural heritage and creating the conditions for increased urban development in Tripoli coastal cities precisely Qalamoun town. Effective guidelines shall be proposed accordingly. Therefore, to improve the local development indicators of the Lebanese coastal cities.

As the Cornish remains until today one of the most successful public spaces in the cities and as had been noticed that the Cornish has an attractive significant role and a historic value to the Qalamoun people. Based on the aforementioned, the interventions shall be applied along the waterfront as following:

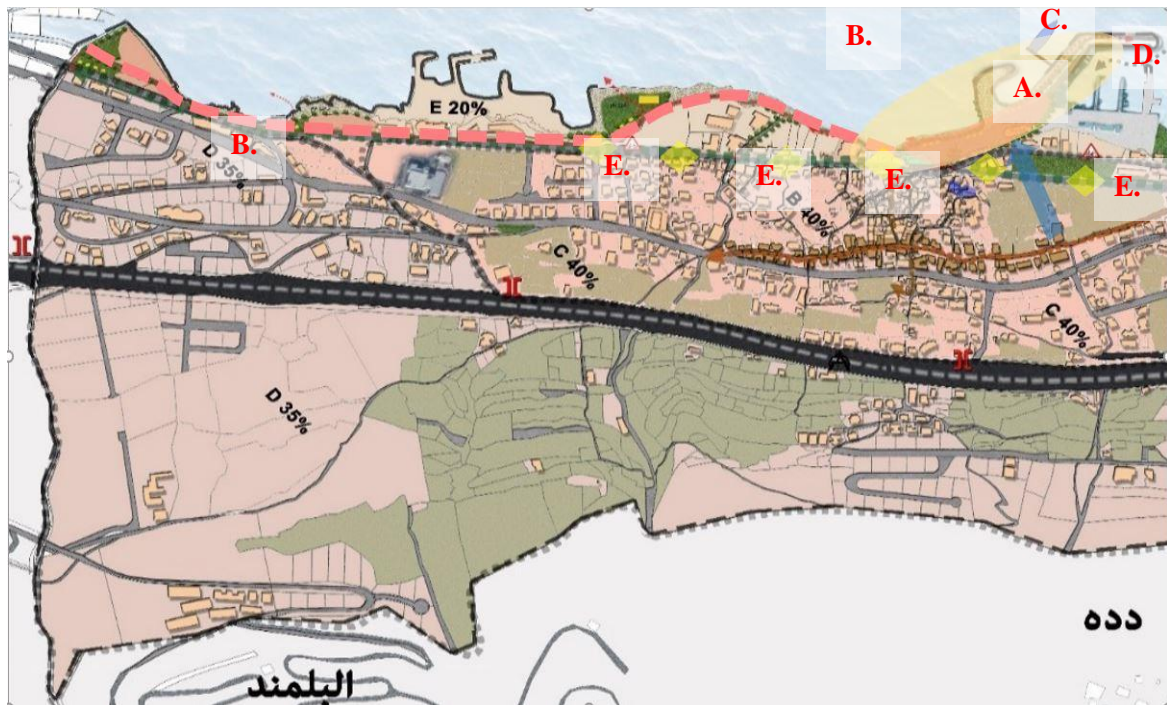


Fig. 25: Master Plan of Al-Qalamoun and the surrounding towns- indicating the location of interventions at the waterfront.
Source: Researcher

- A. **Provide digital screen** at the waterfront main square as a platform for discussions to improve strategic decisions making through the Community participation in planning.
- B. Link the main square with the pedestrian passage along the water front by **providing lights and Wi-Fi hotspots** to encourage people to use the space safer.
- C. **Apply interactive furniture**, as seats that emit lights and sounds/music harmonies at the main square and the pier to enhance social interactions and activities.
- D. Merge the cultural heritage values into the square through organizing physical and virtual events, as **augmented reality**, accessible to all users.
- E. Revive the traditional products (Crafts, rose water, lemon blossom, olive...) by **distributing digital signage's** along the waterfront that provide information about the history of it to enhance traditional values.
- F. **Create digital platform by using mobile apps** in order to engage the networked audience in the development process by sharing and providing online feedback.

6. CONCLUSIONS

Throughout history, the growth of the cities had been always attached to the public spaces and the way it is arranged and organized. The function and the meaning of public spaces had been changing with time according to the requirements and necessities of people at different intervals. This transformation of public spaces through time and during different stages were being made to accommodate and harmonize with their users as per their needs.

As technologies had noticeably overwhelmed, this technological growth shall be used to bring people more into public spaces and to improve the participation methods as well. The public open spaces had always been an important part of cities' identity. Also, the development of the city was controlled and determined by the existing types of public space. Furthermore, the presence of different type of public open spaces contribute to increasing the indicators of development in cities.

Public open spaces must be eligible and well prepared to receive the society. Thus, to enhance the social cohesion and the sense of belonging to the place. Therefore, this depends on how to benefit from the new forms of technology in public spaces and how to use them as a tool:

- To Boost design and retrofitting process,
- For Design Solutions,
- In Planning and Decision making,
- For Maintenance.

As a conclusion, the integration of technology tools into the urban spaces of the Lebanese coastal cities associated with cultural heritage identity can promote the possibility of using the heritage resources existing in the public spaces as the development potential of the city. The use of technology in the context of a significant city community exchange, elements of cultural heritage and links with cultural memory that are rooted in the public space are elements that can enhance the urban development potential and a support source for new inhabitants.

However, the use of technology that will serve to improve the development process of spaces shall be combined with the traditional participation tools such as written questionnaire in order to obtain the best results of this approach. Therefore, the challenge is how to address technology to integrate in the public spaces and public life as well.

APPENDIX

Section One: Identification

Section Two: Open Public Spaces in Qalamoun

Section Three: Improvement of public spaces in Qalamoun

Date: Form #:	Area:												
A- Identification													
1	<p>What age group are you in?</p> <p><input type="radio"/> < 25 <input type="radio"/> 46-55</p> <p><input type="radio"/> 26-45 <input type="radio"/> > 56</p>												
2	<p>What is your highest level of education?</p> <p><input type="radio"/> High School <input type="radio"/> Masters/PHD</p> <p><input type="radio"/> Bachelor Degree <input type="radio"/> None</p>												
3	<p>What is your gender?</p> <p><input type="radio"/> Male <input type="radio"/> Female</p>												
4	<p>Where is your current Residence?</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Fayhaa Union Community</td> <td style="width: 50%; border: none;">Neighboring Areas near Qalamoun</td> </tr> <tr> <td style="border: none;"><input type="radio"/> Tripoli</td> <td style="border: none;"><input type="radio"/> Ras Maska</td> </tr> <tr> <td style="border: none;"><input type="radio"/> El-mina</td> <td style="border: none;"><input type="radio"/> Hraysleh</td> </tr> <tr> <td style="border: none;"><input type="radio"/> Beddawi</td> <td style="border: none;"><input type="radio"/> Deddeh</td> </tr> <tr> <td style="border: none;"><input type="radio"/> Qalamoun</td> <td style="border: none;"><input type="radio"/> Balamand</td> </tr> <tr> <td style="border: none;"><input type="radio"/> Others (please specify)</td> <td style="border: none;"></td> </tr> </table>	Fayhaa Union Community	Neighboring Areas near Qalamoun	<input type="radio"/> Tripoli	<input type="radio"/> Ras Maska	<input type="radio"/> El-mina	<input type="radio"/> Hraysleh	<input type="radio"/> Beddawi	<input type="radio"/> Deddeh	<input type="radio"/> Qalamoun	<input type="radio"/> Balamand	<input type="radio"/> Others (please specify)	
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B- Open Public Spaces in Qalamoun	
1	<p>Do you use public spaces spaces?</p> <p><input type="radio"/> Yes <input type="radio"/> No</p>
2	<p>Which public spaces do you usually use in Qalamoun?</p> <p><input type="radio"/> Green Spaces <input type="radio"/> Green passages at Waterfront</p> <p><input type="radio"/> Coffe shops at the old center <input type="radio"/> Old Souk</p> <p><input type="radio"/> Majed's quare at the waterfront <input type="radio"/> Public garden</p> <p><input type="radio"/> Others (please specify)</p>
3	<p>How often do you visit public spaces?</p> <p><input type="radio"/> More than once per week <input type="radio"/> Once per week</p> <p><input type="radio"/> Once per month <input type="radio"/> Others (please specify)</p>
4	<p>How long do you usually spend time at public spaces?</p> <p><input type="radio"/> Half an hour <input type="radio"/> One to two hours</p> <p><input type="radio"/> Longer than four hours <input type="radio"/> Others (please specify)</p>
5	<p>What do you currently use public spaces for?</p> <p><input type="radio"/> Walk <input type="radio"/> Picnic</p> <p><input type="radio"/> Enjoying the nature and lanscape <input type="radio"/> Sense of attachment</p> <p><input type="radio"/> Social relationship <input type="radio"/> Others (please specify)</p>

C- Improvements of public spaces in Qalamoun	
1	<p style="text-align: center;">What design features are required to increase the visits to public spaces?</p> <p> <input type="radio"/> Shade <input type="radio"/> Pop-up furniture <input type="radio"/> Greenary <input type="radio"/> Lighting <input type="radio"/> Others (please specify) </p>
2	<p style="text-align: center;">What communications practices are required to increase the visits to public spaces?</p> <p> <input type="radio"/> Maintenance <input type="radio"/> Management <input type="radio"/> Entertainment <input type="radio"/> Security <input type="radio"/> Others (please specify) </p>
3	<p style="text-align: center;">What interactive technology elements are required to increase the visits to public spaces?</p> <p> <input type="radio"/> WiFi hotspot <input type="radio"/> Touch screens <input type="radio"/> Digital and virtual events <input type="radio"/> Furniture emit music & lights <input type="radio"/> Others (please specify) </p>

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