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PROPOSING GUIDELINES TO UPGRADE THE OPEN PUBLIC SPACES IN THE INFORMAL SETTLEMENTS

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PROPOSING GUIDELINES TO UPGRADE THE OPEN PUBLIC SPACES IN THE INFORMAL SETTLEMENTS

Abstract

Informal Settlements have expanded rapidly in the last fifty years and have kept rising. With rapid population expansion has come an increase in haphazard urbanisation and informal settlements, frequently referred as slums. Defined as a settlement that was formed in an unplanned and uncontrolled way, which means they are mostly unrecognized. Unfortunately, focusing on the problem of current challenges in informal settlements, on the socio-cultural and environmental levels, which are facing a massive shift in the quality of life in these sites, this is reflected in urban fragmentations, social and infrastructures are lacking, service systems that have become progressively inefficient over time, a shortage of open public spaces, and inequality. Which all influence the urban environment. This paper, therefore, aims to provide guidelines to upgrade the open public spaces in the informal settlements to evolve these sites. To achieve this aim, the paper will follow a scientific methodology, starting by presenting a literature review highlighting the definition of an informal settlement, recognizing its causes, types, and its relation to the city. As a focused case study, the research will tackle Taamir district in Saida applying the field method, which are primarily inhabited by refugees, abandoned peoples, and fragmented families, as a scoped case study. This methodology investigated the challenges of its residents and proceeded with recommendations to improve their quality of life. These guidelines may be used to all those communities while considering the conditions of each region. As a conclusion, improving the quality of life in informal settlements includes ensuring that resident's academic, economic, environmental, and socio-cultural issues are addressed.

Keywords

Architecture, Informal Settlement, Public Space, Guidelines, Upgrading, Infrastructure

1. INTRODUCTION

Rapid urbanization, one of the most significant socioeconomic transformations in the last five decades or more, has resulted in the rise of new types of slums, as well as the expansion of squatter and informal settlements throughout the developing world's rapid expansion cities. Informal settlements are affected by a range of aspects, such as overpopulation and rural urban migration, a shortage housing for the slum dwellers, financial problems, unequal treatment and dehumanization, and dislocation affected by conflict, environmental catastrophes, and climate variability and change (UN Habitat, 2015).

Informal settlements represent the worst examples of urban poverty and inequality. They have the highest density of poor people and the worst living conditions. They have unsatisfied demand for financial services. Public space needs to receive a little attention. The goal is to improve public places to satisfy the needs of residents, with an emphasis on green infrastructure to promote people's feeling of space. In those settlements, the open public spaces, are public in terms of ownership and accessibility but it is unusable (Valerie, 2018).

The lens a critical role in the settlement's physical and social movements, however their renovation and safety may take several years. Several aspects have been regarded, including helping to improve the interconnection among both environment and the urban context, allowing individuals to support from the area's natural heritage, promote and facilitate, raising community knowledge and active participation in conservation strategies, agrees of urban green spaces though the corridors, protection of environment, and helping to maintain ecological integrity (Kassem, 2018).

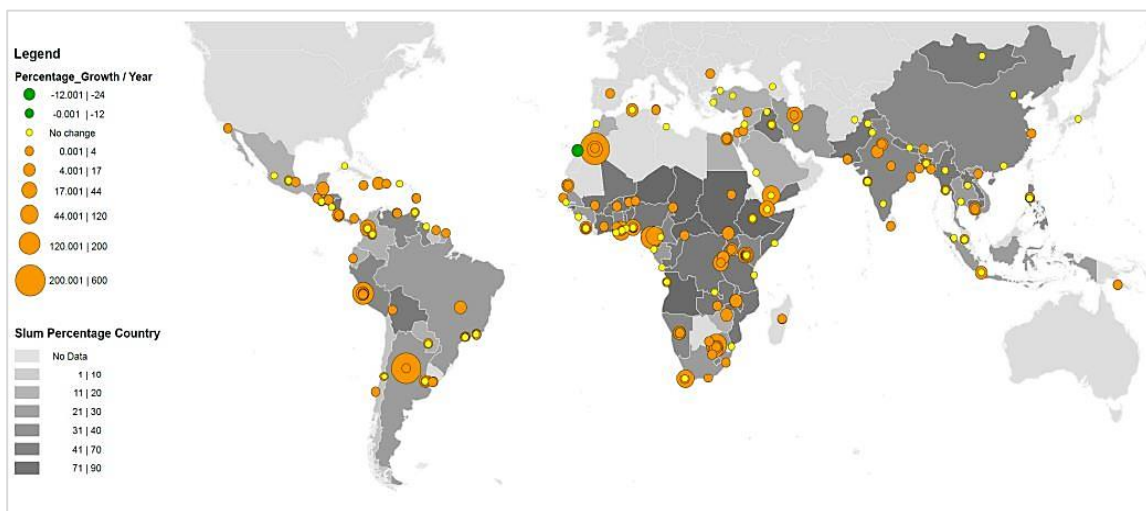


Fig.1: Map showing the growth percentages in the Atlas of informality, Source: United Nation, 2020.

The term "informal settlement" is used to describe a populated neighborhoods where a cluster of spaces has been built on land to which the citizens have an unlawful claim. It might have an influence on the social situation (Kassem, 2018).

Unfortunately, focusing on the problem of existing issues in informal settlements, on the socio-cultural and environmental periods of history. Which are facing a major transformation in the quality of life in these sites. This is reflected in urban fragmentation, a lack of social and infrastructures, service systems that have become gradually inefficient over time, a shortage of open public spaces, and inequality. Which all have an effects on urban environment.

The informal settlements have a dominant influence of inequality and socio-economic degradation. It may include family breakdown, jobless, financial, cultural, and physical isolation, and a variety of other difficulties. The notion of quality of life has evolved as a concept of living conditions, social and mental capabilities (Valerie, 2018).

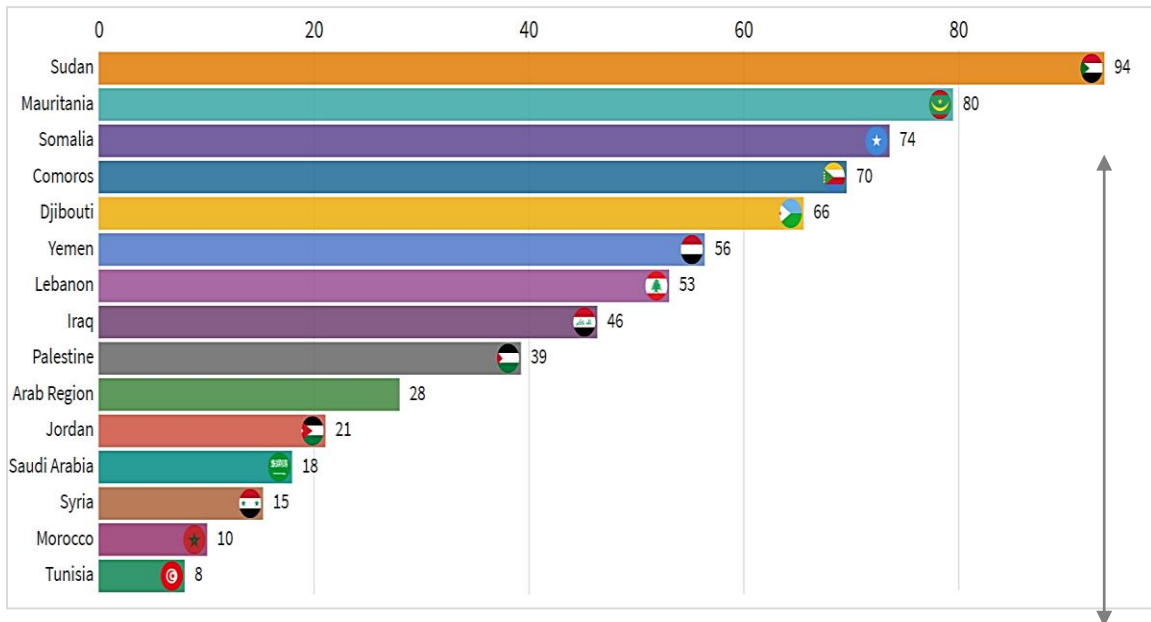


Fig.2: An estimated percentage of urban population living in informal settlements in such countries, source: United Nation, 2020.

While quality of life can mean various things to different individuals, it usually includes a sense of socioeconomic stability as well as the fulfillment of other non-material demands and goals. This paper, therefore, aims to provide specific guidelines to upgrade the open public spaces in the informal settlements to evolve this sites.

To achieve this aim, the paper seeks to accomplish the above objectives: to establish basis of understanding about the informal settlements inhabitant and their present challenges in this regions; to propose methods to determine and improving their quality of life. To investigate both advantages and disadvantages of these regions. To evaluate interactive slum upgrading programs that include urban poverty alleviation goals and to implore governments to implement these strategies.

The research hypothesis: Upgrading the open public spaces in informal settlements can be enhanced the socio-cultural and environment issues of the settlers.

The paper is a qualitative type of work. It will follow a scientific methodology, starting by presenting a literature review highlighting the definition of an informal settlement, recognising its causes, types and its relation to the city.

This data will be supported by previous readings, and referring to updated references. Investigated the present situation of the inhabitants using a field approach that includes interviews and a questionnaire, to recognize subsequent studies and demonstrations in upgrading informal settlements across the word, and then it concentrates on a case study of a zone in Saida, Lebanon, named (Taamir).

2. LITERATURE REVIEW

For the literature review, initially the research concentrates on selected references that employ a qualitative methodology and which relate to informal settlements upgrading with a focus on the guidelines in improving the living conditions.

To comprehend this complex relationship, the research begins by outlining specific definitions, causes, and similar examples of informal settlements and at the end a set of parameters are conducted in a form of table, as shown:

2.1 Definition of Informal Settlements

The UN Habitat defines the Informal Settlements as:

“ Informal or spontaneous settlements are settlements whereby persons, or squatters, assert land rights or occupy for exploitation of land which is not registered in their names, or government land, or land legally owned by other individuals. ”

This definition is mentioned in “issue paper of informal settlements” (UN habitat, 2015).

Informal settlements are urban neighborhoods or districts that develop and operate without the formal control of the state, co-existing but not synonymous with 'squatter' settlements and 'slums'. They are defined by three major criteria:

- a. Inhabitants have no security of tenure in relation to the land or houses they inhabit, with modalities ranging from squatting to informal rental housing.
- b. Neighborhoods frequently lack or are cut off from formal basic services and city infrastructure.
- c. The dwelling may or may not meet with current planning and building regulations, is frequently located in geographically and environmentally unsafe places, and may or may not have a municipal permit.

Informal settlements can be inhabited by individuals of all economic levels, both affluent and impoverished (UN habitat, 2015).

2.2 Historical Background of Informal Settlements

Prior to the industrial revolution, self-help and self-building techniques were the main way in which individuals supplied themselves with shelters (Jaime, 2012).

The rapid growth of urban areas was already followed by either a similarly massive rise of informal settlements.

That commonly referred to as squatters. These communities arise as a result of overcrowding caused by urbanization and migration to urban areas, mixed with poverty and insufficient government support in providing suitable housing.

Informal settlements embody informal forms of sociality and economic output that are difficult to maintain. The quality of basic services, as arteries become obstructed and makeshift shelters take up all available space. The basic services such as water, sanitation, health, and safety are seriously harmed. To resolve these challenges, informal settlements must be upgraded. Which means they must be rebuilt and re-blocked to provide more space, organisation, and long-term spaces alternatives for all people. Community resistance, preventing re-crowding, enough finance, and resources are among problems that the upgrading process faces (Gouverneur, 2015).

Based on reviewing this book in Fig3, it offers an overall framework for controlling the formation of new informal settlements. Suggesting that if better supported, self-constructed cities may become balanced, efficient, accessible, and appealing urban zones. One of its goals is to increase social fairness while being value. (David, 2014).

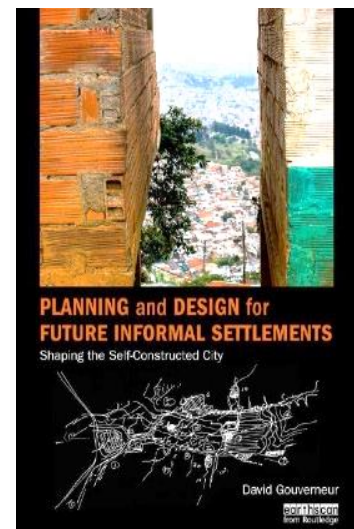


Fig.3: The book of planning for future IS, Source : David G., 2014.

2.3 Factors of Informal Settlements

There is factors that cause the emergence of informal settlement. To understand and offer a basic overview of the phenomena of it, as well as to suggest certain solutions to these issues and circumstances.

“Informal settlements and slums are caused by a range of interrelated factors, including population growth and rural-urban migration, lack of affordable housing for the urban poor, weak governance, economic vulnerability and underpaid work, discrimination and marginalization, and displacement caused by conflict, natural disasters and climate change”.

This factors is mentioned in “issue paper of informal settlements” (UN habitat, 2015).

- a) Areas developed to provide low-cost accommodation for refugees.
- b) Pre-war settlements established to shelter rural-urban migration.
- c) Squatter settlements established during certain wars.
- d) Illegal subdivisions of suburban property on private or public land

In addition to the sub-categories include areas that are expansions of or near existing refugee camps, places built on agricultural land, in urban suburbs, and regions marked by challenged property rights. All of these places are defined by unlawful land tenure, informal land subdivision, non-compliant structures, informal access to essential urban services/networks, and residents living in difficult socioeconomic situations (UN Habitat, 2020).

2.4 Typologies of Informal Settlements

There is types of informal settlements to understand (linear, radial, scattered, and extended). The purpose of this paper is to comprehend a fundamental overview, as well as to provide specific solutions to the issues and implications.

2.4.1 The Linear Informal Settlements

This typology is classified when the informal settlements have a linear layouts or patterns. Linear pattern: as shown in figure 4, the buildings in such villages are built along a road, railway line, river, canal border of a valley, or levee.

- a) Linear: where an informal settlements is formed with a linear form in a certain region.
- b) Linear alongside railways: where an informal settlements that have formed and developed along trains and have a linear layout.
- c) Linear alongside rivers: where an informal settlements that have formed alongside rivers and also formed by a linear pattern.

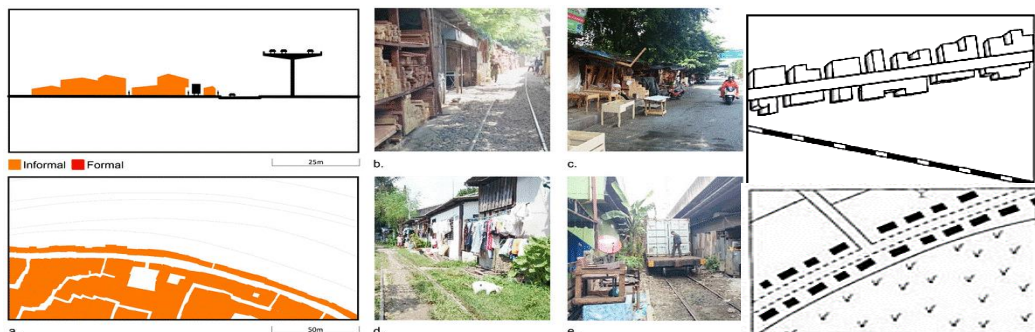


Fig.4: Maps and pictures showing the linear layout of an informal settlements, source: Gayatri Singh, 2017.

2.4.2 The circular Informal Settlements

Circular settlements form around lakes and tanks. And frequently the settlement is designed in such a manner that the central part stays open. As shown in figure 5.

It is as an example of spaces are radiating off a central zone. Even the space itself don't have a circular boundaries or edge. Water is the most powerful expansion restriction. Places with geographical constraints, such as proximity to waterbodies, present more obvious indications of the environmental issues encountered by informal settlement occupants.

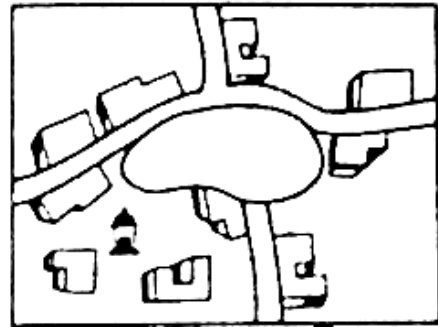


Fig.5: Map showing the circular layout of an IS, source: Gayatri Singh, 2017.

2.4.3 The Compact or Nucleated Informal Settlements

These are settlements where a huge number of dwellings are built extremely close to each other. As shown in figure 6.

These settlements suddenly appear in river valleys and agricultural plains. Settlements are close and have shared occupations. This already has formed in small scattered spaces grouped together.

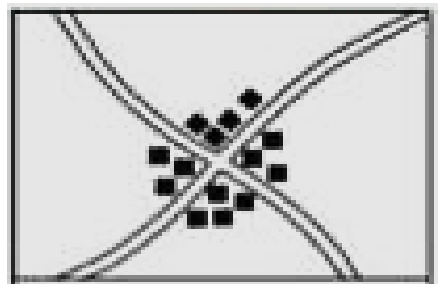


Fig.6: Map showing the nucleated layout of an IS, source: Gayatri Singh, 2017.

2.4.4 The Dispersed Informal Settlements

Buildings in these settlements are widely separated and frequently separated with fields, as shown in figure 7.

A cultural component, such as a place of worship or a market, connects the community. The most intimately and immediately related to land. Primary occupations such as agriculture, animal farming, fishing, and so on predominate. The settlement is relatively large in size.

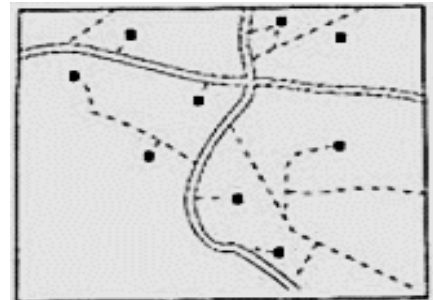


Fig.7: Map showing the dispersed layout of an IS, source: Gayatri Singh, 2017.

2.4.5 The Extended Informal Settlements

In addition, it include areas that are extension of or near existing refugee camps, places built on agricultural land, in urban suburbs, and regions marked by challenged property rights. All of these places are defined by unlawful land tenure, informal land subdivision, informal access to essential urban services/networks, and residents living in difficult socioeconomic dimensions.





Fig.8: Maps showing the different layouts of an IS, source: Gayatri Singh, 2017.

2.5 Forms of Open Spaces in the Informal Settlements

Public open spaces have been identified as sleeping massive areas that are potentially unutilized. The components that have only been designated for social-cultural, ecological, and recreational roles. While ignoring their economic attributes that could lead to the production of funds for their self-preservation (Mark, 2018).

“By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities” (UN Habitat, 2015)

2.5.1 Open spaces on “the Pathway”

Another of them has been the accessibility of open area as a building orientations. Communications and social connection among the peoples that live in the housing units might be enhanced by exposing a single open area. In overall, the open public space will be successfully utilized by the residents: kids, youths, and elders. They are using the empty area within the communities on a time-sharing basis, using the open areas, as shown in figure 9.

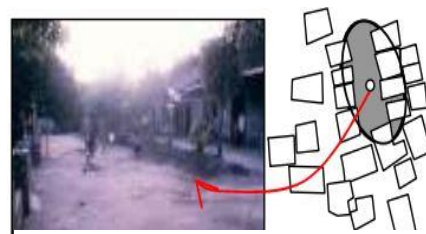


Fig.9: Map and picture showing the open public spaces as a pathway, Source by Paulus Bawole, 2009

2.5.2 Open spaces as “Empty Lot”

There is a densely crowded district that still has a little empty space between its buildings used for waste and carparks. These empty lots are sandy areas and undeveloped regions. Playgrounds and other types accessible to the public open public areas are examples of informal open spaces. Governments, though, do not formally recognize them even so, as shown in figure 10.



Fig.10: Picture showing the empty lots of waste and carparks, Source: Farah Mefleh, 2021

2.5.3 Open spaces as “Private Yard”

It is an area where private people or groups own yards, as shown in figure 11. So, it become a private land that cannot be accessible and occupy by the public and anyone in this region. Regrettably, the yards presently serve as pockets anywhere obstructed connectivity.



Fig.11: Picture showing the unusable private land as open space, Source by Paulus Bawole, 2009.

Open public space in informal settlements, are mostly the output of self-control, monitoring and supervision procedures. There is little comprehension of these spaces because they are inaccessible to the rest of the city and social movements, however their renovation and safety may take several years (Paulus, 2009).

2.6 Reflection of Informal Settlements in Architecture

Mapping the emergence and transformation of street/laneway networks and buildings throughout a variety of settlements. While such data cannot explain the social, economic, and political dimensions of individual cases.

It does illustrate the diversity of informal morphologies and self-organizational techniques that create them. The informal guidelines or logics embedded within such morphologies are extracted by analyzing building types, plots, blocks, streets, and lanes. This is a preliminary research that reveals how informal settlement works to provide habitable land, affordable housing, and public space. The potential is a better awareness of how such activities may or may not result in 'slums'. How upgrading processes may be improved, and how informal output might be predicted and harnessed (Kim, 2020).

2.7 Analysing Similar Examples

The research initially, concentrates on key parameters that apply a qualitative methodology and which relevant to upgrading the informal settlements areas, with a focus on guidelines for improving the living conditions.

2.7.1 Informal upgrading in Medellin, Colombia

The architect explained that he aimed to transport people from this poor neighborhood to another place and transform their perception. The educational facilities represent revitalized social change and set a pattern for other communities. As shown in Fig. 12, the project is titled 'Library Parks', a place to gather next to each other, in Freedom and Liberty.

In 2007, Medellin launched one of the most important upgrading projects, a city-wide push to supply informal settlements with sites and services in an effort to integrate informal settlements into the formal city.

It attempts to capture the city's new image as a metropolis of culture instead of violence. The library, which overlooks the city, not only created a new symbol for Medellin, but its plaza also served as a leisure area, recreating the nature of this new program inside the community.

Through a variety of new sustainable public areas and social interventions, this initiative aims to raise livability. Social development may be achieved through developing and constructing new public places, which can help to alleviate poverty.

Because the neighborhood is thought to have significant educational, cultural, public space, and basic services shortages, the library is located either near to them or inside the informal urban fabric. The architect expanded and renovated the area's public spaces. With the establishment of education, cultural, and sports activities and facilities, he strengthened the low-income region as a new focal point (Mazzanti, 2016).



Fig.12: Perspective showing the Library of Medellin, Source by Lorenzo Castro, 2008

2.7.2 Informal Upgrading in Caracas, Venezuela

As shown in Fig. 13, another example of informal upgrading is "Opportunities for the community." A project that converted an eroding landscape into a producing zone and vibrant public area.

Brillembourg & Klumpner's idea comprises a sloped public space with urban agricultural sections, a water management system, a public amphitheater, a school of music, a smaller concert venue, sports fields, outdoor venues, and transportation infrastructure

This is defined by its integrating concept, premium cultural and social facilities, architectural quality, and integrated local community participation in a socially inclusive design and planning approach. This important intervention has the potential to bring satisfaction and opportunity for the local inhabitants by providing both connectivity and development in a practical manner (Klumpner, 2005).

After a literature review that highlights two examples tried to upgrade open public spaces in the informal settlements, the paper will explore a case study in Lebanon using a specific methodology.



Fig.13: Perspective the "Opportunities for the community" in Caracas, Source Klumpner, 2005.

2.8 Parameters of Analysis

The examples focus on the upgrading informal settlements. Strategies and methods were analyzed. An extending and improving the area's public spaces. With the implementation of education, cultural, and entertainment activities and facilities, strengthened the informal settlements as a new central focus.

The injection of new program inside the community. Through a variety of new sustainable public areas and social interventions, this initiative aims to raise livability.

Social development may be achieved through developing and constructing new public places, which can help to alleviate poverty.

A socially inclusive design and planning strategy that includes concept, premium cultural and social facilities, architectural quality.

To integrate the local community by offering both connectivity and growth in a practical manner, this significant intervention has the potential to bring pleasure and opportunity to the local inhabitants. Understanding the people with critical needs within the informal settlements to have guidelines and some approaches to have a vision of the planning and design for future informal settlements.

The upgrading process can be started by providing new facilities that are suited to the problems they face and the demands of the community. As a result, upgrading the informal settlements dramatically improves satisfaction with the quality of life. Improve the sense of security and safety in supplying such new programs, activities and sustainable approaches. Derived from the previous research, the following table summarizes some of the deduced parameters of upgrading informal settlements:

Table 1: Table shows the parameters of analysis as architectural guidelines for upgrading an informal settlements.

Upgrading Informal Settlements				
Reduce inequality	Solving critical needs	Quality of life	Respecting diversity	Comfort for all
Architectural Guidelines				
Open public spaces	Green infrastructure	Security by activity	Injection of new programs	Services and facilities

When conducting research, several parameters must be considered, the architectural guidelines to upgrade the open public spaces in the informal settlements, which the following similar examples justify them.

3. METHODOLOGY

The paper investigated a case study to derive guidelines for upgrading the quality of life in the informal settlement Taamir.

It employs four research methodologies. The first is the inductive method, which collects facts on the specific location. Second, using the field method, the researchers attended the location, taking live images and conducting interviews with residents to learn about their perspectives on the current difficulties. In fact, the authors created a survey questionnaires and disseminated it to a sample group of residents in order to acquire measurable findings. Third, is the analytical method, the study evaluates the outcomes of the interviews and the survey. Fourth, using the deductive method, the study deduces a criteria as a guidance for improving quality of life in poor communities as an end of the process. The basic recommendations will reflect these research methodologies.

3.1 Introducing the Case Study of “Upgrading Informal Settlements In Taamir, Saida”

"Taamir" is a district beside the Ain El-Helweh settlement in Saida (Fig 14), Lebanon's biggest Palestinians camp. Which is the suburb of Ain el-Helweh as the first region of urban expansion in Saida. Regardless of Saida's validity, and after the following earthquake that struck the region in 1956, a major cause for the growth of informal settlements. It would include internally displaced people, within poor neighborhoods. Where standard of living is frequently noticeably below norms and standards. As well as inequality, poverty, child labor,

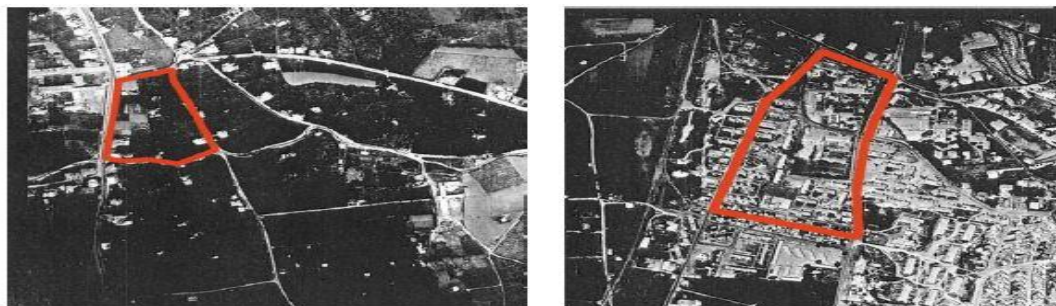


Fig.14: Taamir's arial views before and after the informality in 1956 & 1965,
Source: Direction des affaires geographiques, 2010

joblessness, education crisis, and insecurity. Taamir is currently a diverse neighborhood that cover a variety of ethnic or racial groups. A district where low-cost housing abounds during an otherwise costly location. As people attempt to meet their immediate need for shelter. Despite this, because to the progressive deterioration of its physical circumstances, many residents leave if they can, resulting in a thriving shared community. Most notably, the district has seen an inflow of migrants escaping Syria's civil conflict. Syrian migrants sought safety in Taamir's low-cost apartments, contributing to the neighborhood's variety and diversity.

3.2 Historical background of “Taamir, Saida”

The Taamir neighborhood was initially build over 8 plots, owned by the Ministry of Agriculture. Taamir is a governmental public housing project developed in the early 1960s in response to the city's critical housing needs (Fig 15). The project, which began with 1200 apartment buildings and subsequently extended to maintain approximately 2600 units that vary from 2 to 4 floors. It was a planned solution to accommodate people who had lost their homes due to the earthquake, particularly fishermen and their families, who were regarded to make up the majority of the city's working class. The construction project was illegal in the area, Taamir's development, occupancy, and further extensions were only halted in the 1970s and early 1990s. As a result, the community created its own method of dealing with basic building extension requirements, which are a requirement of the nearby residents.

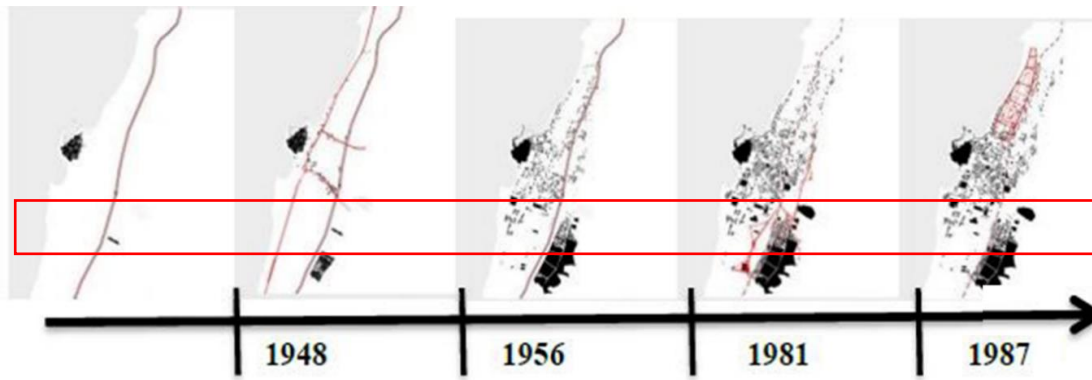


Fig.15: Maps showing the historical evolution of Saida transport infrastructure determined its urban foundation. Source: Valerie Kassem, 2018

3.3 Population of “Taamir, Saida”

The present settlement includes approximately 250 dwellings and a diverse population. Including communities relocated from Saida's old city, Bedouins who develop and improve the surrounding lands, Lebanese-Palestinian migrants from "Ain El-helwe," Lebanese inhabitants from various areas in the country, and Syrian employees.

3.4 Urban analysis of “Taamir, Saida”

According to UN-Habitat and UNDP, the Taamir district is located near the grey zones.

Grey zones, also known as surrounding zones, are "informal Palestinian settlements created near existing Palestinian tent camps in Lebanon." It is clear to see that the Taamir neighborhood is close to the surrounding areas of the Ain El-helwe camp. The camp is also one of Lebanon's largest Palestinian colonies, bordered by eight Neighboring Zones, as indicated in fig16. These adjacent regions are occupied by internally displaced individuals who have been transferred as a result of the civil war. Aside from the urban form, where green areas are shrinking, as shown in Fig17.



Fig.16: Map shows the adjacent grey areas of Taamir. Source: UN habitat, 2010.

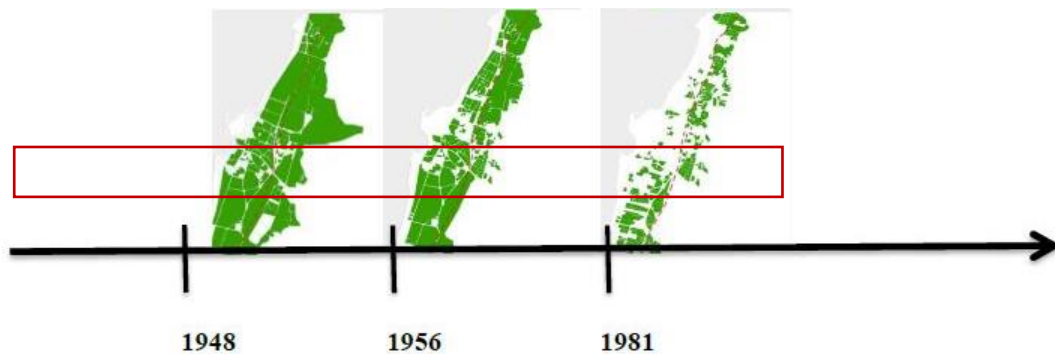


Fig.17: Maps shows the Shrinkage of the green spaces in period of time, Source: Valerie Kassem, 2018.

The district of Taamir is divided into 3 main neighborhoods, which are shown in the maps in figure16, Al Zaatari, Al Dobat, Al Masaken. Neighborhoods tend to have their own identity, or "feel" based on the people who live there and the places nearby.

- a) The Zaatari neighborhood is an important landmark in the district, includes the Zaatri School.
- b) Al Dobat neighborhood have a diversity of land use, mainly it includes: religious building (mosque), a medical center, commercial spaces and residential apartments.
- c) Al Masaken neighborhood is an important landmarks includes UNRWA school, in addition to the residential and commercial land uses.

Structures in the Taamir district are classified into three types based on their condition: deteriorated, in need of renovation, restored and durable. Taamir's buildings all require immediate renovation and upgrading. The southern half of the district, on either side, is already in urgent need of renovation due to structural deterioration. Among the renovated structures are the school and the medical facility. Other public spaces, such as the masjid and the NGO, are extremely durable.

As shown in the maps, the three clear neighborhoods are unfortunately disconnected. An even more critical threat is the expanding use of fencing. A diverse range of activities are offered, with both social and commercial activities linked in common streets. Main Street serves as a commercial artery for the entire area “Social and Economic Development”. It serves as a connecting point between several areas, the location is critical, with a high permeability. The district achieves legibility through several of causes “landmarks and nodes” with connecting the city to its surroundings.

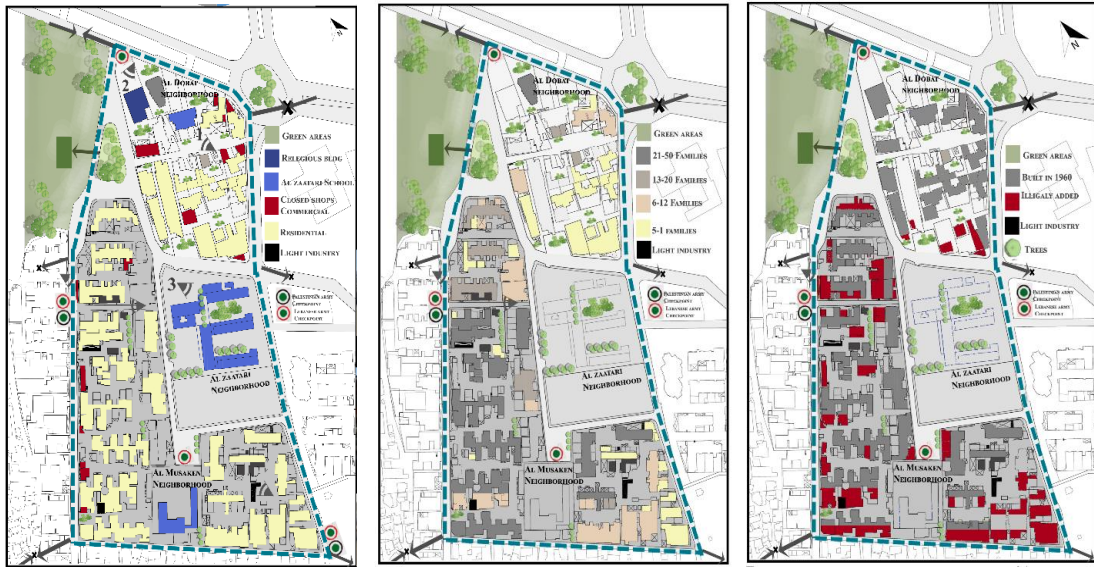


Fig.18: Maps shows the land use, density & illegally added apartments.

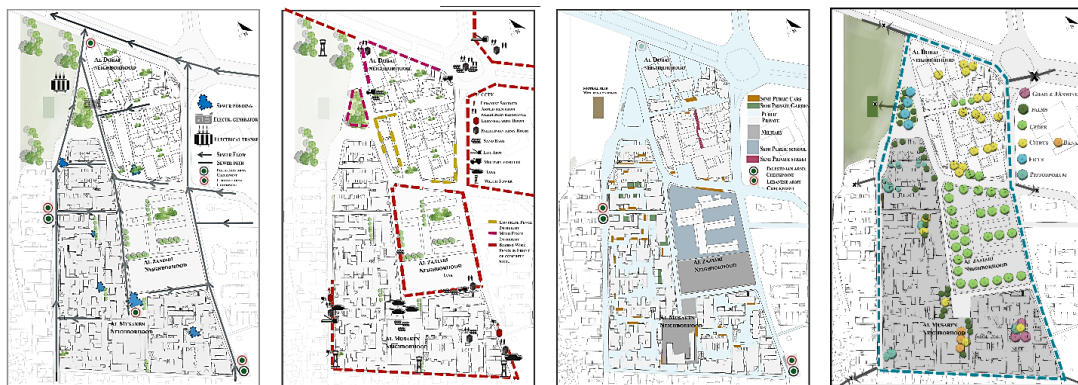


Fig.19: Maps shows the accessibility, Infrastructure, public and private spaces and vegetation.

3.4.1 The First Zone: Commercial Zone

The secondary artery (fig20) leading to Ain el-Helwe is a robust commercial spine with the opportunity to be redeveloped as an investing in green artery. The area has a wide range of personalities, ranging from a commercial spine to a residential district. Taamir is a self-sufficient district with spaces of circulation, socialization, play, and commercial activities.

Although Taamir is a busy and crowded area, it is filled with green occupied centers and interaction. Ground floors along main arterials are busy with commercial activity; however, ground floors inside this neighborhood are residential.



Fig.20: Map shows the main commercial arterial.

3.4.2 The Second Zone: Educational Zone

The Taamir district is divided between two populated areas, the Lieutenant & Masaken projects, each of which has own personality. The community also incorporates Zaatari school, but all of these regions has an own personality, as seen by the pictures. UNRWA and Zaatari School are the various public schools in Taamir district. Because of its closeness to the Palestinian settlement and insecurity, the UNRWA school has been closed. Currently, Zaatari School's facilities are held by the Lebanese military as a significant institution. The other, serves as a school. This college has 619 students from various nationalities, including Lebanese, Syrian, and Palestinian educators.



Fig.21: Map shows the educational zone.

3.4.3 The Third Zone: Agricultural Zone

In the adjacent neighborhood as shown in the previous maps there is agricultural zones located beside the residential zones and urban fabric. An obvious extension of this zones as shown in fig.22, 23. The division of Taamir between the base of a steep hill on one side and the limit of flat agricultural areas and the highway on the other causes this marginalization.

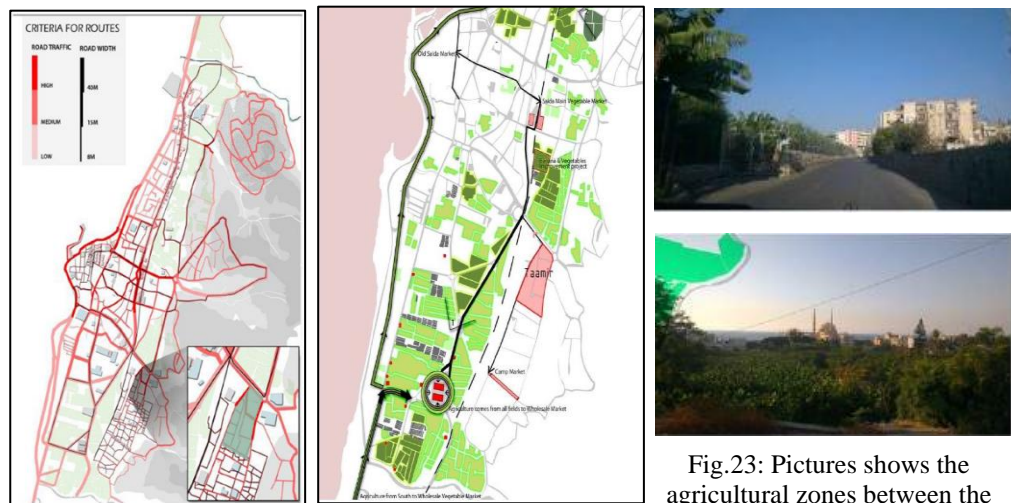


Fig.22: Maps shows agricultural identity & flow and the street networks map, Source: Valerie Kassem, 2018.

Fig.23: Pictures shows the agricultural zones between the urban fabric and extension.

3.5 Identifying Problems of “Informal Settlements In Taamir, Saida”

Unfortunately, there are several problems in the existing informal settlements “Taamir”, on the socio-cultural and environmental periods of history, which are facing a major transformation in the quality of life in these sites. This is reflected in urban fragmentation. A lack of social and infrastructures, service systems that have become gradually inefficient over

time, a shortage of open public spaces, and inequality. The Fig.24 shows the existing issues in this district.

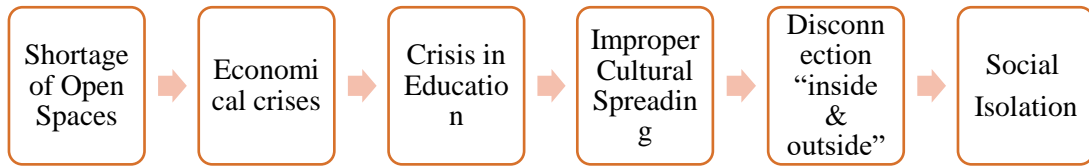


Fig.24: The top six issues were identified in this district.



Fig.25: Images shows the problems as economic crises, Source: Author, 2021



Fig.26: Images shows the disconnection between neighborhoods with social insulation.

The first problem of “Taamir” district is: the shortage of open public spaces. Including the absence of green open places. The local public areas are limited, unclean, and frequently seen as "hazardous". A lack of vegetation, proper infrastructure, and public open spaces are poorly maintained. The second problem is the economic crises. Many Lebanese syndicates don't really accept immigrants to work, and they will be not permitted to establish their own businesses, thus their only option for finding employment is to operate under anyone's identity. The proportion of immigrants who are unemployed is clearly rising. The third problem Educational Crisis. Many families are unable to give their children with the necessary education due to great poverty and instability of life in certain cases of refugees. Child labor was caused by a lack of education. The fourth problem is the improper cultural spreading. From the dangerous environments, cultural movements can occur. One of the significant cultural craft of Saida is the embroidery craft, which is missing in this district. The fifth problem is the disconnection between districts. That means that the districts are fragmented and have an obvious disconnectivity from the old city of Saida as shown in fig.26. The Sixth Problem is the social insulation. Lacking gathering places, safe public spaces were needed to facilitate social interaction and prevent violence. Often the minimum requirements for living are missing such as intermingling with the neighboring societies.

3.6 Selection of a Specific Area in “Taamir, Saida”

To focus the study, the authors selected one spot as a limited site. It is situated on the periphery of Taamir and Sekkeh districts, as indicated in Fig. 28. The significance of this location lies from its placement on a critical spine, the "commercial Axis". Which faces several problems that the most of commercial stores in this spine are currently closed. Causing the disconnection between the two neighborhoods. The secondary arterial (fig27) leading to Ain el-Helwe is a robust commercial spinal with the opportunity to be redeveloped as an investing in green artery. The area has a wide range of personalities, ranging from a commercial spine to a residential district. Taamir is a self-sufficient area with commerce arteries and one of Saida's.



Fig.28: Map shows the spine leading to the proposed site.



Fig.27: Pictures shows the unusable stores in the Sekkeh Street.

3.6.1 Dimensions of the specific Area

The total area of Taamir in Saida is approximately 94,540.55 m². The area of the selected specific site is 8500 m², as shown in fig.29.

The surrounding buildings have an average height, high is between 1 to 4 floors. The specific site can connect the two districts, the Taamir and Sekkeh to the old city Saida. The open spaces surrounded vary between empty lots, private yards, unusable spaces can be adaptive reused. According to this the selected spine and the specific lot can thrive economically and establishing a strong cultural level to the informal settlement Taamir in Saida.

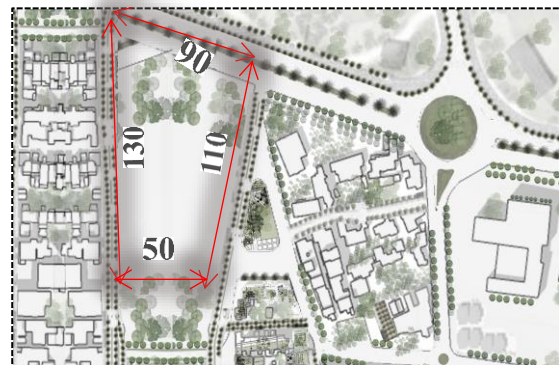


Fig.29: Map shows the selected site dimensions.

3.6.2 Demographical Study in Taamir

The current informal settlement of Taamir includes approximately 250 dwellings and a diverse population of residents, including communities relocated from Saida's old city, Bedouins who develop and improve the surrounding lands, Lebanese-Palestinian migrants from "Ain El- helwe," Lebanese inhabitants from various areas inside the city, and Syrian employees.

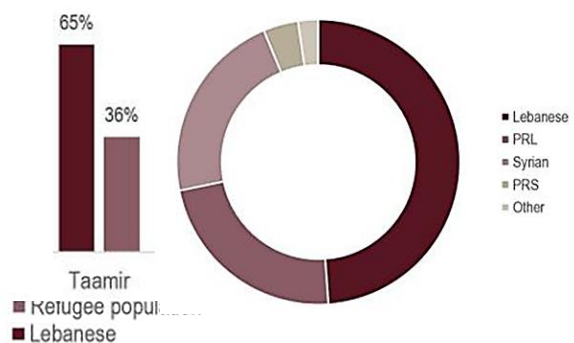


Fig.30: Diagrams showing the demographical study of Taamir.

In addition to the occupation and educational level of the inhabitants that varies in a higher percentage shown in Table 2 which is the craft workers in Taamir district, so this will seeks the economic and cultural level by supplying sociocultural facilities in the spine chosen before.

Fig.31: Showing the “Sekkeh” spine and proposed site in Taamir.



Table2: shows the occupation and education level of the population, source: socioeconomic institution, 2015

	Professionals Senior Officials, Managers	Technicians, Associate Professionals , Clerks	Service & Sales Workers	Craft Workers, Machine Operators
Saida	13.00%	4.00%	15.00%	49.00%
Mia Mia Camp	12.00%	4.00%	8.00%	52.00%
Ain El Helweh Camp	10.00%	4.00%	13.00%	54.00%
Taamir-Villat	6.00%	0.00%	20.00%	49.00%

	Employment Rate (23-65 years)	Professionals , Associate Professionals	Service & Sales Workers	Craft Workers, Machine Operators
Never at School	39.00%	7.00%	16.00%	45.00%
Completed Primary	40.00%	12.00%	16.00%	47.00%
Brevet	38.00%	13.00%	23.00%	49.00%
Baccalaurate	44.00%	35.00%	20.00%	34.00%
Vocational Degree	70.00%	36.00%	22.00%	27.00%

3.7 Different Perspectives Of Public On “Taamir, Saida”

This study intended to engage a selection of target people who work and live in the specified region of the district of Taamir. In order to get recognition and greater engagement with inhabitants. The paper used two basic field methods to identify the layer's perspective, objectives, desires, and critical needs: conducting interviews and distributing a survey questionnaires, as shown below.

3.7.1 Holding Interviews

Face to face interviews were carried out with adolescents since it is sensible to improve and upgrade the informal settlements in Taamir district. To begin, users must protect, instruct, and engage themost active people (adolescents), who could really contribute to a range of facilities and services, although it was critical to select this target age group. Significant interview questions include the following:

- a. How do you think about yourself belonging to Taamir district?
- b. What are your social practices during the day?
- c. Where you meet your friends all the days from morning until evening?
- d. Would you go to college?

Here are some examples of responses:

Samir, (16 years old):

No, I do not attend school. My family has recently had financial difficulties, and I works in the garages to help my parents; however, I don't really learned how to read and write.

Saleh, (15 years old):

I actually play with my local friends. We use the empty area within the community on a time-sharing basis on the pathways between our buildings.

Almost all of the adolescents here anyway stopped the school to work to meet their basic needs. For example, the interview with Samir shows that he do not attend the college because of their financial problems that faces his family. Furthermore,

there has been a serious lack of outdoor facilities and a shortage of the open public spaces that might interest adolescents. Such services, including facilities and parks, are not present within the area and regarded as enjoyable locations to visit.

3.7.2 Questionnaire

A closed questionnaire with 4 type of questions was involved in the analysis. The targeted group consisted of randomly residents ranging in age from 7 to 20 years of age, while they have an impact on future generations. The questionnaire was completed by fifty people in order to obtain a variety of perspectives. Determining in which tools can measure quality of life. The following questions were provided in this form and were focused, straightforward, and selective as shown:

- a. What are the major issues in the district?
- b. What services would you need to see implemented to improve your community?
- c. What are your opinions on the current open public spaces?
- d. What are the causes of the disconnection to the city center and the social insulation in the district?

Following the completion of the field method, the paper evaluates the findings and conclusions of the replies.

4. FINDINGS

The research follows an analytical methodology to analyze answers said in the interviews and answers mentioned in the questionnaire forms.

4.1 Analysis of the Interviews Results

The study can derive a checklists of needs from interview responses that could successfully enhance the quality of life inside the community of Taamir. The table 3 is a representation of this list.

Table 3: Table shows the needs of inhabitants in Taamir Saida.

Socio-Cultural Facilities	Educational Facilities	Recreational Facilities	Open Green Public Spaces	Commercial Facilities	Improved Public Amenities
Craftsmanship Workshops	Leisure Facilities & Library	Sport Facilities & Green Spaces	Park and Hubs for different target groups	Retails spaces & Shops	Community Facilities that are Adaptable

4.2 Analysis of the Questionnaire Results

The outcomes are presented in the form of statistics charts. Some of which are depending on cultural, social, and economic backgrounds. The findings are presented in the statistics in Figures 32, 33, 34 &35. Inequality was cited by 35% of participants in Fig. 32 & 35, followed by pollution and sewerage (referred by 10%). Other issues raised included social deprivation and culture spreading deficiency. In terms of academic performance, 12% said their education stopped at the elementary level, and sadly, the proportion of the respondents stopped out amongst the ranges of 10 and 19 years (34%). So according responses, adolescents left college due to domestic problems, and the majority of family members had to work to cover living expenses. This one was stated by 31% of the group, which would have been the

largest number. According to the diagram in Fig.33, in terms of resident’s viewpoints on improving the facilities trying to serve and enhancing the district, 14% of participants highlighted the significance of supplying vocational courses and trainings, since a 23% of participants believed that able to provide a sociocultural facilities could revitalise the region with better and healthier and effective activities.

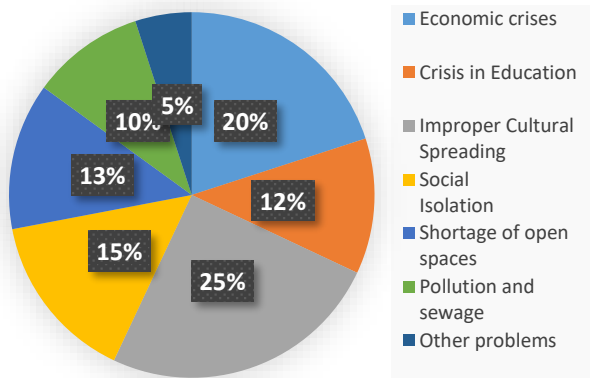


Fig.32: Pie Chart of answering the first question of the major issues.

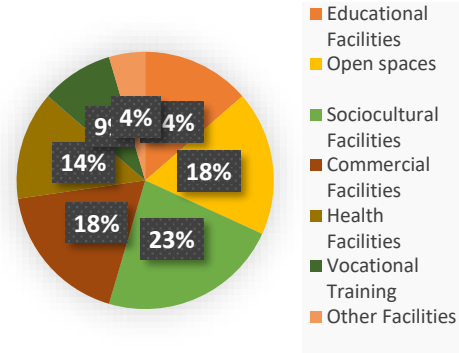


Fig.33: Pie Chart of answering the second question of the needs of facilities.

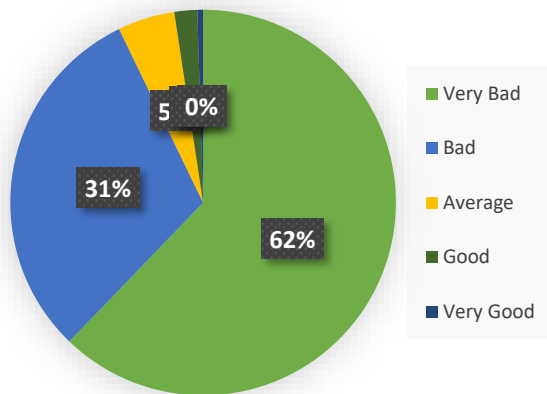


Fig.34: Pie Chart of answering the third question of the opinions of existing open spaces.

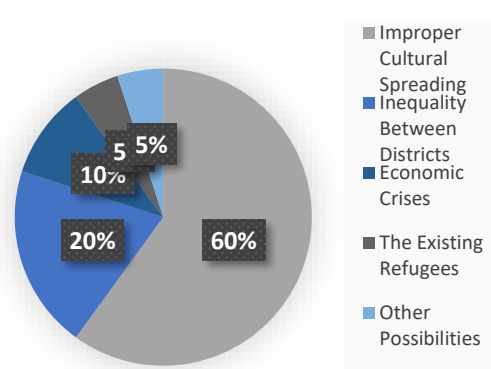


Fig.35: Pie Chart of answering the fourth question of the causes of disconnection to city.

5. DISCUSSION

The study suggests guidelines for improving the quality of life in informal settlements district. The first guideline is underlined in the role of sociocultural facilities in upgrading the informal settlements. Activating the open public spaces and adaptive reuse of existing spaces. To express the image of the old city and intends to establish itself at a strong cultural level and platform. The significant aspect of that kind of procedure, which could also enable socializing, economic growth, as well as the development of the empty lots as open public spaces among the informal settlements.

The second guideline is to reuse the existing scattered wood in the informal settlements district and implement wooden perforated shelters in a way as the classic old city pergolas to recall area’s culture. The third guideline is to provide public parks and improve facilities that upgrade the district with leisure facilities, library, and work programs, academic institutions such as vocational training courses, and other aspects essential to social interaction. The fourth guideline is to ensure green corridors, infrastructure and landscapes within the informal settlement improving the sense of security, safety and clean environment.

The Lebanese government must act using ministries to implement the last two guidelines: the Ministry of Culture, the Ministry of Education, and the Ministry of Environment.

Table 4: Table shows a presentation of specific guidelines for upgrading an informal settlements.

Guidelines to upgrade the open public spaces in the informal settlements				
-Supplying services and facilities that are appropriate for the current needs and issues of the selected district.	-Enhancing quality of life by improving resident's educational, socio-cultural, economical issues.	-Developing open public spaces, empty lots and adaptive reuse of spaces.	-Improve the sense of security and safety in supplying such activities and sustainable approaches.	-Improving the connectivity with the surrounding districts and neighborhoods.

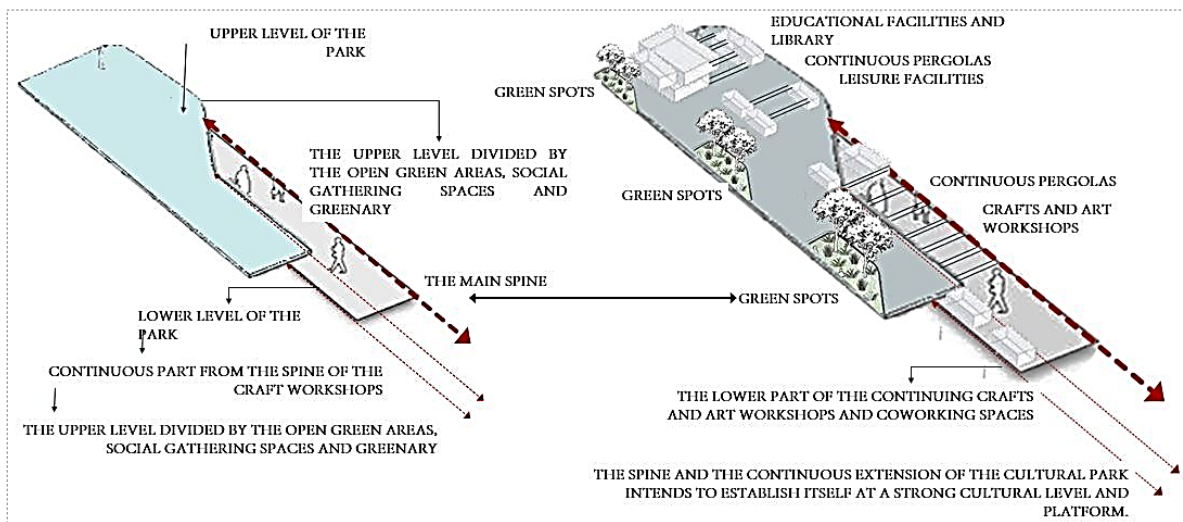


Fig.36: Showing the spaces concerning the continuous spine of craftsmanship workshops, expressing the image of old city Saïda.

6. CONCLUSION

This research paper mention the problem of informal settlements, such in the socio-cultural and environmental levels. Similar examples were analysed to define the parameters of analysis of the main case study. Overall, this paper comes to the following conclusions:

- a. The notion of upgrading informal settlements must be founded on three fundamental aspects and steps in future intentions:
 - The empty lots and adaptive reuse spaces: Taking advantages from this spaces along the edge of the studied district by activating and reusing it.
 - The connectivity with the city: reducing the disconnection between neighborhoods by injecting such a social and cultural activities to recall the culture of the old city.
 - Consistency: by applying such facilities and green infrastructure within the informal settlement improving the sense of security and safety.
- b. Upgrading the open public spaces can guarantee improving the cultural, environmental and social concerns of the informal settlements inhabitants.
- c. Enhancing the quality of life in informal settlements helps to guarantee that resident's educational, sociocultural, economic and environmental problems are resolved.
- d. According to the outcomes of this research, the process may be engaged by supplying this areas with facilities according to the existing issues and community needs. As a result of renovating and upgrading the informal settlements, the fulfillment with the quality of life rises dramatically.

- e. This study intends to be an urgent call to government decision-makers, Hariri Foundation, the UN Habitat, and Human Rights Organizations to pay special attention to this group of individuals who already have huge potential but are unemployed.

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