THE REPUBLIC OF TURKEY
BAHCESEHIR UNIVERSITY

A STUDY ON SELF-HELP INCREMENTAL HOUSING: LATTAKIA CASE

Master's Thesis

NOOR RAI

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THE REPUBLIC OF TURKEY
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MASTER OF ARCHITECTURE

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SUPERVISOR: PROF. DR. SEMA SOYGENIŞ

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ABSTRACT

A STUDY ON SELF-HELP INCREMENTAL HOUSING: LATTAKIA CASE

NOOR RAI

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Informal settlement has been one of the major topics to discuss in the current time, and it is one of the most serious issue governments and societies face nowadays. Rapid population growth in developing countries forced households to use informal mechanisms to access housing, such as acquiring land in illegal sub-divisions or squatting on public land and incrementally building their dwellings. The study argues the potentials of government intervention for housing the poor, thru analysis of the Corniche Region phases of development similar to self-help incremental housing. The study deduces the best recommendations for finding possible solutions for incremental housing process. In brief, this thesis attempts to identify the main determinants and triggers of incremental housing process and the outcome of the Corniche Region case study where it is incrementally built but there is not much governmental intervention. These triggers might aid in explaining the challenges and potentials of the development of the process. Then, some recommendations, based on questioning the potentials of self-help incremental housing in various geographies, will be the starting points for an improved planning and management.

Keywords: Self-Help Housing, Incremental Housing, Site And Services, Informal Settlements Development

ÖZET

SELF-YARDIM ÇÖZÜMLEME KONUTU ÜZERİNE BİR ÇALIŞMA: LATTAKYA'NIN ANALIZI

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Mimarlık ve mühendislik hizmeti alınmadan geliştirilmiş yerleşmeler, yönetimlerin ve toplumların karşılaştığı en ciddi sorunlardan birisi olmuştur. Gelişmekte olan ülkelerdeki hızlı nüfus artışı, hanehalkını, kamu arazisine el koyma ve konutlarını aşamalı olarak inşa etme gibi barınma olanaklarına erişimi için resmi olmayan mekanizmaları kullanmalarını zorunlu kılmıştır. Çalışma, "self-help" konutların üretim süreçlerine benzer bir oluşum yaşamış olan Corniche Bölgesi'ndeki gecekondu yerleşmelerinin yerel yönetim veya sivil toplum kuruluşlarının katkı potansiyelini savunuyor. Çalışma, uzun bir süreç içinde gelişimini tamamlayan knout süreci için olası çözümleri bulmak için önerileri ortaya koymaktadır. Kısacası, bu tez, arazinin yönetimler tarafından kullanıcıya sunulduğu, ve kendi kendine, gelişigüzel bir şekilde zaman içinde gelişen Corniche bölgesini inceliyor. Bu tetikleyiciler sürecin gelişiminin Yönetimlerin arazi sağlama dışında katkısının olmadığı bir yerleşmenin fiziksel koşulları, organize edilmiş "self-help" örnekleri ile karşılaştırmalı olarak incelenerek yönetim veya kuruluşların destek ve müdahalelerinin önemi sorgulanmıştır.

Anahtar Kelimeler: Kendi Kendine Yardım Konutları, Artan Konut, Site Ve Hizmetler, Gayrı Resmi Yerleşim Yerleri Gelişimi

CONTENTS

TABLES

FIGURES

ABBREVIATIONS

E	:	Electricity
EDU	:	Education
Ex	:	Extended
HE	:	Health
I.H	:	Informal Housing
N	:	Nuclear
N.P Lodgers	:	Non Paying Lodgers
S	:	Single
SHH	:	Self-Help Housing
W	:	Water
WC	:	Waste Collection

1. INTRODUCTION

Rapid population growth in developing countries and cities in the last three to four decades has brought about serious challenges to housing provisions around the globe. The increasingly urbanized boom of world's population is projected to add 2.5 billion people to the urban population by 2050, with nearly 90 percent of the increase concentrated in Asia and Africa (United Nations, 2015). However, housing in the developing world is increasingly becoming a scarce commodity in many cities due to the rapid population growth as an effect of unparalleled urbanization phenomena; thus, resulting in people going to alternative solutions and temporal structures in form of squatter settlements (UNCHS, 1996). Increase in population growth in developing countries such as Syria means that providing housing and urban services for urban residents, especially the low-income will be a major challenge for urban managers and governments involved in this issue. Therefore, it is a difficult prospect, given that most developing countries are currently cannot deal with the housing needs of the existing urban populations.

As a matter of fact, housing is increasingly becoming unaffordable for most low-income groups. The have-nots in the developing countries cannot access mortgage finance. Furthermore, the cost of housing remains high (UN Habitat, 2008). In reality, the only solution left for those that cannot afford a decent house is the informal housing. The lack of appropriate housing finance models, the low-income households have constantly relied on other sources such as individual savings, informal loans from friends and relatives, to build their dwellings (Stein&Castillo, 2003). Consequently, their poor financial standing led them to invest in housing production incrementally.

As a developing country, Syria has been suffering an increase in urban population. The factors contribute to this growth are mostly natural population growth in addition to internally displaced people. Painfully, there are 6.5 million people, including 2.8 million children, displaced within Syria, the biggest internally displaced population in the world since 2011 (UNHCR, 2016). With this increase in urbanization, Syrian safe cities, especially Lattakia, are on the pressure to cope with the need for the growing demands for

housing in both quality and quantity. "Informal settlements" is described as settlements that do not adhere to all planning regulations such as construction regulations, land ownership, and the right to use elementary services (UN Habitat, 2008). In this context, it is important to realize that the escalating demands for housing have been accompanied by an increasing sense of urban dwellers to build their own housing. This naturally produces informal and incremental housing over a period of time.

1.1 PROBLEM STATEMENT OF STUDY

The trend of informal and incremental housing construction is rapidly increasing. What added insult to injury was the city officials who did not heed the aggravated situation and did not adjust the planning regulations to meet the needs of most people. This necessitated the inevitability of housing stocks. In reality, unless actions are taken against this phenomenon, low-income people are fated to live in informal and none decent housing. Actually, the task of accessing a good house has been left to the households themselves (UN-Habitat, 2012). Since they have no choice, they accept a kind of housing that does not respond positively to their needs and financial standing. According to (NHA, 1996), self-help incremental housing creates housing units of a very poor quality devoid of any urban planning, sufficient services, and land ownership. This is due to the slowness of land delivery for formal development which responds to the needs for low-income housing, lack sufficient finance, and the reluctant efforts to actualize housing development for the poor people. The phenomenon of building incrementally can be spotted in both informal and formal settlements, anyway. However, this research attempts to examine the process of incremental housing and how one can utilize this very process to improve the living standards of low-income people.

1.2 RESEARCH OBJECTIVES

This research attempts to delve into the growing phenomenon of incremental housing in Lattakia, Syria. Furthermore, the research looks at the informal incremental housing processes as practiced by most low-income groups. The study takes a case of Lattakia Corniche Region, for it is one of the informal settlements. The main research objectives therefore are:

To study the determinants that drove low-income people to build incrementally, to examine the self-help incremental housing processes in informal settlements, and draw possible intervention to support self-help incremental housing that would improve decent housing for low-income people in Corniche Region. The sub-research objectives are:

a) To shed light on how the process of incremental housing construction in Corniche Region is done by low-income households.

b) To understand of the factors that trigger the incremental housing process.

c) To find out the possible strategies for low-income groups that would improve self-help incremental housing process.

1.3 RESEARCH QUESTIONS

The research will seek to provide an answer to the question of whether or not self-help incremental housing processes have helped low income dwellers in informal settlements to access housing and how far these processes can be developed into a strategy for providing housing for low-income people in the Corniche Region. The research problem that are understudy in this thesis will help to answer the following question:

How does the low-income households in informal settlement in Corniche Region typically done their incremental housing construction?

1.4 RESEARCH METHODOLOGY

1.4.1 Research Framework

The beginning of this thesis presents the background and rationale for conducting the research. In order to understand the incremental housing processes, the thesis starts with drawing in-depth upon knowledge of literature. As a matter of fact, the comprehensive literature review and the research of concepts appeared over the years laid the foundation for forming an experimental study and developing the variables and the indicators that can be used to actualize this research.

1.4.2 Type of Research

The study is a qualitative interpretive one, carried out on three embedded case study. The study attempts to comprehend incremental housing phenomenon via detailed descriptive analysis of this phenomenon. The research, furthermore, includes essential quantitative data such as household's sizes, household income, and other data related to the study. Much has been written by a host of researchers about self-help housing and incremental solutions. Hence, knowledge and giving an in-depth understanding of the experiences of the low-income households in Peru, Burkina Faso, and Lattakia form the foundation for this research. This case studies emphasize detailed analysis of the self-help incremental housing process according to the already mentioned examples. The case study is so relevant to the research, for it is an experimental analysis that examines a contemporary phenomenon within its real-life context. In this case study, multiple sources of data are also used for endorsement of the findings.

Figure 1.1: Thesis Framework
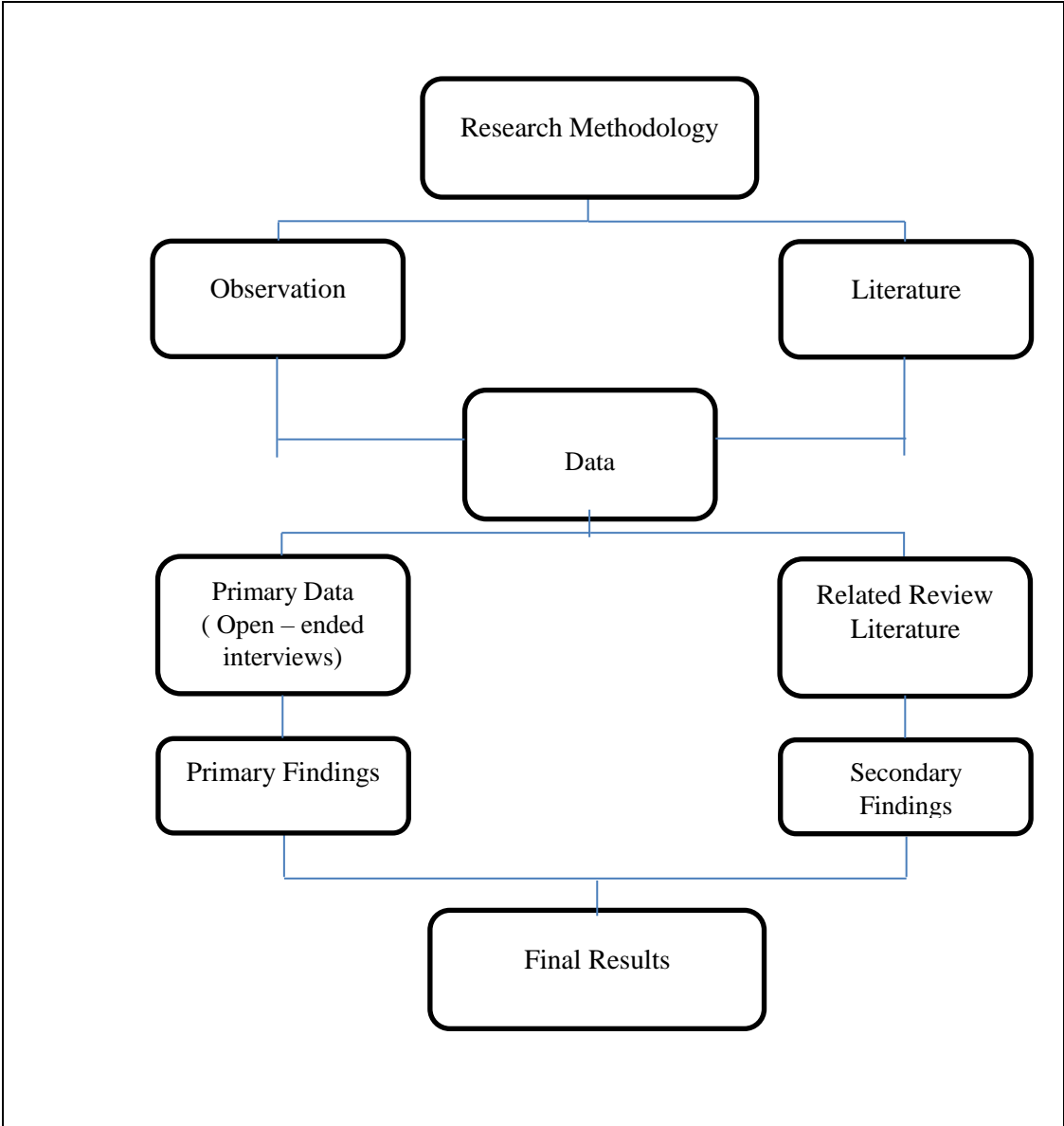
Source: edited by Author

1.4.3 Data Collection Methods and Research Sample

The second part of this thesis includes going out into the field study to carry out data collection, after having drawn knowledge from literature. The case study data collection is undertaken in the researcher's home country, Corniche Region, Lattakia, (the residence of the researcher), Syria. This research utilized various data collection methods including interviews with heads of households, photography, and observation including interviews with the officials of Lattakia City Council and non-government people such as contractors. A sample of 30 household respondents was chosen from one part of the settlement in Corniche Region that is the starting point of the informal settlement. From these 30 respondents, a basic survey was carried out to establish the household characteristics, the basic characteristics of the incremental development of the settlement, a physical characteristic of the environment, and possible interventions and support. The participated people were municipality officials and dwellers of various ages and occupations. The conducted 20-minute interviews were open-ended interviews, as all of them were face to face interviews.

1.4.4 Research Validity and Reliability

The main key informants in giving data related to the self-help incremental housing processes were the household interviews. Moreover, in order to obtain facts as well as the opinions of the low-income people in Corniche Region in their quest to have decent housing, researched questions were asked.

1.4.5 Relevance of the Research

The thesis finding would be relevant for architects and municipalities as well as the experts, contractors, and policymakers who can develop interventions that would be responsive to the low-income people.

1.5 STRUCTURE OF RESEARCH

Chapter one: this chapter includes the introduction of the thesis, which explains the rapid population growth in developing countries and the increasing housing demand, then gives a brief on internally displaced people in Syria and their need for housing. It also clarifies the problem statement of the study, research objectives, questions and research methodology.

Chapter two: the second chapter provides a literature review which contains theoretical studies about the importance of housing and the formal versus the informal housing development. Then analysis what is meant by self-help housing and its types, characteristics and the phases of self-help housing development. It also illustrates the self-help incremental housing concepts and factors that supporting it.

Chapter three: this chapter includes two successful case studies for self-help incremental housing which are located in Pero and Burkina Faso and explain them in detailed.

Chapter four: this section presents the self-help incremental housing case study in Corniche Region, Latakia, Syria which is the residence of the author, then explain it in detail with the characteristics of the study area and how the household build it incrementally over time.

Chapter five: the fifth chapter mainly deals with data gathered in the research. It explains interviews with thirty participants and how does the low-income households in informal settlement in Lattakia typically done their incremental housing construction. Moreover, this section discusses the research findings that emerged in the analysis.

Chapter six: this chapter draws conclusion based on the recommendations and with the aim of enhancing low-income housing.

2. LITERATURE REVIEW

2.1 INTRODUCTION

Housing for the lower income groups has been a continuous problem especially for the countries of the developing world. The poor found very few places to live in developing countries due to increased migration to the cities. Some rented rooms in flats, but mostly all they could do was to occupy a vacant land and build makeshift shelters. Therefore, governments that do not have realistic housing policies neglected them or often faced the problem by evicting and removing slums to stop squatting, offering no housing alternatives to those displaced. Some of the states turned to predominating industrialized models for housing the poor, i.e. the public high-rise building projects. In the long run, these solutions failed since they were unaffordable to the target low-income groups and were disliked by residents. The housing deficit continued to get worse with no way to enter the housing industry, by default the poor continued to build their own cities of slums and illegal settlements. Consequently, the underlying issue for these households and for future generations continues to be legal and formal access to land, credit, and security of tenure. The urban poor has shown the ability and the willingness to build their houses. There are many examples of illegal and self-help housing where they did by themselves. If they are given the security from eviction, the time and place to build; houses and communities will flourish. (Gattoni,2011)

2.2 THE IMPORTANCE OF HOUSING

Narrowing focus down, it is important to explain what is meant by 'housing. World Health Organization defines housing as "a residential environment which includes in addition to a physical structure all that man uses for shelter, all necessary services, facilities, equipment for the physical, mental health and social well-being of the family or occupants." (WHO,2000). Housing is a human right which is expensive and involves fixed capital and location. Furthermore, due to the property rights and regulations, it requires additional infrastructure investments and other public services and also demands government intervention. Housing nowadays remains one of the most critical and challenging issues in

the developing world. It is also important addressing housing issues because a house is not just a structure of walls with a roof. It is a place where people raise and care for their children, where a family lives together. The physical environment gives a huge impact on people's well-being and outlooks on life. Furthermore, a house provides a family with personal and private space and also represents security as a coping structure, as a step into the city, as a safe investment and as an enterprise. Due to the importance of decent housing for people and societies, housing policies and programs should meet housing needs. (Williams,2005)

2.3 CHARACTERISTICS OF INFORMAL HOUSING
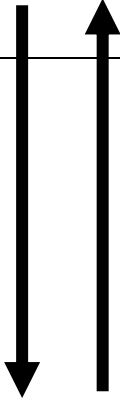
When government fails to provide formal housing to people, people tend to develop housing by themselves, named as Informal Housing. (I.H.) is viewed quite differently by different organizations. (The Vienna Declaration on National Regional Policy and Programs, 2004) Defined 'informal housing or informal settlement' as "human settlements, which is for a variety of reasons do not meet legal procedure. It has been built without respecting; formal procedures of legal ownership, transfer of ownership, as well as urban planning regulations which prevail in their respective countries" The declaration acknowledges that I.H. differs from one place to another. In other words, one cannot take one type of I.H. as the only sample because there is regional diversity in terms of the manifestation of informal housing. Yet there is something common among informal housing, for they are characterized by informal or insecure land tenure, inadequate access to basic services, lacking both social and physical infrastructure and housing finance (Tsenkova,2009). In some books, people refer to informal housing as slums or unauthorized housing. According to The UN-Habitat, the term "slum" refers to housing that is lacking one or more of the following conditions: security of tenure, structural quality, durability, access to improved water, access to improved sanitation, and sufficient living area. 'unauthorized housing' is defined to be housing that is not in compliance with the current regulations concerning land ownership, land use, and zoning or construction, while squatter housing relates to housing that is occupying land illegally" (Angel,2000). Since there are different names for the informal settlements. Informal housing will be used in this thesis to represent housing that has been built without respect for the formal procedures of legal ownership and urban planning regulations.

2.4 THE FORMAL VERSUS THE INFORMAL HOUSING DEVELOPMENT PROCESS

Although, formal housing is the legal basis of the planning agency which is developed within the structure of government rules, controls and regulations. As well as informal housing is illegal and consisted of unauthorized colonies and squatter settlements. There is something in common between formal and informal housing. Both of them have been incrementally developed over a period of time. What differs is the sequence of development anyway. The sequence of housing development in the formal and informal process usually occur in reverse order. The formal development follows planning regulations and land development procedures (Turner,1986). The future recommendations, in housing policies, point out that the in the formal processes the housing development follows a sequence of 'land to build to people'. However, land is developed including a provision of infrastructure and services (Without knowing who will be the end user), then assigned to the intentional user with a title deed. In this land development order, all housing is developed in accordance with the planning guidelines and regulations. The final sequence is the occupation of the house by the user. This sequence is usually stunted because land delivery is quite slow and serious efforts hardly exist. (NHA, 1996).

On the other hand, There is a similarity between the formal and informal housing development. However, informal housing development follows a reverse sequence of the formal housing development. The sequence in the informal housing development process is from 'people to land to build.' People start occupying the land. Later, they develop it with all services they can afford. (Turner, 1986, Barros 1987). In this order, the acquisition of the title deed is the last in the sequence although it is not guaranteed. Following in Table 1 that shows the formal versus informal housing development processes.

Table 2.1: Formal Versus Informal Housing Development Processes

Formal Housing Development			Informal Housing Development
1. Register Land 2. Land division with title deed 3. Land planning 4. Facilities such as services and infrastructure 5. Building construction 6. Occupation			1. Occupation 2. Building construction 3. Facilities such as services and infrastructure 4. Land and shelter upgrading 5. Regularization and trying to obtain title deed 6. Legalization

Source: (Mcleod & Mullard,2006)

Figure 2.1: Housing patterns of informal and formal (Lattakia)
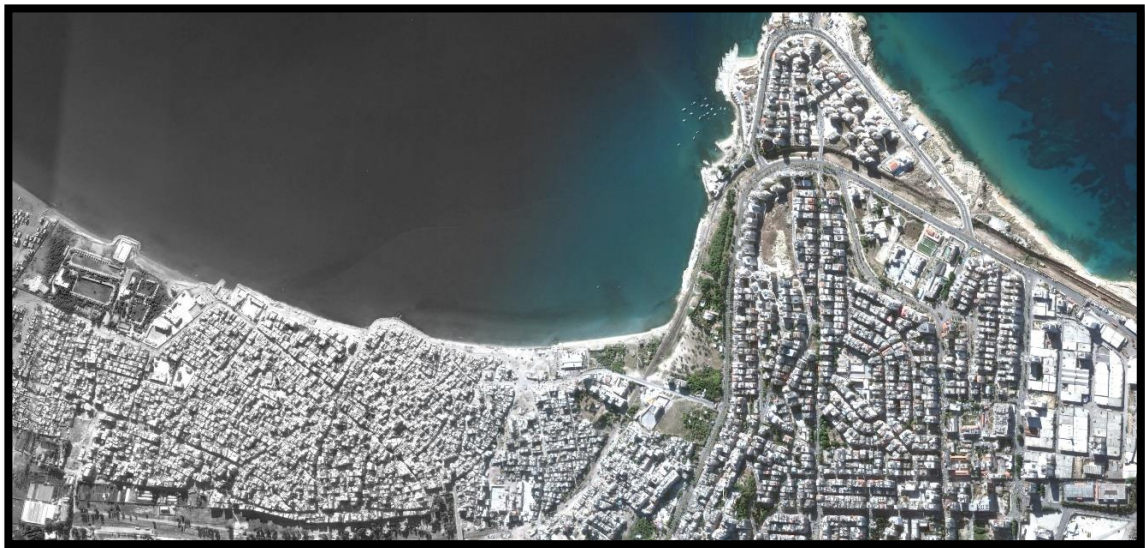
Source: google maps, edited by author.

Informal housing has been criticized, several emphasize the positive effect of it. Still, it has some advantages that cannot be ignored. It leaves strong effects on the housing stock (NHA,1996). (Greene&Rojas,2008) Also indicate about the positive side of the self-help incremental housing, for it immediately starts soon after land acquisition. Then, people go on to build shelters that provide their basic needs such as protection from natural phenomena and privacy. With the passage of time and funding, the households begin to consolidate their

dwellings. The majority of households consolidate their places from personal savings, microloans, and community aid. This process of consolidating the dwellings which takes into consideration the needs visions and priorities of the dwellers can take several years. From this argument, informal housing is studied under two expressions: self-help housing and self-help incremental housing processes which can be seen as a possible alternative that can be boosted with adequate technical and financial support for the poor. It is worth noting that the self-help incremental housing is frequently called self-help housing, self-managed housing that is an appropriate term. Nevertheless, what is different is that the self-help incremental housing indicates the construction is incremental. (Turner, 1982)

2.5   SELF-HELP HOUSING (SHH)

2.5.1 Characteristics

 "Self-help" is a course of action in which low-income people are the major players in their own housing construction that will ultimately be improved. Furthermore, (Westendorff, n.d) defines self-help housing as the outcome of various activities leading to design, construction, maintenance and management of the physical structure and immediate surroundings of a permanent shelter for human beings. Self-help housing also includes renovations of existing buildings. This process includes tenements, industrial spaces or other structures that have not been occupied for lengthy periods. This can be done when new residents or others working with them undertake the improvements.

Still, views and counter views of the same issue can be seen. For example, Charles Abrams, an early critic of self-help housing models, contributes to the understanding of incremental housing models. For him, self-help housing breaks with more technological approach that the poor could not afford. For Abrams, self-help is nothing but a failure of institutions in providing the poor with more advanced, efficient, and affordable technologies. Consequently, these institutions or agencies push the poor to build on their own. Some of the shortcomings of self-help housing Abrams refers to are that self-help houses take a long time to build. Moreover, construction by families is defective due to the absence of experience in addition to the fact that efficient construction is not achieved since the modern techniques of

mass production are not used. John Turner, on the other hand, disagrees with Abrams. To him, the concept of self-help is not only as sweat investment by residents in their houses but also as the authorizing processes of owner-design and management. The primary aspect to the concept of self-help is that the residents are free and independent in their decisions. (Turner, 1976). Turner argued that such autonomy would provide the best results because the houses would be appropriate to the changing needs and circumstances of their dewllers (Turner&Fichter, 1972). Therefore, housing conditions in squatter settlements would be developed and improved over time primarily due to the individual efforts of the residents. He believes that the poor have the insight and the good judgment that enable them to visualize their own needs that they can address. (Turner&Fichter, 1972).

2.5.2 Types of Self-Help Housing

Self-help housing can be seen in three forms: users initiated, state supported, and state initiated housing programs (Harms, 1992).

2.5.2.1 Users initiated Self Help Housing

User-initiated self-help housing form frequently starts with the household obtaining a piece of land through legal squatting or un-registered subdivisions. In this form, low-income users commence the process and consolidate their dwellings little by little by themselves with no governmental aid or programs. Often this form produces low-quality housing and legal problems in both land acquisition measure and building regulations (Harms, 1992).

2.5.2.2 State Supported Self-Help Housing

The State Supported self-help housing starts by the local municipality or state offer that supports upgrading the settlements to minimum standards. It is important in this context to realize that the aid is often takes the form of technical support, infrastructure provision, and land possession. This form demands community participation procedures and the initiatives from Community Based Organizations (CBOs) or Non-Governmental organizations (NGO's). This requires collaboration between professionals and non-professionals (Harms,1992). According to (UN Habitat, 2005), the state-supported self-help housing is a smart and affordable way of supplying sustainable shelter for low-income people due to:

a. It is formed on minimum criteria.

b. It integrates a permanent amount of equal efforts.

c. It is valuable due to the individuals and communities engaged in it and it gains building skills.

d. It meets people's real demand and levels of affordability.

e. It is flexible because of dwelling units are often designed to be extended over time.

2.5.2.3 State Initiated Self-Help Housing

State-initiated self-help housing is normally planned and regulated by national government or international agencies, the implementation of which requires participation from beneficiaries. It is important to know that state-initiated self-help housing and state-supported self-help housing differ significantly. In the first, the government offers much more aid, while in the second the aid is much less. As a matter of fact, the state initiated self-help housing implies two concepts which are concept of core housing; and site and service housing supported by the World Bank and other international organizations (Harms, 1992). Following are the concepts of core housing and site and service in detail in order to draw lessons from the state initiatives in supporting self-help housing approaches.

The concept of core housing means that the majority of low-income groups lack access to finance and as such opt incremental construction due to their financial standing. Actually, most low-income households start the process by building sections of their houses building materials they can afford after the acquisition of land. (Napier, 2002). Some of the principles of core housing as put by (Abrams, 1964) are:

a. It starts with a size quite enough to accommodate the typical family.

b. It is designed to be enlarged by the household.

c. It is owned by the occupants by installment in both the original core and the extended structure

d. The core housing constructed from materials that allow expansion and which could be supplied through local material suppliers and producers.

e. The core housing unit must have access to water and sanitation since the occupation time. Also, it is designed to be comfortable as to adapt to changing climatic conditions.

The concept of site and service comes from the awareness that governments cannot provide the complete serviced house. Furthermore, most government housing programs are not available to the majority of low-income families (Van der Linden, 1986). The program starts with providing the land with all its utilities such as sewage system, water supplies, roads, and electricity. This accelerates the process of improving the housing. The World Bank supported strongly such a concept by financing similar pogroms in various countries in South America, Asia, and Africa. Site and services can be seen as a means of solving the problem of squatter settlements that are expanding at the time. In other words, the governments should provide a plot of land and the infrastructure such as drainage systems, electricity, water supply, roads or a sanitary network while the households should contribute to the building of the houses. The financial procedures used for most of these projects demand beneficiaries to repay the money in terms of service charges.

According to (Goethert&Goethert&Chavez, 2011) there are advantages and disadvantages. Others have different opinions of site and services. The advantages of site and services are: site and services concept helps the government to focus on providing land for the low-income people as a role of city growth plans. Also, it helps to gives households legal status and control markets. Moreover, it organizes, facilitates and reduces the cost of housing production for government and homeowners. Furthermore, it helps to use savings for shelter and promotes community cohesion and collective responsibilities. Finally, it provides channels for complementary social assistance programs and improves coordination among service agencies, infrastructure, and utilities. However, the difficulties of sites-and-services are: it needs both the political commitment and the political to address land assembly and acquisition.

Figure 2.2: The Starter Core House Types

THE STARTER CORE HOUSE: TYPICAL 'FAMILY' OF
HOUSE TYPES IN A SITE OF SERVICES PROJECT

Lot only, with services

Lot, services, with starter
core (most favoured)

Lot, services, small house

Secure tenure a key component, with various support
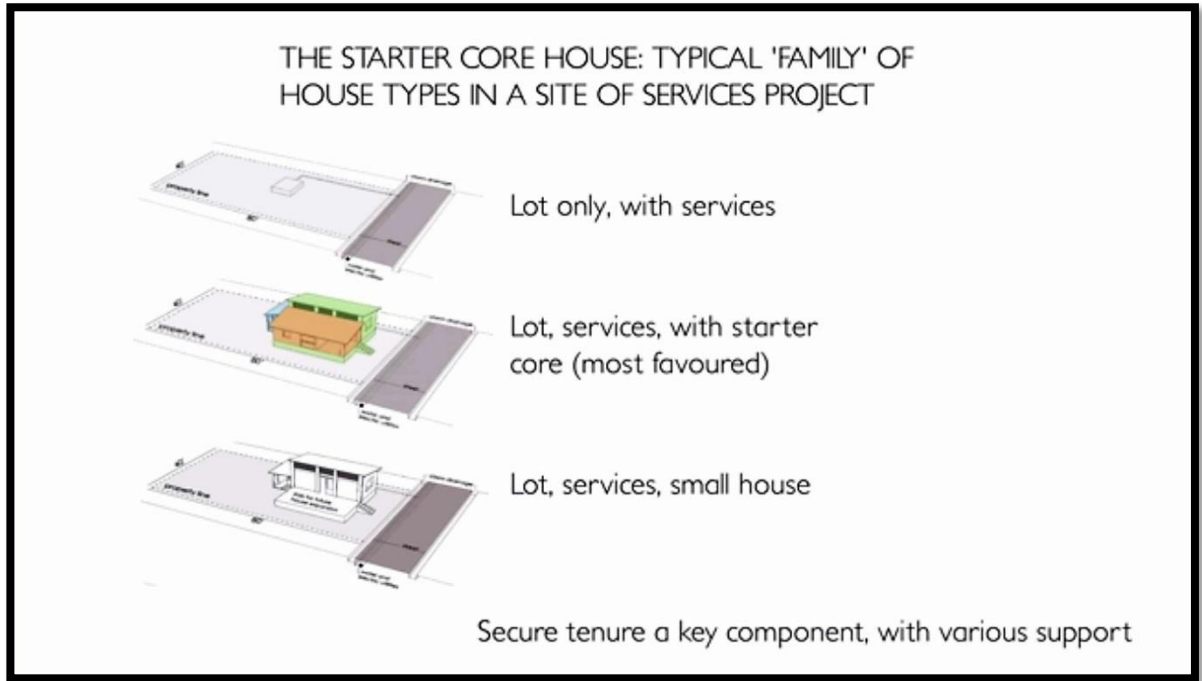
Source: (Abrams, 1964).

2.6 PHASES OF SELF-HELP HOUSING DEVELOPMENT PROCESS

It is possible to distinguish three phases of self-help housing identified by (Greene&Rojas,2004). These include; access to land, the construction of basic housing core, and the incremental improvement of the dwelling

2.6.1 Access to Land

The first step in self-help housing development process entails access to land, with appropriate location, by the low-income households. This step permits low-income families to build their dwellings and to benefit from basic services and job opportunities within the urban area. For (Payne, 2002), the priority of the poor urban households is to obtain a way to land where they can take full advantage of their livelihood opportunities and this is usually located in urban areas where competition for land and land prices are extremely high. In this context, (Greene&Rojas, 2004) maintain that low-cost or free land is highly important in

making the total process possible. (Payne, 2002) further affirms that the central location is carefully chosen because it provides access to transportation. The land prices are chiefly governed by the location and the future development of the land. In reality, the two factors, already mentioned, influence the land prices and explain why low-cost land can be only located on the city periphery that is deprived of infrastructure as well as basic social services. In some cases, nevertheless, incremental housing construction takes place in a central location by illegal seizure of the public land.

2.6.2 Construction of Basic Housing Core

The second phase of the self-help housing development is construction of basic housing core. Upon accessing the land, low-income people start construction. The core unit offers them a shelter that protects them from bad weather (Figure2.3). Actually, the materials used for this construction are mostly not durable such plastic materials, cardboard, used tin sheets, or wooden pallets. In some cases, households use local materials that are affordable like burnt bricks and cement. All in all, these units lack basic services like sanitary systems, kitchens, electricity, water, and roads. It is important to realize that the construction and design are completely done by the households who make use of native equipment and local materials (Greene&Rojas, 2004).

These units, however, protect people from eviction. In this context, their construction is financed entirely from personal sources. Consequently, this defines both the type of housing unit and the type of materials used. (Hansen&Williams1998) argue that availability of household income is the most significant factor that determines how the basic housing core is constructed. More importantly, these households build the basic housing core to reveal their living standards. They avoid debts as much as possible. However, when it becomes necessary for them to incur debts, they choose shorter debt periods so that they can meet other pressing needs such as education for children, food, and travel costs (Smets, 1999).

Figure 2.3: The starting basic housing core in informal settlement. Lattakia, Syria

 Source: Author.

2.6.3 Incremental Improvement of The Basic Housing Core

The third phase of self-help housing involves incremental improvement of the basic housing core. After completing the housing core possession, households go on to enlarge and improve their dwelling taking into consideration the family size, priority, income changes. At this stage of the expansion, they do not take into consideration the quality, rather the need for accommodating more additional members of the family. (Greene&Rojas,2004) (Figure2.4) (Figure2.5). This stage is characterized by minimal infrastructural services as well as conflict of interest between beneficiaries and public sector agencies. The beneficiaries are much highly preoccupied with consolidating their properties and maximum protection against natural phenomena, while public sector agencies recommend improvement of sanitation services. At this stage, improving the quality of the homes in case the initial expansion has taken place, considered the longest phase in the incremental housing development process. It involves further complex operations and technical expertise.

Figure 2.4: Incremental improvement of the basic housing core in informal settlement.

Lattakia, Syria

Source: Author

Figure 2.5: Incremental improvement of the basic housing core in informal settlement. Lattakia, Syria

Source: Author.

Figure 2.6: Self-Help Housing Development Process
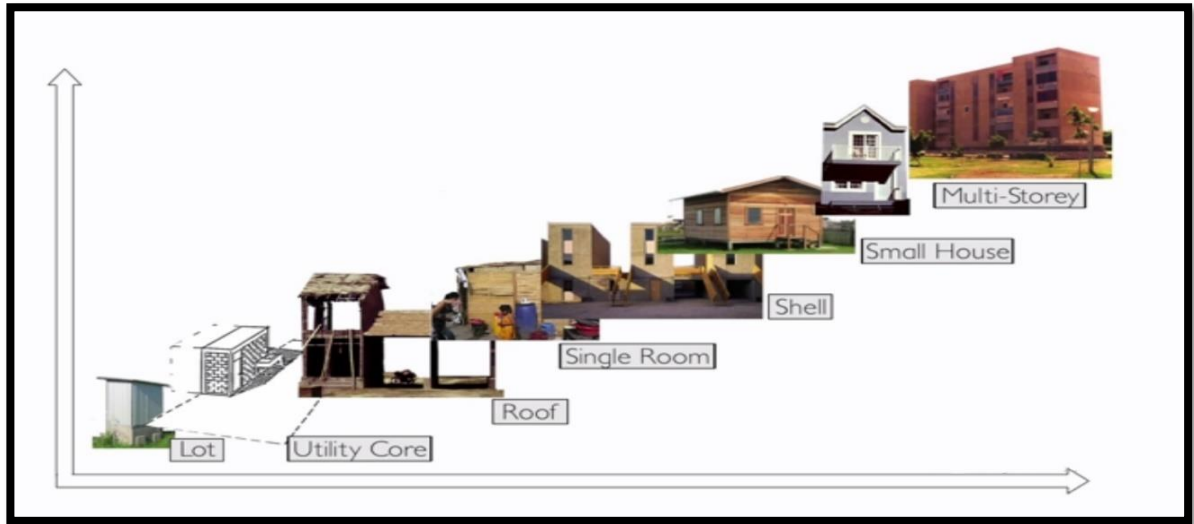
Source: (Greene&Rojas,2004)

2.7 CRITICS OF SELF-HELP HOUSING APPROACHES

The concept of self-help housing has come under attack by many scholars such as (Burgess, 1982), (Ward, 1982) and (Mathey, 1992). For them, self-help housing produces low-quality housing as the households have neither the skills nor the money builds decent housing by themselves. The critics assert that self-help housing, as defended by Turner, goes against the necessary planning principals, and it can only provide short-term solutions to urgent housing problems. Furthermore, the request for households to manage their own housing development without professional skills assistance usually gives informality and low standards. The governments, furthermore, have limited resources for buying and improving the land to please the large demands of low-income housing. (Bredenoord&Lindert, 2010) (Greene&Rojas, 2008).

2.8 SELF-HELP INCREMENTAL HOUSING: CONCEPTS

The rise in the self-help incremental housing concepts witnessed in the1970s-1980s. It began to see a reasonable way in which low-income households' access housing. Especially, (Turner, 1976& William, 1967) analyzed one of the most successful examples in the informal housing development in Peru and how the construction process experienced by low-income

people. Turner spotted the 'progressive development' of the informal housing which was a parallel between the social process of households and the gradual improvement and expansion of the shelters (i.e., consolidation) which people built by themselves. Since then, the concepts of self-help incremental housing received a lot of theoretical development. (Turner, 1976)

Figure 2.7: Incremental Housing Types

Source: edited by author.

Figure 2.8: Incremental Housing Process Development
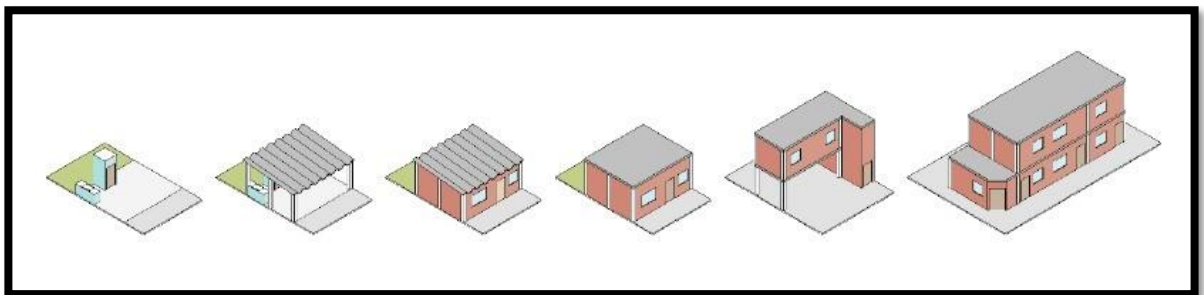
Source: edited by author.

It is important to understand factors behind incremental hosing. In other words, one should understand the reasons that trigger the incremental housing growth. (Tipple, 2000) points out that both cities and households suffer from 'housing stress' which forces them to expand their

dwellings. The method and form of the incremental housing highly depends on the private needs of the occupants. From (Gattoni, 2011), some of the triggers include: changes in household sizes and changes in household income and strategies and priorities in space.

a) Changes in Household sizes

The households' growth makes the needs for space more and more important. The occupants affect the incremental housing. In other words, the single family or the extended family has large impact on the process.

b) Changes in Household Incomes

Incomes play a crucial role in the expansion and improvement of the dwellings. The improvement of the households' dwellings is attributed to the increase of income levels. With additional incomes, dwellers develop their household into a fully serviced house that has all essentials such as water, sanitation and electricity, etc.

c) Strategies in Space

The strategies differ among households for develop and expansion their home. Several households such as average and high income expand their homes and utilities to meet their needs in space, cultural requirements and functional priorities. Others such as low-income households are far more pragmatic. They improve their dwellings in proportion to their income. Therefore, their immediate needs are quite important.

2.8.1 Factors supporting Incremental Housing

For (Acioly,2003) there are some factors that support incremental housing process such as, building material, finance, infrastructure, labor, and land are equally important in incremental building well-functioning dwellings. In fact, these guarantee the possibility of incremental decent dwelling.

Figure 2.9: The Incremental Housing Diamond of Perfect Equilibrium of Inputs
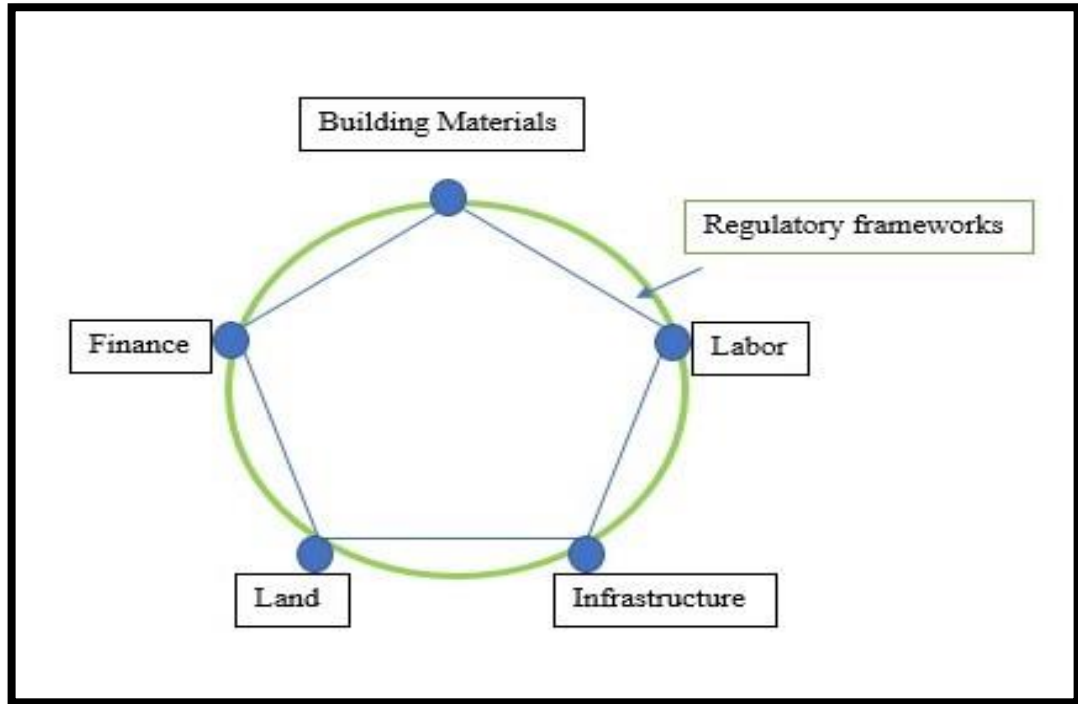
*Source***: (Acioly, 2003)**

a) Land Tenure and Location

Determining the location for the low-income housing is highly important to guarantee the success of the project. As mentioned elsewhere in this study, the land chosen should have affordable transport links to the city center for the low-income groups.

b) Housing Finance

Without sufficient housing construction finance, developing programs such as site and service programs are impossible. Similarly, the family savings, the public subsidies and mortgage loans usually finance the housing construction. The wealthy people have resources to purchase outright or construct their dwellings. In this context, access to housing loans and mortgages is restricted to people who have normal incomes such as the upper-class and middle-class people. The lower class, on the other hand, people who do not have regular incomes are denied the access to such loans. For (UN Habitat,2011) (Stein&Castillo,2005), various sources can be used for housing finance in housing development process. These

sources vary from, informal loans from colleagues and family, transference of funds from families working aboard, informal loan suppliers and household savings.(Figure 2.10)

Figure 2.10: Supporting Incremental Housing Through Microfinance
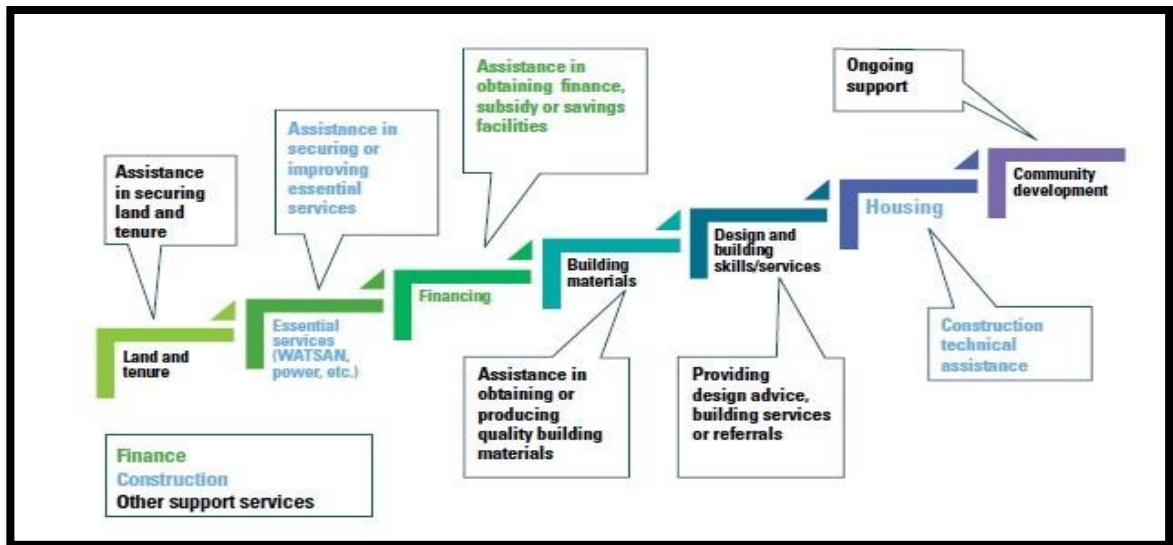
Source: (Habitat for Humanity, 2014)

c) Services and Infrastructure

The level of infrastructure, timing, standards, and service provision are the chief factors that guarantee the success of incremental housing initiatives. In this context, a careful balance between quality of service/infrastructure or affordability must be taken into consideration. The low-income households cannot afford high levels of standards for infrastructures and services. The balance, as mentioned before, can be accomplished only when low-income groups start to define their own priorities and set the standards for infrastructure and services. (Wakely& Riley,2011)

d) Planning Standards and Technical Support

Planning for low-income housing must offer standards that meet the needs of low-income groups. Therefore, to implement affordable housing for the low-income households, low standards have to be used. Therefore, planning and building advisory services that provide

technical guidance on good practices specific to incremental housing must be established. (Wakely&Riley, 2011).

e) Community Participation

In fact, self-help incremental housing programs such as site and services program are impossible without the community participation, for they demand supports from the public sector by the provision of training, credit, and technical assistance (Erguden, 2001).   In reality, most programs rely on community organizations and community leadership to make the projects possible. Therefore, community organizations have played an important role in the self-help incremental housing process, for they manifest collective concerns and needs. In brief, when the community participates in the incremental stage of development, success is guaranteed.

f) Private Sector Participation

The private sector also plays a vital role in the self-help incremental housing process. Furthermore, it provides an opportunity for small private businesses to share in the low-income housing development. Those private businesses can provide large support such as providing infrastructure and provision of services to the informal settlements where the local authorities cannot do or reluctant to do. Besides, they support the incremental housing process by providing building materials and local building technologies. However, private sector participation usually fails because those involved in the process find in it a financial risk they do not want to take. (Akely&Riley,2011)

İn conclusion, this chapter gives an overview of the characteristics and improvements surrounding self-help incremental housing in the context of the informal settlements. Due to the importance of improving the informal settlements, the study will show some case studies of self-help incremental housing in some different regions around the world.

3.   SELF HELP INCREMENTAL HOUSING: A CASE STUDY

This chapter deals mainly with two case studies. First is the city of Lima in Peru in the period of 1970's, with an emphasis on the successful examples of self-help incremental housing projects constructed in that period. The justification of choosing Peru as a good example for the possible solution for the self-help incremental housings was due to the support of the World Bank, the enlightened government and the civil and local organizations. Moreover, being the first is important. The World Bank constructed one of the first site and services projects in Peru. Also, the WB initiated a large scale, minimal-cost solution for site and services programs. On the other hand, Burkina Faso in the period of 1980's provides another example of successful programs initiated a large-scale surveyed program following a master plan that had been developed with A Dutch cooperation. This was like a challenge trying to solve the problem of informal settlements due to the bad economic situation of the country in that period.

3.1 PERU, 1970'S

In the early 1970s, the World Bank constructed the first site and services projects in Latin America, Africa, and Asia. For instance, the government of Peru launched large-scale and minimal-cost solutions in and around Lima. The National Social Mobilization System SINAMOS transported and settled low-income communities and residents of squatters, in vast zones of empty land to the south and north of the capital city. These settlements consisted surveyed plots and organized communities but with no urban services. The World Bank played a crucial role in supporting sites and services projects by providing communal water fountains and core housing units. The purpose of the surveyed plots was to provide housing solutions for the majority of low-income households who spilled out into the cities from the countryside.   The British architect, John F.C. Turner researched and executed the programs. For him, when left to their own devices, they can produce the most efficient possible housing solutions for themselves. From his observation came out the well-known phrase "Freedom to Build." (Williams, 2000)

Figure 3.1: Diagram of the ascendant development in squatter settlements in Lima, Peru.
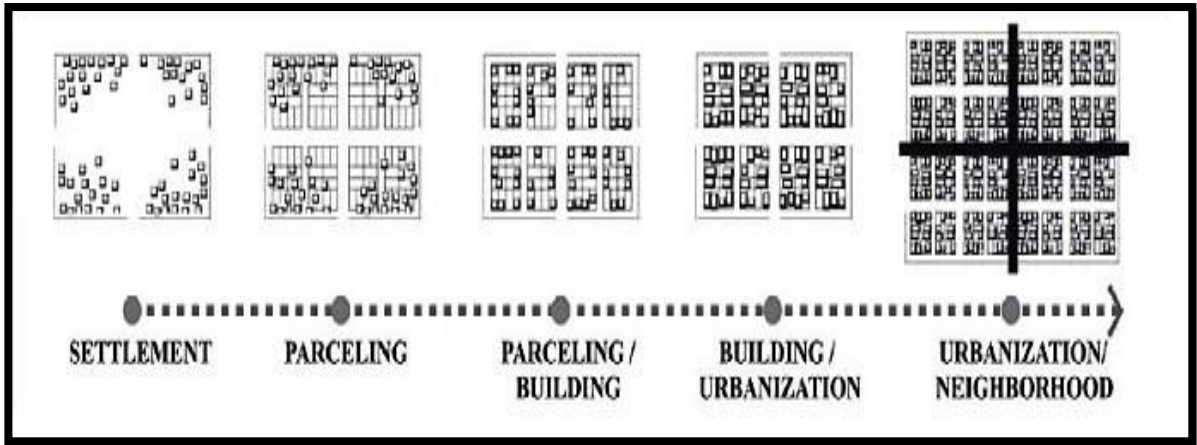
Source: John F. C. Turner Archive

Figure 3.2: Basic core units designed for self-built extensions 1958 in Lima, Peru.

Source: John F. C. Turner Archive

Figure 3.3: Family stage and evolution of their incremental self-help house in Lima, Peru.
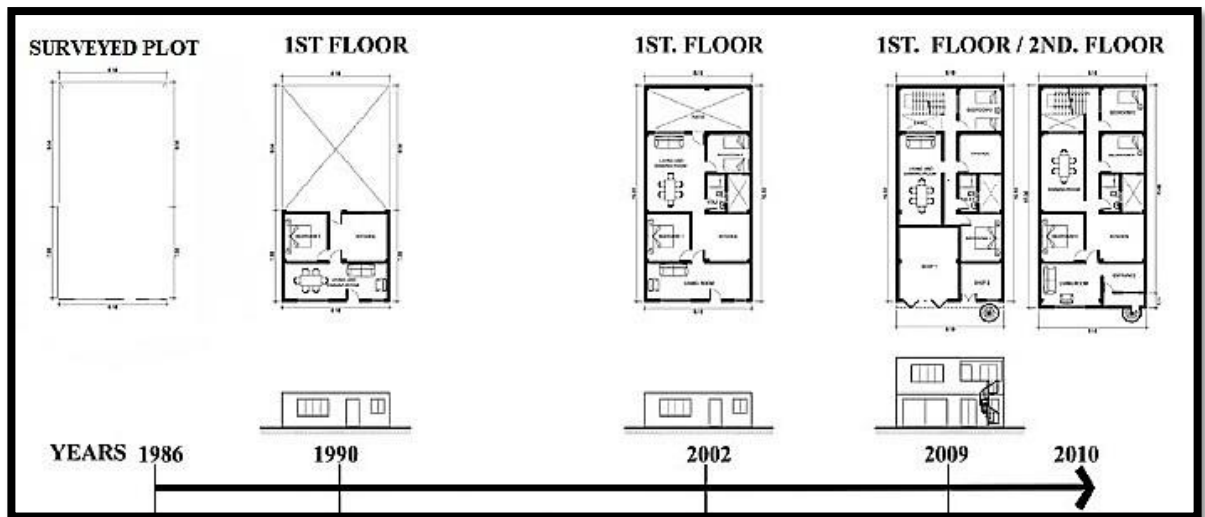
Source: John F. C. Turner Archive

The first settlement was Comunidad Urbana Autogestionaria Villa El Salvador CUAVES (self-managed urban community Villa El Salvador). The design and surveyed plots characterized the settlement. The design was a vast network of adjacent areas of 400 x 400 meters. The center of each was dedicated to community facilities. SINAMOS collaborated with the military. They first used tanker trucks to provide water, the latter established field clinics to provide medical care for the population. Next, The World Bank was encouraged to upgrade Villa El Salvador in 1975. The World Bank provided water and electricity to the northeast of the Metropolitan area. After four decades, Villa El Salvador was converted into the second largest city. The housing core unites developed into one to three and four stories. The public areas in the middle, developed in several ways, they had a lot of facilities such as a health center a school and playground. Unlike other public spaces in informal settlements, they have become crime and violence free. (Gattoni & Goethert &Chavez, 2011)

Figure 3.4: The grid network that forms the surveyed plots in Villa El Salvador, Peru.

Figure 3.5: Sites and services, core house evolution in Villa El Salvador, Peru.

3.2 BURKINA FASO, 1980'S

In the mid-1980s, Ouagadougou presents another successful example of surveyed plots programs that was supported by the World Bank. Thomas Sankara's regime initiated a large-scale surveyed plot program following the master plan of the city. The assistance of Dutch cooperation had developed this program. The migrating low-income families who were living at the city limits moved to a residential surveyed plot program where each family was given a plot of land. Similar to Peru, the World Bank provided the essential services such as water and fuel for cooking food.

Figure 3.6: A large-scale surveyed plot program in Burkina Faso

Source: Google Earth

Figure 3.7: Housing in Burkina Faso

Source: (Chavez, 2011)

Furthermore, streets were named to give the residents a sense of belonging and a sense of citizenship, i.e. the low-income people have all the abilities and rights as the city dwellers. (Chavez, 2011)

Figure 3.8: Housing in Burkina Faso

Source: (Chavez, 2011)

4. LATTAKIA, SYRIA A CASE STUDY

After the two successful examples of Peru and Burkina Faso, Lattakia it has potential as a self-help incremental housing whereas it turns out to be an initiation for self-help housing then it moved on incrementally. Lattakia suffered from overpopulation in both pre-war period and post-war period. However, the current war aggravated the problem of informal housing. Displaced and evicted people found safe haven in Lattakia that remained distant from warring factions. Displaced people could not afford to live in the city; therefore, they settled at the city limits that were already overpopulated by informal housing dwellers. Located at the city limits, the Corniche region / Al-Rammel Al-Phalastini (Figure 4.5) is a vacant land that was given by the government without formal planning to the Palestinian refugees to build on in 1948. Hence, it is deliberately chosen as a case study of self-help incremental housing, where people build their houses slowly. At that time the government intervention was so limited if there is any. In other words, the region developed incrementally because of the absence of government, or any other source in the process. Consequently, this gave way to huge and uncontrolled growths of population that led towards the phenomenon of haphazard settlements creating indecent living conditions. Taking what I already demonstrated into consideration justifies selecting Corniche region in Lattakia for the study.

4.1 HISTORICAL BACKGROUND OF LATTAKIA ENVIRONMENT

Lattakia figure (4.1), the largest city on the Mediterranean, is the principal port city of Syria, as well as the capital of the Lattakia Governorate. In addition to serving as a port, the city is a manufacturing center for surrounding agricultural towns and villages. According to the 2004 official census, the population of the city is 383,786. It is the 5th-largest city in Syria. It is located in western Syria 348 kilometers (216 mi) north-west of the capital city, Damascus, bordering Turkey to the north. The north-eastern tip of Cyprus is about 68 miles (109 km) away. The governorate has a reported area of either 2,297 square kilometers (887 sq mi) or 2,437 square kilometers (941 sq mi). Lattakia City is located in the Lattakia District in the northern portion of Lattakia Governorate.

Named by the Canaanites Ramitha in the 2nd millennium B.C., Lattakia was rebuilt by Slocus, the founder of the Seleucid State (2nd century), who renamed it Laodicea. Later it witnessed a period of Roman and Byzantine rule before the Arab conquest of 637 when it became to be known as Lattakia (Arabic: اللاذِقِيَّة al-Lādhiqīyah). Before 1516, Syria was part of the Mamluk Empire centered in Egypt. The Ottoman Sultan Selim I conquered Syria after defeating the Mamlukes in 1516. When he brought the end to the Mamluk Sultanate, Syria became part of the Ottoman Empire. In 1617, he reorganized Syria into one large province or eyalet named Şam (Arabic/Turkish for "Syria"). The eyalet was subdivided into several districts or sanjaks. In 1579, the Eyalet of Tripoli was established under the name of Tripoli of Syria (Turkish:Trablusşam) (Arabic: طرابلس الشام). The Eyalet of Tripoli included the Sanjaks of Tripoli, Lattakia, Hama and Homs. (Phillips, 2010)

Figure 4.2: An aerial view of Lattakia

Figure 4.1: Lattakia Governorate map
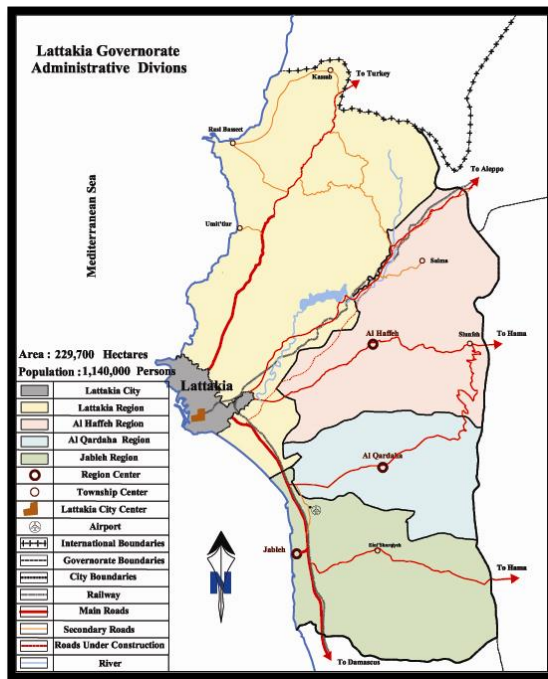
Source: google, 2018

Source: Municipality of Lattakia

4.2 FORMAL SETTLEMENT IN LATTAKIA

Housing areas in Lattakia, as elsewhere in Syria, are divided into three main areas: a housing area within master plan, boundary housing in the expansion area and housing as an informal settlement, i.e. areas that are inhabited by poor group who are less able to choose their own house design or modify it or change it due to economic status.

In this context, 'formal housing' refers to assimilated spheres, specific forms, elements or procedures that have become standards, the norm, rule, or convention. The master plan for Lattakia (figure 4.3) was issued for the first time in 1927. The area of which was 71 hectares. It was developed in 1944, 1964, 1991, and 2008 to be 8545 hectares. The housing area covered 61, 18 %, housing in the expansion area covered 26, 21 %., and the housing in informal settlement area covered 21, 61%.

Figure 4.3: The development of master plan for Lattakia City
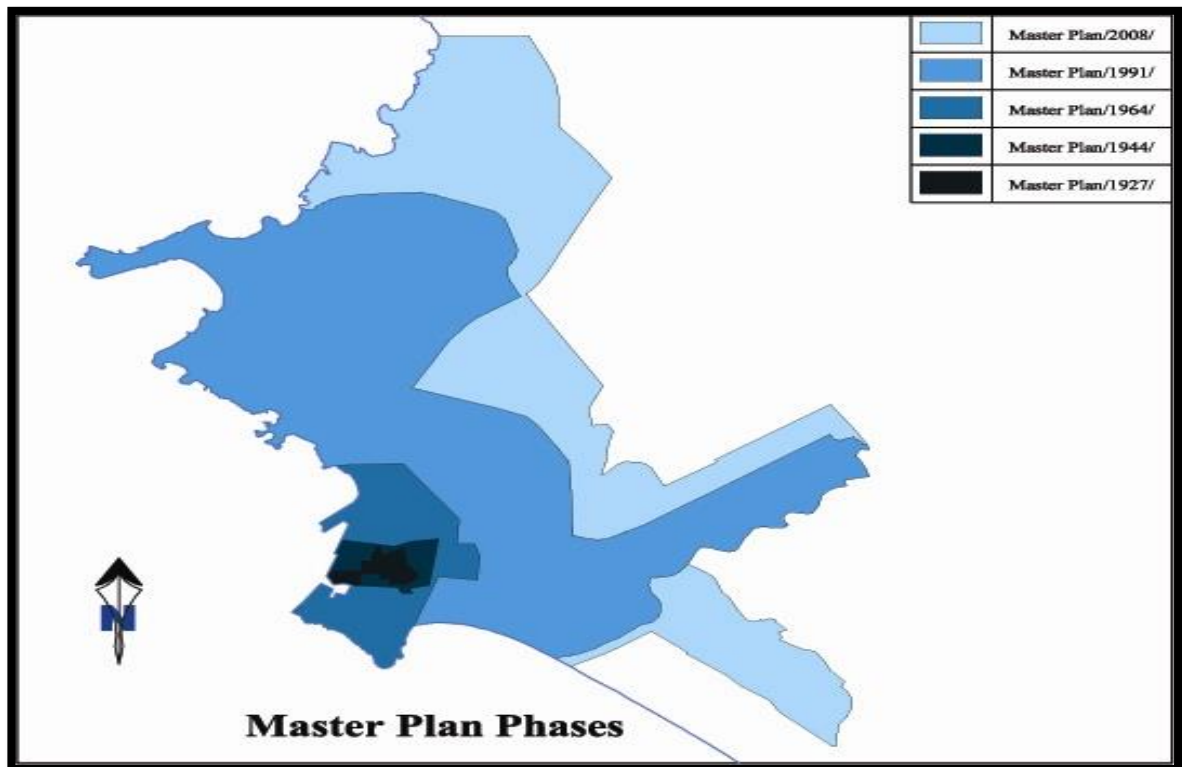
Source: Municipality of Lattakia

4.3 INFORMAL SETTLEMENT IN LATTAKIA AS A WHOLE

The phenomenon of informal settlement in Lattakia dates back to many decades ago. It attracts a large number of people due to the availability of services and low prices. Nevertheless, informal settlement which lacks urban planning, leads to a lot of problems associated with the development and the society. Generally speaking, the phenomenon is one of the biggest problems on both global and local levels. Its emergence is due to several factors starting from population growth, rural-urban migration, drought, and the shrinkage in farming lands. Perhaps the most important factor is the job opportunities in various sectors in the city; hence they find no problem in living in houses lacking decent conditions and services.

In reality, informal settlement exists in several areas in Lattakia. They exist in the areas of Al-Rammel Al-Janoubi / Al-Rammel Al-Phalastini (Palestinian Sand) and Al-Daedour. They are occupied by thousands of people coming from various governorates in Syria. According to the residents of these areas, basic services are available and the living conditions seem to be okay. Above all, prices are low compared with other areas.

Figure 4.4: Informal settlements in Lattakia

Source: google maps, edited by author.

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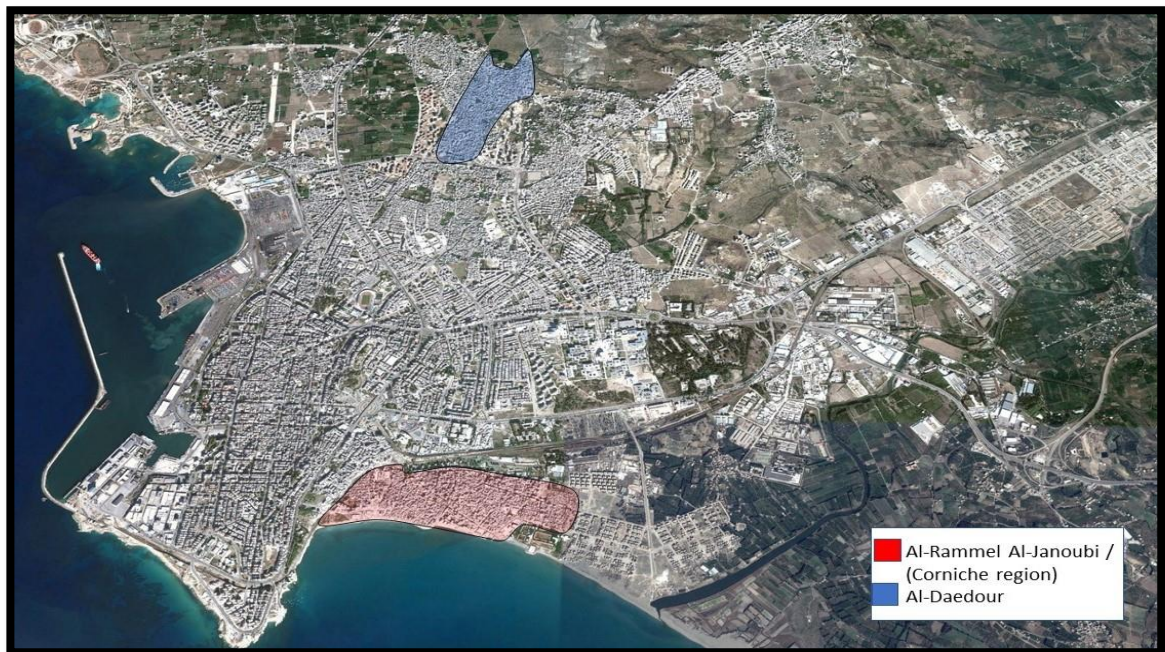
Several problems faced the informal settlement in Lattakia, such as the failure of issuing the city's urban planning since 1965 has been one of the chief factors behind the emergence of informal settlement. "I work at several sites. However, the suspension of housing permits by the municipal and other governmental administrations for a long period of time made people resort to illegal options in construction. This delay also made the prices of houses soar forcing people into informal settlement, whose population is so dense, and setting up more pressure on the state and the services provided for them," Contractor, Khalid Al-Husein said.

Other problems created by informal settlements are difficulties of their maintenance and quality maintenance at the same time. "Informal settlement sites cost too much. They cost much more than the urban-planned sites. Their horizontal sprawl requires large services for the telephone and electricity cables in addition to those for the sewage system. Stretching over a large area of land, those buildings of a single-story houses or two- story houses will collapse at any earth tremor causing human, social and economic catastrophe, for they lack the technical requirements of construction," Mr. Husein added.

People involved in this problem maintain that informal settlement can be eliminated through a multi-decade process by utilizing various methods. Most importantly, Lattakia informal settlement must be planned by adopting global experiences. However, local peculiarity must be taken into consideration. To eliminate informal settlement, the location must be determined as a start. Then towers, with all technical requirements, must be built nearby. Afterwards, one can move to another block and so on. Some new self-planned sites built their own roads, their own sewage system and other services. As an example, Skubeen and Sinjwan are planned by collaboration between government and civil society.

The development of palestinian Corniche Region started in early 1950s with the coming of the first wave of Palestinian refugees. They occupied makeshift houses in Al-Rammel Al-Janoubi / Al-Rammel Al-Phalastini (Palestinian Sand) making the first informal settlement. In the 1970s, Lattakia witnessed urban and economic boom that produced another informal settlement site such as Al-Daedour. "Many people failed to heed these informal settlement locations. This phenomenon will expand endlessly devouring farming lands and green spaces surrounding the city. The prices of apartments in city were not high in comparison with

income at that time, but the complacency in controlling this phenomenon and the failure to heed its seriousness allowed it to expand to other areas in the city," said member of the City Council, Alaa Ghanem. It is important to realize that the Corniche Region remains informal settlement simply because the government cannot re-evacuate the Palestinians for political, human and economic reasons. In other words, the government cannot get them back to Palestine, in addition to the fact, that there are no other places in Syria to re-settle them. The Syrian government insists on their rights to return to their homeland: Palestine; therefore, it is reluctant to interfere. Hence the problem persists. Actually, the land without urban planning encourages informal settlement.

4.3.1 Corniche Region Today with Population Growth

Sites of informal settlement, mentioned above, are hierarchically classified according to their problems. Al-Rammel Al-Phalastini / Corniche Region comes at the top because it is entirely provided with all essentials such as electricity, potable water, and sewage system. However, due to the limited intervention of the government, it has serious problems because of bad planning, narrow roads, and insufficient health care. The essentials already mentioned are of poor quality, anyway. One can say that these 'essentials' does not go hand in hand with the population growth. The government stopped the development, while the population kept increasing. The Palestinians, especially in 1960s, had a large increase in birthrate on a limited space. This encouraged the horizontal buildings.

Municipal Administration Modernization (MAM) Program was selected as a data source for this study. The program supported by EU aimed at providing high quality support to the Ministry of Local Administration and Municipalities. Furthermore, Helping Syrian cities and the Ministry face the new challenges and improve their ways of working. The project focused on local, regional, economic and social development in Corniche Region. This objective was pursued in different parts of Syria, and in different types of cities. The Municipal Administration Modernization (MAM) program analyzed the Corniche Region from different aspects in cooperation with the municipality of Latttakia in order to improve

and develop living conditions in the region. The MAM analyzed the statistics, but failed to develop the region due to the current war. In other words, the MAM failed to actualize the recommendations. In reality, the people participated in MAM, the sole program adopted by Lattakia Municipality, were reliable a source for most data collected. Therefore, it necessary to draw upon their statements.

4.4 THE STUDY AREA

4.4.1 Characteristics of Corniche Region

As mentioned before, the Corniche region / Al-Rammel Al-Phalastini (Figure 4.5) is a vacant land that was given without formal planning to the Palestinian refugees to build on in 1948. Therefore, the refugees built their self-help housing incrementally and randomly. At that time the government did not interfere in what was going on. It is an informal settlement area located in the southern part of Lattakia. It extends between Al Orouba Street to the west and Al Husseini Street to the north. Today, the area of the Corniche region is 117.6 / ha. It constitutes 2% of the area of the approved regulatory plan. It is a high-density area of about 390 people per hectare and has a total population about 45640 inhabitants. It is a distinctive informal area featuring an important location of Lattakia City facing the waterfront on the coast line. It offers unique opportunities for providing operational solutions to improve the living conditions and urban environment. Huge and uncontrolled growths of population, which can be seen in the region, have led towards the phenomenon of haphazard settlements after the migration of immigrants from the countryside to settle there. The justification of selecting Corniche region for the study is the lack of governmental involvement in the improvement of housing conditions for a series of informal settlements and housing in Syria, due to the economic crisis and problems facing the country caused by the war. Besides, the Corniche region is similar in some ways to self-help incremental housing in which the governmental intervention was limited.

Figure 4.5: The Corniche region / Al-Rammel Al-Phalastini
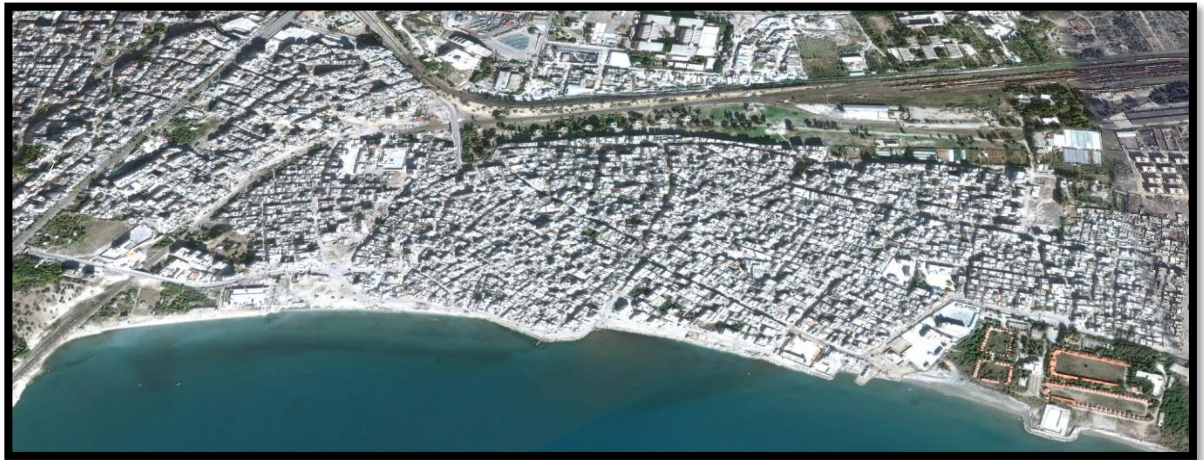
Source: google maps, edited by author.

4.4.2 Legislative and Legal Framework Relating to Informal Settlement Property

Land ownership in the Corniche region is distinguished in three sections owned by:

- Section I: special property (Syrian citizens housing) with an area of / 52.7 / ha, constituting 44.8 percentage.

- Section II: public property (Palestinian refugees housing) area / 30.1 / ha, constituting percentage.

- Section III: public areas with an area of 34.8 / ha, constituting percentage.

Figure 4.6: Land properties in Corniche region
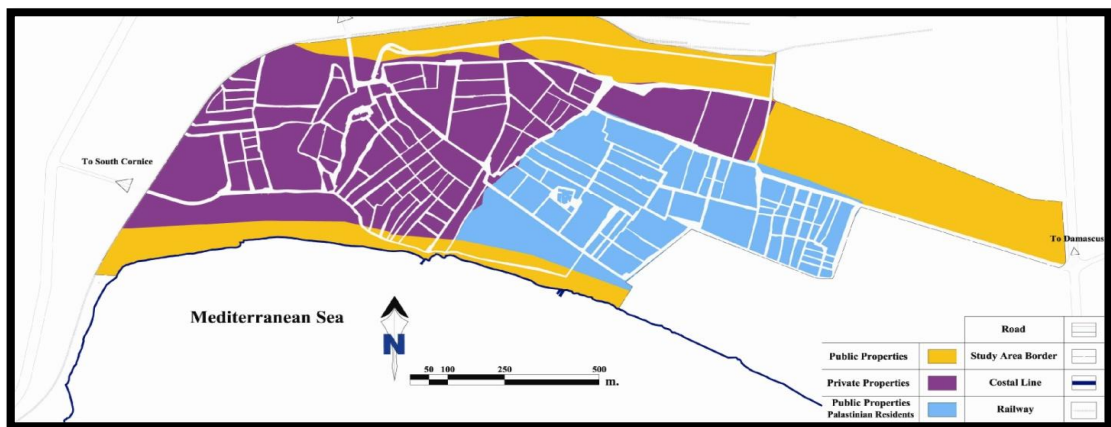
Source: *Municipality of Lattakia*

4.4.3 The Importance of The Corniche Region

The Corniche region is one of the few remaining parts on the city coastline. It features a distinctive view as well as its direct relationship with the commercial center and its various daily activities. It is close to several critical places such as, the city port, university, train station and stadium. Moreover, many projects located near the region are proposed for tourism investment. Also on the eastern side of the studied area are the tourist city and the Baath camp with an area of 15 hectares. In the northern located a group of buildings dedicated to the workers of the train station, consisting of four floors in a good physical condition.

Figure 4.7: The importance of the Corniche region
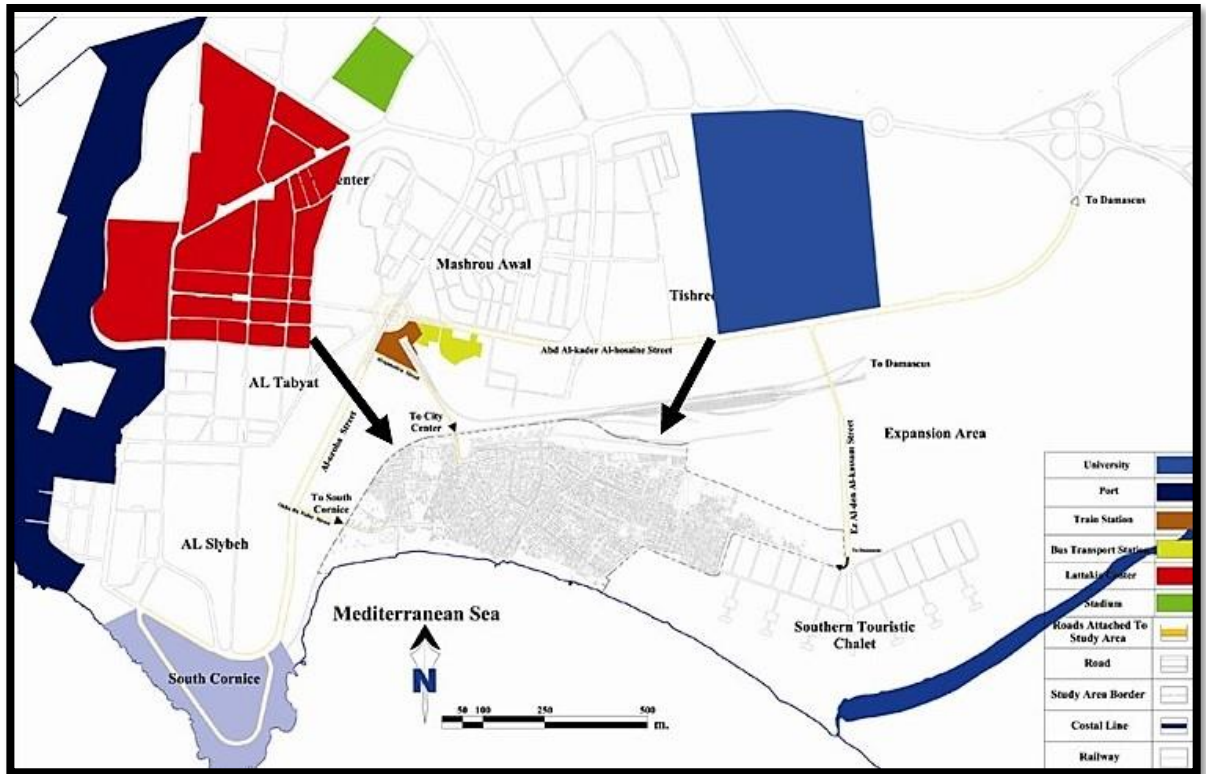
Source: *Municipality of Lattakia*

4.4.4 Physical Conditions of the Buildings

The presence of high population density in the region, most of the buildings do not meet safety and health requirements. In addition to the lack of green areas, commercial, cultural and service activities give the region a non-urban image, which requires a complete reorganization. The physical conditions of the buildings distinguished in three categories (good - fair – poor physical conditions). It should be noted that the concept of good construction building in the region is related to the structural concrete building with external processing facades (clay, stone). The field study showed a decrease in the percentage of good buildings conditions with only 18%, while poor buildings conditions constitute 42% (6.2% of buildings are in a very bad condition of the entire land area) and 40% with average middle conditions buildings.

Figure 4.8: Physical situation of Corniche region buildings
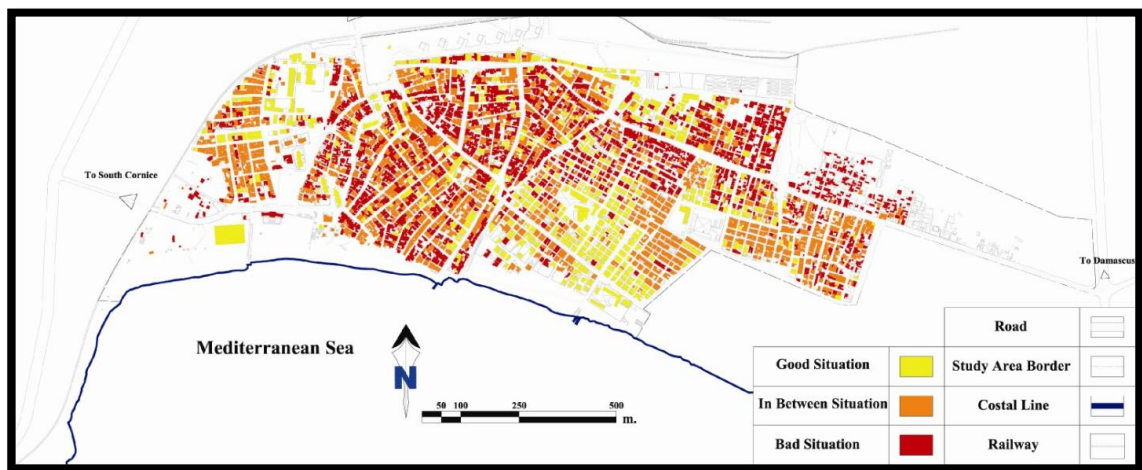
Source: Edit by author

4.4.5 Land Use

The land uses of the Corniche region are follows:

    a. Green areas of 12 hectares, which are agricultural areas, most of it located in the north near railway and there are no other green areas within the urban fabric of the region.

b. Residential areas with an area of 63.5 ha. distinguished in two areas include: informal settlement, which represents the Syrians housing by 74.4% and the Palestinian refugees housing by 25.6%.

c. The beach area which is 8.3 hectares.

d. Local roads with a total area of 18 hectares, which are irregular roads with unstable width and without sidewalks or parking spaces.

e. Empty areas with an area of 11 hectares.

f. Occupations of another area of 1.34 hectares (fish market - clinic - swimming pool).

Figure 4.9: Land use of Corniche region
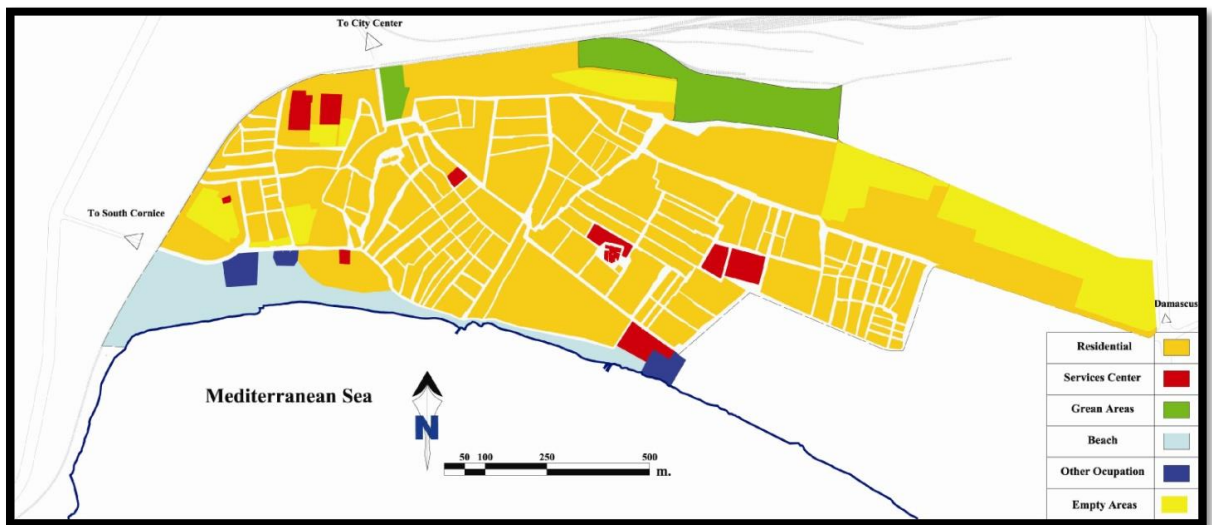
Source: Edited by author

The field analysis of the area showed that housing is the predominant use of buildings and constitutes 63.5 hectares. While some social services are distributed as follows:

 a. In the Palestinian housing section: the area of educational buildings (1.9) ha and religious buildings (0.29) ha and clinic with an area of (0.05) ha.

 b. In the Syrian housing section: the area of educational buildings (0.95) ha and religious buildings (0.17) ha and clinic with an area of (0.09) ha.

In addition to the presence of other common public areas such as; the pool (2.03) ha, the Palestinians workers area (0.44) ha and the fish market (0.36) ha.

Figure 4.10: Building use of Corniche region
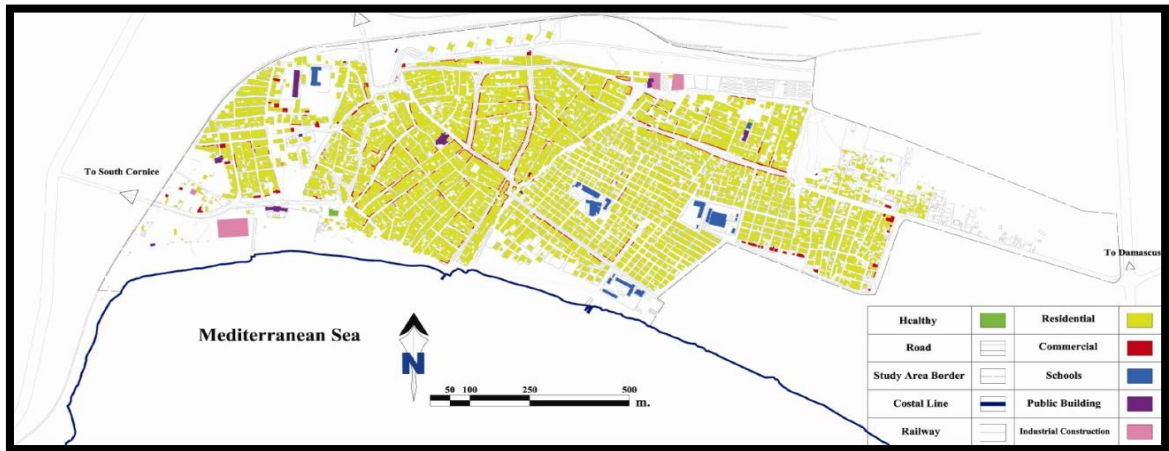
Source: Edited by author

4.4.6 Land Growth Analysis

The area is dominated by the horizontal spread of buildings with a height of one or two floors. The percentage of these buildings was 66%. Other heights were 29% for buildings (3-4 floors) and 4% for buildings (5-6 floors) More than 6 floors is 1%. Despite this horizontal spread, population densities are relatively high.

Figure 4.11: Building heights of Corniche region
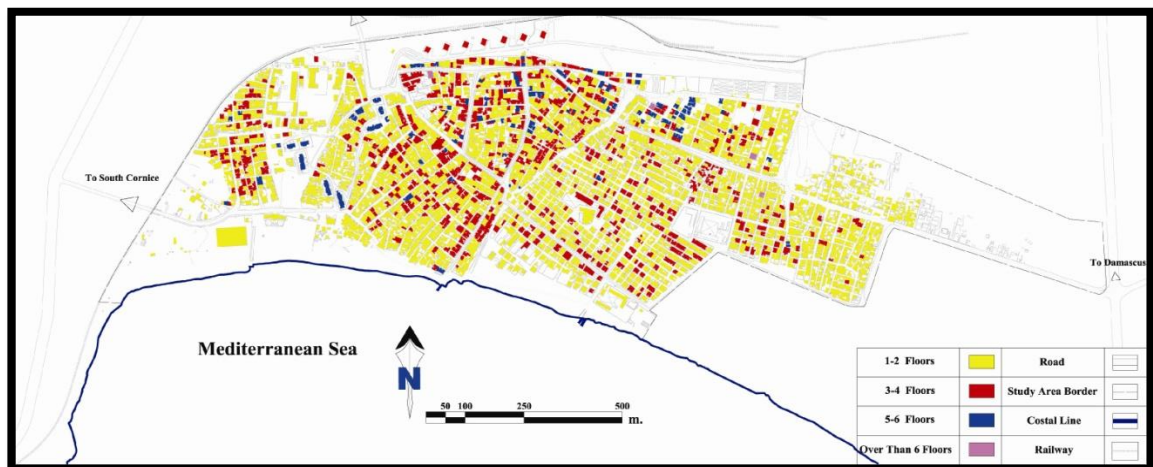
Source: Edited by author

4.4.7 Road Network

The roads of the study area are narrow and do not meet the basic criteria (irregular turns - inadequate width - no sidewalks - not serviced by a rainwater drainage network). Most of these roads are in two directions. It is also noticeable the large number of secondary streets, which impede the passage of highways, so that some of this kind of streets turned into service places (market for vegetables).

Road network in the region can be divided in terms of functionality to:

  a. Main roads (7-10m) are considered as links to surrounding, secondary and interior roads.
  b. Secondary roads and alleys (less than 7 m) are the service network in the area.

The total area of the roads, including sub-streets, dirt roads, alleys and squares, is 18 hectares and constitutes 15% of the total area of the studied area.

Figure 4.12: Road network of Corniche region
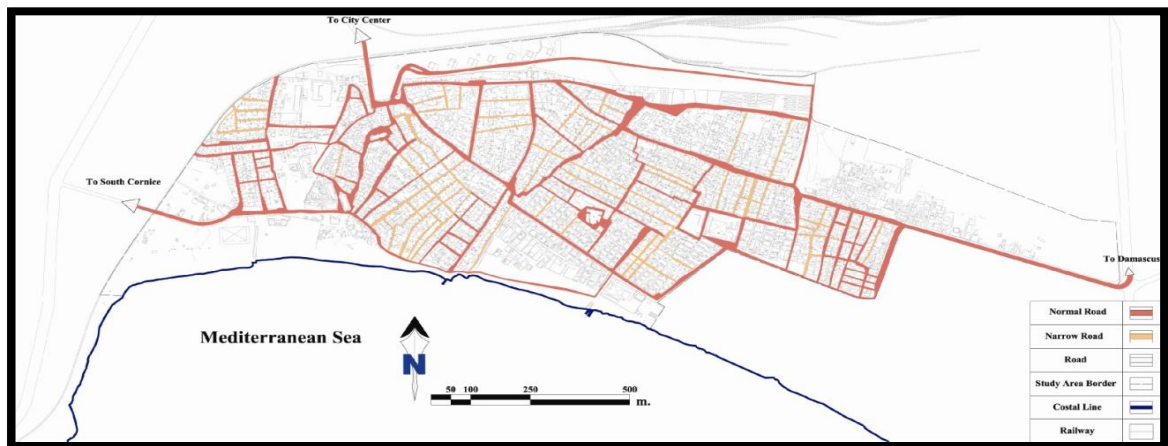
Source: Edited by author

4.4.8 Sewage and Water System

The sewage network in the Palestinian section and its pipes are designed of polyethylene. There are three pump and lift stations located in the southern area. The waste is collected by these stations to be pumped to the treatment station. The sewerage system is one of the main problems experienced by the Syrian section in the region, it flows directly into the sea without treatment (until the construction of the new treatment station is completed), this leading to large environmental pollution of the sea.

Figure 4.13: Sewage network of Corniche region
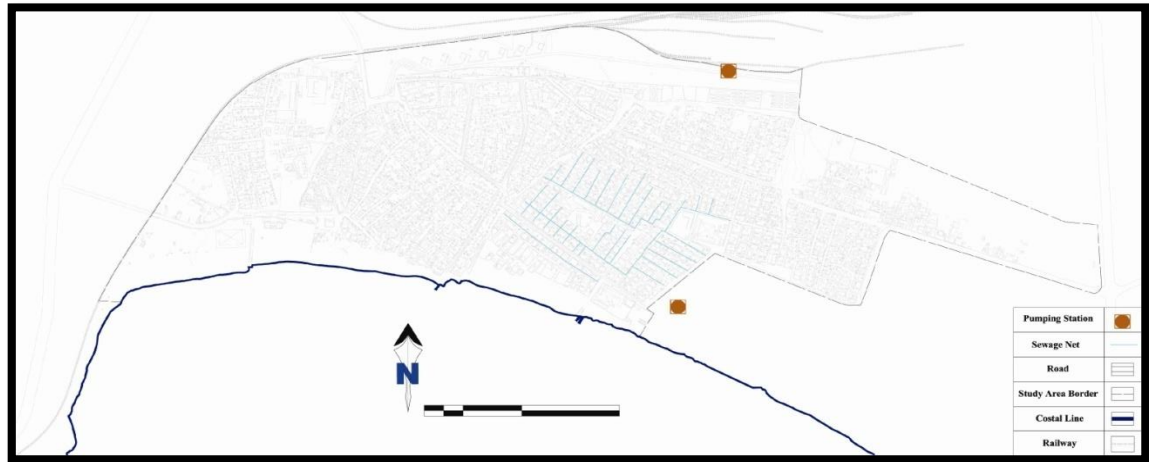
Source: Edited by author

Figure 4.14: Water system network of Corniche region
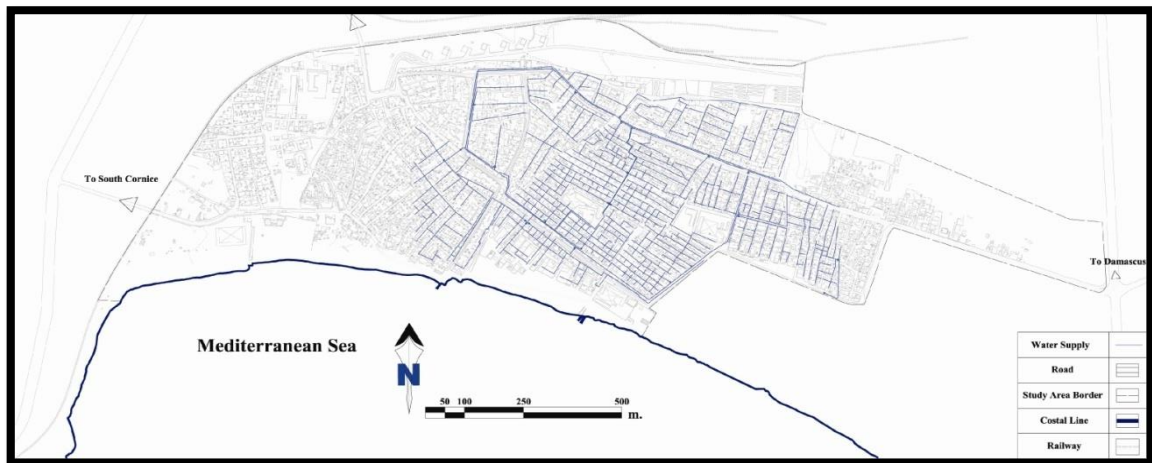
 Source: Edited by author

There is a plan that shows the drinking water network in the refugee accommodation area only, and the network condition is good compared with the Syrian housing area, which is not properly serviced.

5. DATA COLLECTION AND FINDINGS

5.1 INTRODUCTION

This chapter presents reports for the data collected from interviewing thirty participants living in different housing conditions in Corniche Region specifically, Palestinians refugees' area that is considered the starting point of the informal settlement (figures 5.1, 5.2, 5.3). The participated people were municipality officials and dwellers of various ages and occupations. The conducted 20-minute interviews were open-ended interviews, as all of them were face to face interviews. In this context, each interview is divided into four parts: Households Characteristics, Description of Households Incremental Pattern, Physical Characteristic of The Environment, and Possible Interventions and Support. To see the developing process in Lattakia Corniche Region, the survey is prepared for the users (see appendix 1 and 2) and for municipality officials (see appendix 3). The survey interview questions began with the household characteristics. For instance, year of the household occupation, the type of ownership, family size and average income. The interview continued to describe the household incremental patterns. For instance, how did they get the plot at the time of moving into the settlement and what was their financial support to develop it. In addition to that, what kind of building materials and construction skills used. The questions of the physical characteristic of the environment were asked. For example, the number of stories, the quality of services provided, structure integrity, comfortability and the facilities. Lastly, the interview concluded with questions about possible intervention and support for their self-help incremental housing current situation. Such as financial, community and technical support (see appendix 4 and 5). Consequently, the study sampled the following:

Figure 5.1: The study area

Source: Google maps, edited by author.

Figure 5.2: The coastline view of the study area

Source: Edited by author

Figure 5.3: The street view of the study area

Source: Edited by author

5.2 RESEARCH FINDINGS AND ANALYSIS

5.2.1 Introduction

This section debates a comprehensive detailed analysis of the case study of the self-help incremental housing processes that is unobserved as well as unheeded in Lattakia, particularly Corniche Region. The examination of the case study attempts to give answers to the research questions that placed in the methodology. Also, this section shows a detailed analysis of the self-help incremental housing development in Corniche Regions. This section examines the significant aims that were chosen in the self-help incremental development of Corniche Region field work. Finally, a survey of critical findings is highlighted. "Lattakia City Council has made efforts in developing the housing conditions of the low-income groups in Corniche region," the Director of Planning and member of the City Council said in an interview in 2018. Interviews and municipal secondary data reveal what local authorities have embarked on.

5.2.2 The Settlements process in Corniche Region

In an attempt to address the program of site and services, the government granted the Palestinian refugees unplanned vacant land and later on infrastructure was provided. This, in reality, was one part of the whole program. In other words, the program was implemented without the intervention of any financial institutions. Furthermore, access to loans in form of building material to help them start was not provided. Consequently, the program cannot be considered an adequate site and services program because it dealt with one side and dropped many others.

5.2.3 Squatter Settlement Upgrading

Further, the interviews showed that the residents, in collaboration with the government, have taken it up by themselves to provide the infrastructure and basic services. For instance, households try opening up of drainage and access roads within the Corniche Region. From the fieldwork surveys and observations, it was evident that after implementation, these roads and drainages have deteriorated due to lack of maintenance. It

was obvious that after opening up and execution these drainages and roads have declined due to lack of skills.

5.2.4 Physical Characteristics of the Corniche Region

5.2.4.1 Housing Conditions

Housing is not just shelter 'walls and roof' but comprises various elements making up the living environment. From observation and surveys of the Corniche Region, the overall result that it is highly populated and housing units mostly built without panning and not following defined boundaries.

Mostly, the normal plot sizes are 15mx10m (150m2), the plots are built up with locally manufactured blocks of low quality. The surveys also revealed that there had been uncontrolled division of housing structures for example, building of several structures in one plot. The number of stories varies between from one to two stories. All in all, this had made it difficult to provide services. (Figure 5.4)

Figure 5.4 Difficulty in the installation and maintenance of the electricity in Corniche region

Source: Edited by author

5.2.4.2 Infrastructure Conditions

Depending on the surveys and observations, the Palestinian area has a lot of unplanned and not designed inadequate roads and drainage system. Most of the roads are paved with stone and very narrow which is classified as footpaths so that no trucks services can enter such as collection garbage, ambulance and fire trucks. Thus, during the rainy season, parts of the area is flooded. Furthermore, the electric supply is inadequate; unlighted streets are common. (Figure 5.5)

Figure 5.5: Undesignated and Narrow Roads in Corniche Region

Source: Edited by author

5.2.4.3 Gardens / Green Areas

Gardens and green areas do not exist. This lack of green areas creates stifling atmosphere. Therefore, children play in narrow streets making a lot of noise. At times, especially in summer, odors make it difficult even to walk around.

5.2.5 Typically Incremental Housing Developing Patterns

This section examines the description of the self-help incremental housing process from the respondents' viewpoints. The analysis follows a sequential description of the different aspects and trends in the incremental process.

5.2.5.1 Stage 1: Informal Land Acquisition

Incremental housing process in Corniche Region starts with acquiring a piece of land. The Palestinian refugees arrived in the region in early 1950s. They settled in public land of Lattakia limits. The government did not mind this form of settlement for humane reasons. With the passage of time they bought pieces of land from local owners. The informal housing began to aggravate with the population growth. The government did not intervene because it was believed that there would be a political solution that would enable them to return to their homeland, which did not happen. In the past few decades, the government began to realize the expansion of the informal housing would threaten the waterfront of the city by threatening the plans for the tourist sites. This has made the government look for solutions to this problem.

Figure 5.6: The expansion of the informal housing in Corniche region

Source: Edited by author

5.2.5.2 Stage 2: Typical System Of Incremental Construction

From the observations and findings in Corniche Region, the self-help construction systems identified can principally be categorized into two: the Palestinians' and the none Palestinians, i.e. the Syrians'. The majority of Palestinians started with temporal structure with bricks walls with wood covered with cement for roofing. These "houses" were built without building plans and even without foundations. Losing hopes of returning to their homeland, the Palestinians improved these "houses" in attempt to meet their needs. In fact, the above-mentioned finding agrees with (Greene&Rojas, 2008) who claim that incremental housing process begins immediately after acquiring land with the household constructing shelter temporally to meet their immediate needs such as protection from the wind, sun and rain and also privacy.

Figure 5.7: "Houses" were built without building plans foundations in Corniche region.

Source: Edited by author

With the economic boom the country witnessed in mid 1980s, new waves of migrant people from midland arrived in Lattakia governorate. These provided the labor hands for the urban development of Lattakia City itself. Unlike the earlier Palestinians, those Syrians started with permanent building materials from the initial stage and increased the space by adding room by room. This agrees with Abrams claims that "squatters alike have put up 'shacks' and later extended them over time" (Abrams, 1964). Generally speaking, in the first construction system, before the incremental processes started, basic starter structures made without any building plans. As mentioned before, the local authority did not provide planning services in these settlements in addition to the fact that it lost control on the increasing expansion of informal housing. Following is a household interview that supports the above-mentioned findings:

Having been deported from my homeland, Palestine, I settled here with my five children in early 1960s. We lived among four walls covered with a piece of tent as a roof. We did not have the money enough to meet our basic needs. In the early 1970s, we started improving because one of sons who left for Saudi Arabia sent us money to finance the improvements. We changed the whole "house" from a 2 roomed mud house to 4 roomed house with 2 bed rooms. *(Household Respondent, 2018)*

5.2.5.3 Stage 3: Shift in Building Materials towards Permanent- Conventional Materials

Interviews confirm that after the land acquisition, the building materials come as the most important factor that controlled dwellings' improvement. The households start building with non-permanent materials. However, with an increased awareness of security; they often move to improve the quality of their houses by building with conventional materials. In reality, building with conventional materials has been the aim for most households. Still, these materials are too expensive to possess at once; therefore, households try to acquire them in stages following the phases of the house development. In this context, availability of finance to acquire these building materials has always been the most determining factor in the phased-development of the dwellings for most households, simply because the government plays a minor role in this process. As mentioned above, the building materials used in Corniche Region in the initial stages were with temporal structure with bricks walls with wood covered with cement for roofing. These "houses" were built without a professional project and even without foundations. Some respondents confirmed that they developed these houses by building materials in each stage. The improved houses were built with concrete blocks and cement.

"Each time we were able to buy few new building materials, we removed the old ones and replaced with the new ones…until when we will finish the whole house," One of Palestinian refugees said (Household Respondent, 2018).

Figure 5.8: Temporal structure with bricks walls in Corniche region

Source: Edit by author

5.2.5 Stage 4: Use of Small Scale Local Builders for Construction Skills

Most households in self-help hired skilled labor during the construction process of their dwellings. Households hired labor from local builders for most parts of the house construction process. During the construction, the households and the local builders jointly worked in the construction. In this context, the unpaid help of unskilled family and friends still continues to play a significant role in self-help house construction. Almost all household members had roles to play in the construction process, from young boys to older women. "Without the help of the family and even friends, this construction was not possible," said one respondent.

5.2.5 Stage 5: Progressive Financing Mechanisms

Housing finance is a significant factor in accessing a house. It is one of major challenges that face the households. As mentioned before, this finance is needed at several stages: for acquiring the plot, for the improvement of the dwelling, for paying hired labor, and for accessing services such as water and electricity. From the responses of the sampled households in Corniche Region, household savings was the main source of financing the development stages of improvement after acquiring the land. The government funds were earmarked for community level services such as health and social facilities. In other words, the funds were not meant for individual house improvements. There were not any financing mechanisms such as micro loans. Furthermore, the majority of respondents could not borrow money for home improvement because most of them lacked steady flow of incomes. The incomes of most of these respondents are irregular because they are mostly vendors or fishermen. Consequently, they are not willing to make huge commitments such as borrowing for home improvement.

5.2.6 Summary of Main Findings

From the field work, I conclude that the households referred to some of the key issues that they felt would support them during the improvement of their dwellings. For the respondents, housing finance was seen to be the most challenging aspect which might delay or speed up the housing development process. Furthermore, the conventional building materials were expensive for most households despite the fact that most of them acquired them from local dealers. They also complained about the inadequate infrastructure such as water and sanitation facilities and access roads, in addition to land acquisition. Some of others were reluctant to respond to the questions, but they verbally expressed their fear of eviction, for they had no title deeds in addition to the current war that might even determine their future existence. All in all, those respondents indirectly expressed a sense of hopelessness and helplessness because there had been no serious financial support from any other sources.

5.2.7 Contrast Between Peru and Burkina Faso and Lattakia

Peru and Burkina Faso serve as a good example for the possible solution for the incremental housings. The success in the projects was due to the support of the World Bank, the enlightened government and the civil and local organizations. In Lattakia case, no such sources were available. The World Bank or any other organizations did not initiate any project similar to that in the already mentioned countries. The WB initiated a large scale, minimal-cost solution for site and services programs. Furthermore, no researcher such as the British architect, John F.C. Turner, who had the vision and the means to implement his plans, was available for the dwellers of informal settlement in Lattakia. Unlike Peru's case, the dwellers of informal housings in Lattakia were left with minimal instructions or plans. The plans were mostly implemented by contractors or local builders. Even the architects involved in the issue had no comprehensive and unified plan to solve this problem.

Burkina Faso provides another example of successful programs in contrast to the failed ones of Lattakia. Not only had the WB supported the programs in Burkina Faso, but also the government. Unlike Syria's government, the Burkina Faso's initiated a large-scale surveyed program following a master plan that had been developed with A Dutch cooperation. The Syrian government was and still hampered by the war that devastated the country. The municipal plans, though modest and inadequate, were suspended due to the current war.

5.2.8 Possible Solutions for Lattakia Informal Housing

As mentioned earlier housing finance is a significant factor in accessing a house and developing it. It is one of major challenges that face the households. To guarantee the success of any program, financial institute such as the World Bank must interfere. The WB has the financial power to implement the projects of developing informal housings. The WB has been the chief factor in the success of the programs in various parts of the world. In this context, one of the factors attributed to the failure in Lattakia's projects has been the absence of source of finance.

Enlightened government is another major factor that guarantees the success of any program. The government must launch a large-scale surveyed plot program following a master plan.

The finance organization and the government must work hand in hand in such programs. Without the provision of land by the government, the finance organization cannot proceed in financing the projects. The government, furthermore, controls the already existed mess and prevents a future one if any.

Experts in urban planning play a significant role in the success of programs. Architects who dealt with the problem of informal housings elsewhere can visualize the points of similarities and the points of differences in comparison with other programs outside Syria.

Local organizations funded by businessmen can collaborate with the government. Those organization or charities, whatever, can provide water, and field clinics that provide medical care for the dwellers. They can also provide some services such as garbage collection if the municipal involved in other priorities.

Informal settlement is a reality in Lattakia and elsewhere. Furthermore, its Palestinians population outnumbers Lattakia natives. For Lattakia the proposed solution is to reconstruct the buildings in accordance to the Arab Code under the supervision of engineers. Dr. Wazan, member of City Council, explains that a committee has been established to meet face to face the proprietors of those buildings in order to instruct them to resort to Engineers' Syndicate to get the required technicality of reconstruction. Each unit must have a complete file upon which all legal and technical procedures are based.

Some officials from Latakia municipality give solutions for the informal settlement in Latakia. Informal settlement spread on Al-Datour District. These are: Al-Azhari, Hae Kuneinas, Hae Al-Muntazah, Hae Basateen Al-Rehan, and Mukhiam Al-Ramel / Corniche Region. Act 33, passed in 2000, took into consideration the issue of ownership stabilization of informal settlement, the modification of informal houses, which are overpopulated, to formal houses of correct standards. The Act will enable the proprietor to sell his house, to get construction permit and to get mortgage.

Lattakia City Council has started the first stage of a comprehensive project of public housing as an alternative for informal settlement housing. In an interview with the daily newspaper

Al-Baath, the chairman of Lattakia City Council, Engineer Sadeek Mutraji affirms that the project is the basis for informal settlement development, especially after the recommendation issued by the government and the ministry of Housing & Construction. The recommendation attempts to find methods of building low-cost apartments in informal settlement sites. He explains that Act 15 constitutes the nucleus of actualizing the project because it is largely comprehensive in addition to the fact that it takes into consideration the urban expansion. It represents a big leap in developing the informal settlement sites by the private sectors, public sectors, or foreign construction companies. The City Council have to establish committees that survey the site and set up the mechanism of implementing the project in collaboration with the public sectors and its affiliates. These companies offered to construct residential suburbs in exchange of the land donated by the City Council. The shares will be divided between the companies and the City Council. This is going to benefit those who are looking for decent housing.

The chairman has also explained that the committees have been formed. He expects the wide-scale construction will take place since Act 25 decrees that the land must be distributed between the City Council and the residential cooperatives. This residential investment is characterized by low-price houses. The aesthetic and developing importance of these projects are to eliminate informal settlement and display the coastal waterfront of Lattakia, especially at the Corniche Al-Janoubi and Al-Ramel al-Shamali near the Tourist City. The projects, furthermore, guarantee buildings with construction criteria.

6. CONCLUSION

Low-income housing is a problem all over the developing countries. Surveys and on-site analysis carried out in the Corniche Region, reveal the problems associated with uncontrolled housing development without the professional and economical guidance of the governing bodies. Although the land was given to the people for settling, no infrastructure or professional guidance was provided. Survey results also show that the housing settlement at Lattakia have developed incrementally overtime when they had the economical potential. Construction was carried out by the owners or at some cases by construction workers depending on the economical condition of the owner. Thus, the development of the area has some similarities with self-help incremental housing but the end result is much different.

Since the character of self-help incremental housing so much depends on the people and their efforts of building, why not in the early stages the government takes control of it. At least in term of organizing this kind of development. In Lattakia, what has come out as people have settled and tried to build by themselves, ended up with creating an environment which is not safe and not healthy. Today they have reached to a state where you have to demolish and build new building which is not a very sustainable kind of development which is proposed by the municipality of Lattakia officials. If it was first planed there wouldn't be a need to demolish. Moreover, demolishing and building new is not an economical method because the households already spent money on their dwellings and the government will have to pay for it as well. Consequently, it is showing the sad fact of unplanned development.

Meeting the housing needs for low income groups has been highlighted as still a challenging issue in this thesis. Shelter comes first. Policies, regulations and legislative framework and many actors in the informal housing sector influence the performance of it. The research has highlighted the increasing need for low cost housing in Corniche Region, Lattakia, Syria. Many solutions have been suggested for solving the problem of informal housing. These solutions are mere responses to the challenges that face those involved in this problem. In my opinion, there might be an unheeded factor that creates and shape the informal housing, i.e., the cultural factor. People, migrants or displaced, settle in the city limits because they

cannot afford to live within the city. The first thing that haunts the head of the family is the terror of homelessness. Shelter is the ultimate priority. This sense of fear increases in families whose members mostly females. The head of the family hastily builds his dwelling because he is interested in housing his family above all other reasons. When shelter or protection is secured aesthetic factors of urban standards play no role. Culture is significant in this context. There is some connection between culture and housing, formal or informal. Unfortunately, this issue lies outside the scope of this thesis.

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APPENDICES

Appendix A.1 Interview with a Palestinian Refugee 80-year-old Part 1: Households 'Characteristics

N	Note	Participant
1	Type of household	Nuclear
2	Year of occupation	1977
3	Type of occupant	First
4	Type of ownership	Owner without title deed
5	Current family size	Six people
6	Average income	Being a fisherman, my income is not steady. My income never exceeds $200 per month.

Part 2: Description of Households Incremental Pattern

N	Note	Participant
1	How did you get the plot of land at time of moving into the settlement?	Upon my arrival, it was granted to me by Lattakia Municipality to build on but without title deed.
2	Since the region was an unplanned one, how did you choose the plot?	By mutual agreement with other refugees.
3	How did you finance your house improvement?	By my personal income
4	How long have you been improving your dwelling?	Lifelong improving.
5	What type of building materials did you use?	Cheap local materials such as blocks and cement.
6	What type of construction skills did you use?	Family labor and local builders that did not charge much money.
7	What services are available in your house?	All essentials but without waste collection.
8	Quality of the services provided	Below the average since the region is marginalized

Part 3: Possible Interventions and Support

N	Note	Participant
1	Any suggestions for support in your house improvement?	Financial as well as technical.
2	Who do you think would best offer this support?	The government should offer this support. However, the government cannot do that due to the current war. The only financial support may come only from charitable organizations or business men and industrialists.

Appendix A.2 Interview with a Palestinian Refugee 38-year-old
Part 1: Households 'Characteristics

N	Note	Participant
1	Type of household	Nuclear
2	Year of occupation	1980
3	Type of occupant	second
4	Type of ownership	Renter
5	Current family size	Four people
6	Average income	Greengrocer of average income $300 per month.

Part 2: Description of Households Incremental Pattern

N	Note	Participant
1	How did you get the plot of land at time of moving into the settlement?	By building on the core unit house occupied by my father.
2	How did you finance your house improvement?	By my personal income
3	How long have you been improving your dwelling?	Since 2012
4	What type of building materials did you use?	Cheap local materials such as blocks and cement.
5	What type of construction skills did you use?	Neighbors and local builders that did not charge much money.
6	What services are available in your house?	All essentials but without waste collection.
7	Quality of the services provided	Below the average since the region is neglected.

Part 3: Possible Interventions and Support

N	Note	Participant
1	Any suggestions for support in your house improvement?	Technical support.
2	Who do you think would best offer this support?	Municipality friends and benefactors

Part 4: Physical Characteristics of Environment

N	Note	Participant
1	How many stories does your dwelling have?	Two
2	Does the neighborhood have green areas?	None, due to the lack of space.
3	Is your neighborhood quiet or noisy?	Very noisy because there are no parks, no playgrounds for children in addition to the noise coming from overpopulated dwellings.
4	What do you think of the structural integrity?	Unsafe because the structure lacks the standard requirements of building.
5	What about electricity?	Inadequate because of the unlighted streets and power outage.
6	What about road structure?	Very bad because most of them are unpaved and do not have drainage system.
7	Does your neighborhood have schools?	Very few, schools are mostly located outside the neighborhood.
8	Do you have medical centers?	Only one run by UNRWA.

Appendix A.3: Interview with Lattakia Municipality official

N	Note	Participant
1	What are some of the programs that you have for providing low-income housings?	I participated in (MAM),a Program supported by EU aimed at providing high quality support to the Ministry of Local Administration and Municipalities. The program, however, failed to reach its objective of improvement and development of the region due to the current war.
2	Have you ever carried out site and services programs or settlement upgrading?	No, I haven't. The world Bank does not support such programs in Syria.
3	How many informal settlements do you have in your municipality?	Two: Al-Rammel Al-Phalastini (Corniche Region),and Al-Daedour.
4	What is the legislative framework in relation to informal settlement?	ACT 33, passed in 2000, took into consideration the issue of ownership stabilization of informal settlement, the modification of informal houses, which are overpopulated, to formal houses of correct standards. The Act will enable the proprietor to sell his house, to get construction permit and to get mortgage.
5	What assistance do you provide in informal settlement?	Infrastructure of low quality.
6	What other organizations work in these informal settlements?	None
7	What other international supports have been offered?	None

Appendix A.4: The survey interviews table

Participants	Q1 Type of household			Q2 Year of occupation		Q3 Type of ownership	Q4 Current family size		Q5 Average income p. month		Q6 Get the plot	Q7 Financial supply
	S	N	Ex	B1960	A1960		+5	-5	100$+	100-$		
1		x		x		owner	x		x		state	Self help
2		x		x		renter		x		x	state	Self help
3		x			x	owner	x			x	state	Self help
4	x				x	n.p. lodgers		x		x	state	Self help
5	x			x		renter		x	x		state	Self help
6			x		x	n.p. lodgers	x		x		state	Self help
7	x			x		owner		x		x	state	Self help
8		x		x		n.p. lodgers	x			x	state	Self help
9			x	x		n.p. lodgers	x		x		state	Self help
10	x				x	owner		x		x	state	Self help
11		x			x	n.p. lodgers	x		x		state	Self help
12	x			x		renter		x	x		state	Self help
13			x		x	n.p. lodgers	x			x	state	Self help
14			x		x	owner	x			x	state	Self help
15	x				x	n.p. lodgers		x		x	state	Self help
16		x		x		owner	x		x		state	Self help
17		x		x		n.p. lodgers		x	x		state	Self help
18		x			x	renter	x			x	state	Self help
19		x		x		renter	x		x		state	Self help
20	x				x	n.p. lodgers		x	x		state	Self help

Q8	Q9			Q10	Q11	Q12	Q13	Q 14	Q 15	
Building materials used	Services provided			Construction skills	Quality of services provided	Number of Stories	Structural integrity	Comfortability	Facilities	
	W	E	WC						edu	he
Traditional	x	x		Self help	2	1	unsafe	Noise	x	
Traditional	x	x		Self help	1	1	unsafe	Noise	x	
burnt bricks and cement	x	x	x	Self help	5	2	safe	Quite	x	x
tin sheets, or wooden pallets.	x	x		labor	6	2	unsafe	Noise		
Mix of mat.	x	x		Self help	5	2	unsafe	Noise	x	x
tin sheets, or wooden pallets.	x	x	x	labor	4	3	unsafe	Quite		
Mix of mat.	x	x		Self help	4	2	safe	Quite	x	x
tin sheets, or wooden pallets.	x	x		labor	4	2	unsafe	Noise		
Mix of mat.	x	x		Self help	3	1	unsafe	Quite	x	x
tin sheets, or wooden pallets.	x	x		Self help	3	1	unsafe	Noise		
Mix of mat.	x	x		labor	2	1	unsafe	Noise	x	
tin sheets, or wooden pallets.	x	x		labor	3	3	unsafe	Quite		x
Mix of mat.	x	x	x	Self help	4	3	unsafe	Noise	x	
tin sheets, or wooden pallets.	x	x		Self help	1	1	unsafe	Noise		x
burnt bricks and cement	x	x		Self help	6	2	safe	Quite	x	
tin sheets, or wooden pallets.	x	x		labor	3	2	unsafe	Noise	x	
burnt bricks and cement	x	x	x	labor	4	1	safe	Quite		x
tin sheets, or wooden pallets.	x	x		labor	2	1	unsafe	Noise	x	
Mix of mat.			x	Self help	5	2	unsafe	Noise	x	
Mix of mat.			x	Self help	4	1	unsafe	Noise		x

Participants	Q1 Type of household			Q2 Year of occupation		Q3 Type of ownership	Q4 Current family size		Q5 Average income p. month		Q6 Get the plot	Q7 Financial supply
	S	N	Ex	B1960	A1960		+5	-5	100$+	100-$		
21			x	x		renter		x		x	state	Self help
22	x				x	renter		x		x	state	Self help
23		x			x	n.p. lodgers		x	x		state	Self help
24	x				x	n.p. lodgers	x			x	state	Self help
25				x		owner	x		x		state	Self help
26					x	n.p. lodgers		x		x	state	Self help
27	x			x		renter		x		x	state	Self help
28	x			x		n.p. lodgers	x			x	state	Self help
29	x		x		x	n.p. lodgers		x		x	state	Self help
30			x		x	renter	x		x		state	Self help

Q8	Q9			Q10	Q11	Q12	Q13	Q 14	Q 15	
Building materials used	Services provided			Construction skills	Quality of services provided	Number of Stories	Structural integrity	Comfortability	Facilities	
	W	E	WC						edu	he
tin sheets, or wooden pallets.	x	x		labor	3	1	safe	Quite		x
tin sheets, or wooden pallets.	x	x		labor	3	2	unsafe	Noise	x	
burnt bricks and cement	x	x		Self help	3	2	safe	Quite		x
tin sheets, or wooden pallets.	x	x		Self help	2	2	unsafe	Noise		x
Mix of mat.	x	x		Self help	1	1	safe	Noise	x	
tin sheets, or wooden pallets.	x	x		Self help	1	1	unsafe	Noise		x
Mix of mat.	x	x		Self help	3	3	unsafe	Noise		x
tin sheets, or wooden pallets.	x	x		Self help	6	3	unsafe	Noise	x	
Mix of mat.	x	x		Self help	4	2	safe	Noise	x	
tin sheets, or wooden pallets.	x	x		labor	5	1	unsafe	Quite	x	

Appendix A.5: Analysis of Households Characteristics:

Type of household
30 responses

- Single
- Nuclear
- Extended family

26.7%
43.3%
30%
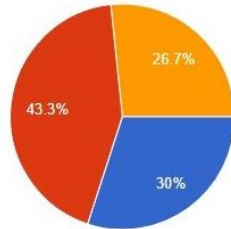
Type of occupants
30 responses
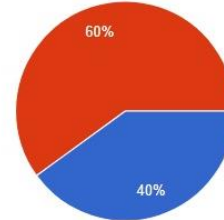
- First settler
- changed settler

60%
40%

Year of occupation
30 responses

- Before 1960
- After 1960

63.3%
36.7%
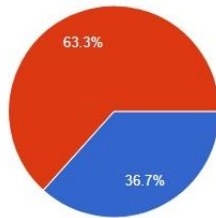
Type of ownership
30 responses
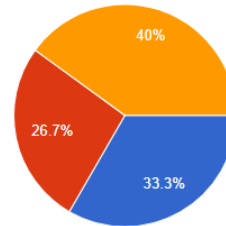
- Owner without title deed
- Renter
- Non paying lodgers

40%
26.7%
33.3%

Current family size
30 responses

- More than 5 members
- Less than 5 members

43.3%
56.7%
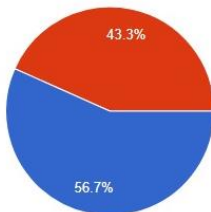
Number of stories
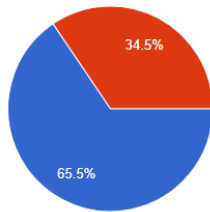30 responses
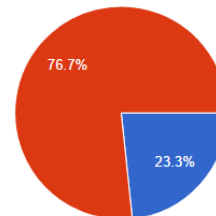
- More than 2 stories
- Less than 2 stories

76.7%
23.3%

Description of Households Incremental Pattern:

What type of construction skills/ labor did you use?

- Self help
- Labor

34.5%

65.5%

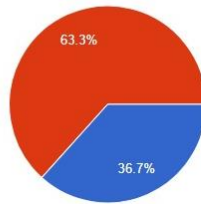## What type of building materials did you use?
30 responses
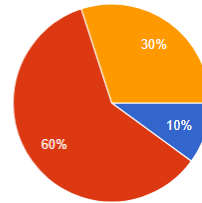
- Burnt bricks and cement
- Tin sheets, or wooden pallets.
- Mix of materials

30%

10%

60%

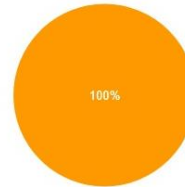## Household income in relation to incremental processes?
30 responses

- More than 100 US dollars
- Less than 100 US dollars

63.3%

36.7%

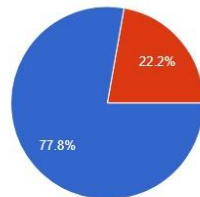## How did you get this plot of land at time of moving into the settlement?
30 responses

- Bought Land
- Rented the plot
- Granted from the state

100%

House improvement/expansion over the last ten years

- Yes
- No

22.2%

77.8%

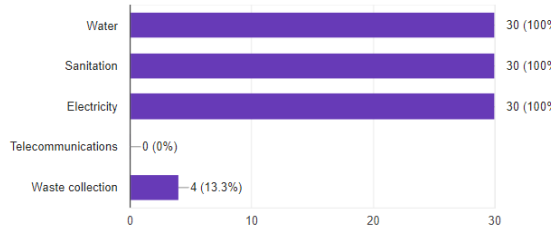## How did you finance your house improvements?
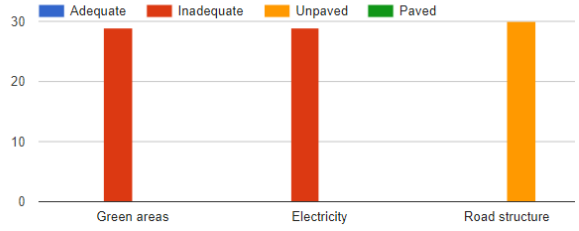30 responses
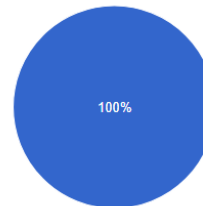
- Self help
- Other help such as state or NGO's

100%

Physical Characteristic of The Environment:

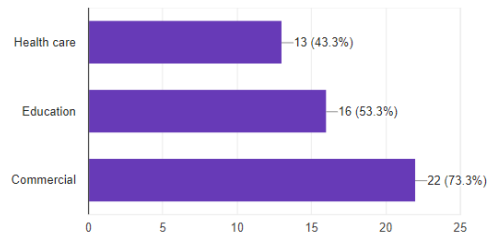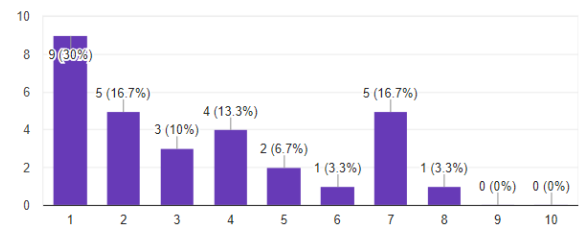### What services are available in the house?
30 responses

Service	Count
Water	30 (100%)
Sanitation	30 (100%)
Electricity	30 (100%)
Telecommunications	0 (0%)
Waste collection	4 (13.3%)

Utilities

Legend: ● Adequate ● Inadequate ● Unpaved ● Paved

- Green areas: ~29 (Inadequate)
- Electricity: ~29 (Inadequate)
- Road structure: ~30 (Unpaved)

Facilities
30 responses

Facility	Count
Health care	13 (43.3%)
Education	16 (53.3%)
Commercial	22 (73.3%)

Comfortability
30 responses

Rating	Count
1	9 (30%)
2	5 (16.7%)
3	3 (10%)
4	4 (13.3%)
5	2 (6.7%)
6	1 (3.3%)
7	5 (16.7%)
8	1 (3.3%)
9	0 (0%)
10	0 (0%)

Quality of the services provided?
30 responses

Rating	Count
1	7 (23.3%)
2	4 (13.3%)
3	5 (16.7%)
4	9 (30%)
5	3 (10%)
6	2 (6.7%)
7	0 (0%)
8	0 (0%)
9	0 (0%)
10	0 (0%)
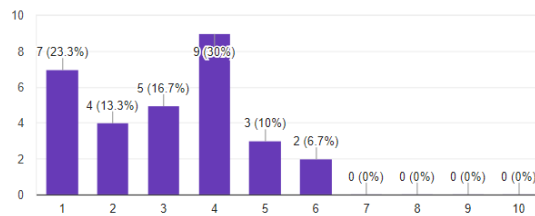
Structural integrity
30 responses

Legend: ● Safe ● Unsafe

- Unsafe: 80%
- Safe: 20%
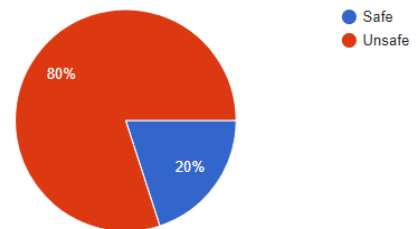
Possible Interventions and Support:

Any suggestions for support in house construction/improvement
30 responses

Category	Count
Financial	29 (96.7%)
Technical	26 (86.7%)
Community	10 (33.3%)
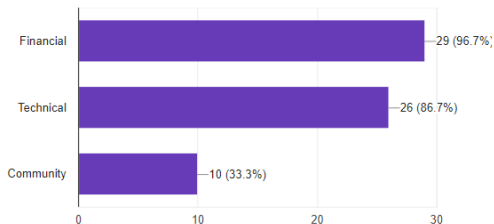
Who do you think would best offer this support?
30 responses
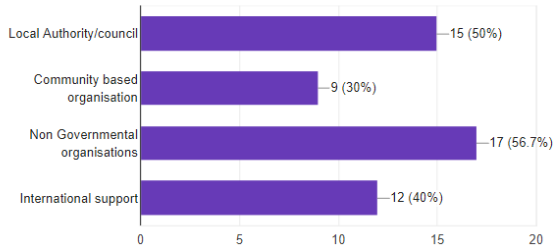
Category	Count
Local Authority/council	15 (50%)
Community based organisation	9 (30%)
Non Governmental organisations	17 (56.7%)
International support	12 (40%)

A Study on Self-Help Incremental Housing and Analysis of Informal Development:A Case Study of Lattakia

Household Semi structured interview guide

1.
   Type of Household
   Mark only one oval.

   ◯ Single

   ◯ Nuclear

   ◯ Extended

   ◯ Multi-family household

2.
   Year of occupation

   _____

3.
   Type of occupants
   Mark only one oval.

   ◯ First

   ◯ Second

4.
   Type of ownership
   Mark only one oval.

   ◯ owner

   ◯ renter

   ◯ non paying lodgers

   ◯ Family member

5.
   House improvement/expansion over the last ten years
   Mark only one oval.

   ◯ Yes

   ◯ No

Triggers/Motivations for extensions/improvements

Part 2

6.
What is the average household income in relation to incremental processes?

_____

7.
What was your original family size when you came?

_____

8.
What is the current family size?

_____

9.
Are there any other households living with you apart from your nuclear family?
Mark only one oval.

◯ Yes

◯ No

Description of House Incremental Patterns

Part 3

10.
How did you get this plot of land at time of moving into the settlement?
Mark only one oval.

◯ Bought Land

◯ Bought a House

◯ Rented the plot

◯ Inherited

◯ Others

11.
How long have you been improving/extending your house?

_____

12.
How did you finance your house improvements?

_____

13. **What type of building materials did you use?**

Mark only one oval.

◯ Conventional (Modern)

◯ Traditional

◯ Mix of materials

14.

What type of construction skills/ labor did you use?

Mark only one oval.

◯ Family labor

◯ Community supported labor (among people you know)

◯ Local Contractors (that you do not know)

◯ Others

15.

What are the uses of additional spaces?

Mark only one oval.

◯ Habitable

◯ Non habitable rooms (commercial)

16.

Any backyard houses for home enterprises?

Mark only one oval.

◯ Yes

◯ No

17.

What services are available in the house?

Check all that apply.

☐ Water

☐ Sanitation

☐ Electricity

☐ Telecommunications

☐ Waste collection

18.

Quality of the services provided?

Mark only one oval.

	1	2	3	4	5	6	7	8	9	10
	◯	◯	◯	◯	◯	◯	◯	◯	◯	◯

19. **Do you have plans for future expansion/ improvement?**

Mark only one oval.

◯ Yes

◯ No

20.
Do you have titles of ownership to the land?

Mark only one oval.

◯ Yes

◯ No

Possible Interventions and Support

Part 4

21.
Any suggestions for support in house construction/improvement

Mark only one oval.

◯ Financial

◯ Community

◯ Technical

◯ Others

22.
Who do you think would best offer this support?

Mark only one oval.

◯ Local Authority/council

◯ Community based organisation

◯ Non Governmental organisations

◯ Others

A STUDY ON SELF-HELP INCREMENTAL HOUSING AND ANALYSIS OF INFORMAL DEVELOPMENT:A CASE STUDY OF LATTAKIA

Interview with the Municipality of Lattakia

1.
What are some of the programs that you have for providing low income housing?

_____

_____

_____

_____

_____

2.
Have you ever carried out site and service programs or settlements upgrading?

_____

3.
How many informal settlements do you have within your municipality?

_____

_____

_____

_____

_____

4.
What is the legislative framework in relation to informal settlements?

_____

5.
What assistance do you provide in informal settlement?

_____

6. **What other organisation work in these informal settlements?**

_____

7.
What other Internationale support have you offered in Corniche region settlement to better the living conditions?

_____