Rethinking the Urban Development Process in Egypt’s Informal Areas
User Based Analysis for Upgrading Projects Outputs Done in Manshiyat Nasser and Izbet Khairallah Areas in Cairo

Thesis submitted in the Partial Fulfilment for the Requirement of the Degree of Master of Science in “Integrated Urbanism and Sustainable Design”

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إعداد التفكير في عملية تطوير المناطق العشوائية بمصر

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Disclaimer

This dissertation is submitted to Ain Shams University, Faculty of Engineering and University of Stuttgart, Faculty of Architecture and Urban Planning for the degree of Integrated Urbanism and Sustainable Design. The work included in this thesis was carried out by the author in the Year 2015/2016.

The candidate confirms that the work submitted is his own and that appropriate credit has been given where reference has been made to the work of others.

07/07/2017

Mohammed Fawzi

Signature
‘... And say: Work; so Allah will see your work and (so will) His Messenger and the believers; and you shall be brought back to the Knower of the unseen and the seen, then He will inform you of what you did.’ (Al-Tawba Verse No:105), The holy Quran.
A Preface

One of the main motives for me to join the IUSD program and go through this interesting experience is a visit that I have conducted as a part of one of AYB’s charity campaign in Izbet Abo-Qarn; One of Cairo’s informal areas. In that visit I got a different perspective through a new window to the neighboring residents of the Informal areas within Cairo. I must admit that I knew only shallow basic information about them that highlights them as a tumor that should be removed from the society.

The Informal settlements are in my opinion one of Egypt’s treasures that should be carefully dealt with in order to capitalize on the existing assets and solve the pending and future problems related to it.

These so called ‘informal areas’ are proven to be self-sufficient, productive and cooperative communities yet labeled by inaccurate and misleading notions (some times by the government itself) like ‘crime zones’, Unemployment settlements’ etc.

Within Those so called ‘informal areas’, I found persistence, solidarity, creativity, advanced problem solving mechanisms, successful business models, mutual care and strong social bonds.
That visit was a turning point in my life that changed my point of view towards the informal areas forever. Since then I became so eager to know more and dig deeper in the topic of informality.

Finally I would like to quote the words of a woman in Izbet-Khairallah: 

*We have solved our housing problem on our own, we have actually put some load away from the government’s shoulders, we are marginalized by the government though.. we just need our basic rights form the government … and at least not to be labelled or marginalized by you (the others living in the city)!*

I hope that this research and many others can help to formulate the bricks of an extended bridge to include our brothers and sisters who are living in the informal areas back into the city. In addition, to give them back their rights by amplifying their voices and scientifically analyzing their problems and propose methods to solve them.
I would first like to thank my first supervisor Dr. Mohab El-Refaie; the teacher in the Urban planning and design department at Ain shams university. The door to Dr. Mohab El-Refaie office was always open whenever I ran into a trouble spot or had a question about my research or writing. He always gave me the motivation I needed to carry on my research. In addition, he consistently allowed this thesis to be my own work, but steered me in the right the direction whenever he thought I needed it. I would also like to acknowledge prof. Astrid ley and Dr. Hassan El-Mouelhi as the second reader of this thesis, and I am gratefully indebted to his/her for his/her very valuable comments on this thesis.

I would also thank my mentor and teacher Prof. Mohammed Salheen for standing beside me through hard times and gave me the advice whenever I knocked on his door. In general I am glad that I had the opportunity to join the IUSD master’s program for the enrichment that it gave to me on both the academic and personal scales.

I would also like to thank my volunteering colleges who were involved in the validation survey for this research project: Eng. Mohammed Abedo and Eng. Nourhan Mohammed Without their passionate participation and input, the validation survey could not have been successfully conducted.

I would like also to thank the local residents of Izbet Khairallah and Manshiyat Nasser for their hospitality, the rich experience and the inspiration that they gave me. Despite the difficulties that they are going through, the residents
showed a great sense of hospitality and cooperation throughout the case study phase of the research.

Finally, I must express my very profound gratitude to my parents and my friends for providing me with unfailing support and continuous encouragement throughout my years of study and through the process of researching and writing this thesis. This accomplishment would not have been possible without them. Thank you.

Author

Mohammed Fawzi
Abstract

Informality is one of the most addressed topics in the present time especially in the developing countries. The phenomenon have many causes that leads to the insufficient formal housing market, forcing people to create their own solutions to accommodate themselves through the informal housing. This phenomenon emerged in the Egyptian context during the 1950’s. yet, The topic have got the attention of the official government and a different paradigm in dealing with it took place specially after the El-Doweiqa deadly rock fall in 2008 that took place in Manshiyat Nasser. Since then, many interventions and strategies have taken place to solve the phenomenon. one of them is the informal areas upgrading approach.

The research aims to discuss the impact of upgrading strategy and the interventions representing it from the resident’s perspective. That would give an indicator of how the locals perceive those interventions and the other hidden comments they may have in order to improve them in the future.

The research aim was achieved by the following methodology:

First by going through the literature of the informality topic in the first chapter. Then the research discusses the urban development term and the relevant related practices in the informal areas context in addition to a brief introduction to relevant quality of life indicators to measure the development outcomes. The case study chapter starts by choosing two case studies in the greater Cairo region that had many interventions done by many actors identified as an in situ development. The field work focused on getting the impressions and the opinions of the residents of these areas through structured interviews done by
the researcher. The structured interview was designed to tackle many aspects including basic infrastructure, accessibility, Education, healthcare service and work opportunities.

The research at the end concludes that the residents of the studied informal areas were normally satisfied with the basic services provided to them. However, there are still complaints about the maintenance and the execution quality in addition to the thrive for more services to be implemented. At the end the research offers other points for further research in order to answer other unaddressed questions and related aspects.
# Table of content

Disclaimer ......................................................................................... VI
A Preface ........................................................................................ IX
Acknowledgment ........................................................................ XI
Abstract ......................................................................................... XV
Table of content .............................................................................. 1

## Chapter 1: Introduction and methodology

1.1. Research Questions ................................................................... 5
1.2. Research Objective ................................................................... 6
1.3. Research Methodology ............................................................... 7
1.4. Research limitations ................................................................. 8
1.5. Chapters overview ................................................................. 10

## Chapter 2: Informality

2.1. Introduction to Informality .................................................... 12
2.2. Informality in Egypt ............................................................. 16
   2.2.1. Facts and definitions ....................................................... 17
   2.2.2. Types of informal areas ................................................. 18
2.3.1. Informal areas timeline in Egypt ....................................... 21
2.3.2. Informal areas Challenges .............................................. 20

## Chapter 3: Urban Development in informal areas

3.1. What is the urban development? .......................................... 3
3.2. How Spontaneous Urban development take place in informal
    areas? ...................................................................................... 5
3.3. What are the Different approaches in developing and dealing
    with informal areas? ........................................................... 8
   3.3.1. Redevelopment: ............................................................. 9
   3.3.2. Urban Upgrading: ......................................................... 10
   3.3.3. The integrated Approach: ............................................ 11
3.4. Development of the Informal areas in the Egyptian context. 13
3.5. Issues of Informal areas development in Egypt. ................... 14
Chapter 4: The case studies ............................................... 15
  4.1. Introduction. ............................................................................. 15
  4.2. Methods and tools. ................................................................. 17
    4.2.1. Structured interview contents: .......................................... 18
    4.2.2. Sampling: ........................................................................... 21
  4.3. Profiling the area of study .................................................... 24
    4.3.1. The Historical background. ............................................... 24
  4.4. The quality of life survey results .......................................... 0
    4.4.1. Basic information: ............................................................. 0
    4.4.2. Basic infrastructure: ......................................................... 2
    4.4.3. Education, Healthcare services and social welfare: ........... 9
    4.4.4. Accessibility and public services: ..................................... 18

Chapter 5: Conclusion and main findings. .................. 21
  Future work: ................................................................................. 24
  Appendices ................................................................................... 25
  References .................................................................................... 26
Chapter 1: Introduction and methodology

Adequate housing is one of the essential rights that any citizen in this world should have. As basic as it may sound, the applicability of that on the ground is so hard especially for the poor or the low-income citizens. The inability to provide the adequate housing for the previously mentioned social strata lead to the emergence of the 'Informal settlements.'

It is one of the most important phenomena that have to be dealt with from different perspectives to solve it. Despite the surface of the phenomenon that appears to have a prominent urban aspect, the roots extend to reflect unbalanced economic and social aspects.

Poverty, Population growth, insufficient housing supply and mass migration movements are the most common reasons responsible for this phenomenon.

The approaches that usually deals with the 'informal settlements' phenomenon adopts one of two tracks that should be done in parallel. The first track is a 'Reaction act' to upgrade and enhance the existing Informal settlements either physically by providing main essential services and infrastructure or by relocating the residents in more adequate and legal buildings.
The other track is a ‘Preventive act’ that is usually concerned with long-term measures to prevent the informal settlements from expansion and to eliminate the reasons that made them formulate in the first place.

1.1. Research Questions

This research was mainly formulated in order to understand the Urban development dynamics of the informal areas as the researcher had some issues and concerns in mind that needed answers and these questions were branching from the main research question which is:

'Have the different upgrading measures and interventions been done in the informal areas, lead them to evolve and develop? and, if so how the locals perceive that development?'

In order to answer that broad question, it should be broken down to smaller easier questions to answer.

What are the different strategies to deal with the informal areas in Egypt?

What are the different measures that could be tracked and spotted in the study areas?

How the change in living standards could be measured and monitored?

What is the current to answer this broad question, the starting point was to dig into the literature to find the definitions of the different involved terms? The first step was to know more about informality phenomenon; it is different definitions and the connection to the practice. Hence to know how the problem have been localized in the Egyptian context.

The second step was to find out more about the Urban development notion. The definitions, what it implies. Then to identify the different types of the development and the involved various stakeholders. The stakeholders include
the residents themselves, the government or and other supporting external agents. For that also the types of interventions vary accordingly. The research also tried to simplify and categorize the different measures following three main paradigms. These paradigms have guiding ideologies different approaches in dealing with that problem internationally and then locate the Egyptian case in context and finding out which the used approach. Finally comparing the results of the different measures or projects. The previous procedure was a direct consequence of the following sequential questions.

- What is the informal areas different definitions?
- What are the driving reasons for the informal areas existence?
- What are the different approaches to deal with informal areas?
- How the different roles of informal areas development are distributed among the different stakeholders?
- What are the informal areas’ residents reviews about the various measures that have taken place aiming to enhance their living conditions in the study areas?
- What could hinder some upgrading interventions and make it underrated according to the recipients’ point of view?

1.2. Research Objective

This research aims mainly to answer the main research question assess the Urban development practice-done by the government with the cooperation of the different partners- in the informal areas based on the feedback of the end user. The idea behind that assessment is to provide a complete review of the situation and to define the strength and weak points to improve the future performance. That idea is similar to the post-occupancy surveys usually done after the implementation of new projects.
In order to get insights into the development process in the Egyptian context, a comparative analysis will be done cross-cutting two main cases based on the urban development criteria that was developed through the literature review of urban development notion and the relevant practices in this field.

1.3. Research Methodology

In order to carry out this research two methods were used. The first on is the literature review of the relevant publications and the official documents that have been done in relevance to the informality issue either from an academic or practical point of view. That included the definitions of the slum areas according to the UN habitat and the definition of different related terms such as -Informality, unsafe and Unplanned-form the Egyptian state point of view. Starting from the history of the informality problem worldwide and the formulation of slums, the research goes on to highlight the similarities with the Egyptian case. In addition to that the notion of the Urban development generally and the slum upgrading specifically was addressed through literature review of relate documents from the Un and other agents like (GIZ as well as the Egyptian law of 2006 about the adequate housing for all the Egyptians). Then the research took two parallel but complimentary lines of investigating the problem and what have been done from the different agents to solve it. The first line was the officials and the representatives of different governmental bodies involved in the issue and that have been done through attending two conferences concerned with the issue (6th International Conference: Towards a Regional Agenda for Habitat III organized by Cairo university and The First Egyptian urban forum) which gave in depth insight to the academic latest contributions and the latest practices connected to the field of Informal areas ‘Ashwayaat’. These two conferences gave the researcher the chance to have an overview based on the experiences of the experts and officials that was essential to understand the process from the government and the state point of view. The second parallel line of the research was to try to address the informal areas
upgrading from the service recipients’ point of view who are in this case some of the Informal areas ‘Ashwayaat’ residents. That point of view has been explored through conducting structured interviews with the residents to get the satisfaction rates of each provided service in each of the selected case studies. This went side by side with having quick profiling of the selected case studies Using GIZ and ISDF documents for Manshiyat Nasser area as well as ICS module publications of the IUSD III and TADAMUN website for Izbet Khairallah area. That fast profiling aimed to map the development timeline as well as the physical interventions done in the case studies.

1.4. Research limitations

The research faced several limitations and in the following points they will be briefly mentioned:

- **The first limitation** is the lake of transparency. Although the Egyptian constitution states that the right to information is guaranteed for all the Egyptian citizens as stated in subject 68 (Egyptian constitution, 2014), Most of the governmental bodies makes the access to information a hard process and sometimes impossible for the normal citizen or researcher. The researcher was aware of the problem specially that the majority of the resources that have been used and analyzed in this thesis are considered ‘grey literature’ that including web published reports and publications of governmental organizations or International organizations. In that sense the researcher found out while asking some residents, that (MoURIS) have made a similar survey to what the researcher have carried out but with a larger sample size that is more representative. However, the data could not be acquired by the researcher when he asked about it or even got any hints of what was the intended use of the data.
• **The second limitation** is the lack of exact figures about the population of the informal areas in general and especially in Izbet Khairallah area as it is divided between three districts and the numbers in each district do not represent the geographical boarders of the study area as the numbers available represent a bigger part of the district.

• **The third limitation** is the small sample size. Since there are no accurate figures of the population numbers in both case studies, the sample could be not representative for the entire community, but it was tailored to serve the aim of this exploratory research. In order to cover the small sample size, the samples were taken from scattered zones following a certain methodology that will be explained later in this research in the investigated areas to insure maximum reliability in the sample.
1.5. Chapters overview

The first chapter provided an introduction to this thesis by defining the researcher background and motives behind this research then stating the corresponding research questions and the research limitations as well as providing an overview of the research plan.

The second chapter then provided the necessary literature background for the reader to understand the informality in general as well as giving a deeper overview of the term in the Egyptian context. The chapter then went though the main events that fostered the informal housing practice in the Egyptian case as well as stating the different challenges that must be tackled or taken in consideration when putting any plans to face that urban phenomena. The entire mentioned process and methodology is presented in a graphical way in the following figure.

The third chapter also provided a literature review for the Urban development term and the necessary definitions related to the term. The chapter then gave an overview of the spontaneous urban development that usually take place in the informal areas and the different development approaches. Finally, the chapter provides a recap using a concluding chart.

The fourth chapter is the case study. That includes the field work methodology and the used tools in order to collect the data and the comparative analysis of the collected data. The results part was divided into three subsections that represent the three main sectors were targeted by the field investigation.

The fifth and the last chapter discusses all the results and concludes the whole research in order to put final recommendations and suggestions for further research points.
Rethinking Urban Development Process in Egypt's Informal Areas

Chapter 1
Introduction

Chapter 2
Informality

Chapter 3
Urban Development
- Specimen Urban development (7 steps of informal areas creation)
- Differential approaches in dealing with informal areas
- Issues of informal areas Development

Chapter 4
The Case studies
- Case study Methods and tools
- Timeline of both of the case studies
- The survey results and charts

Chapter 5
Discussion and Conclusion
- Survey results interpretation
- Findings and Conclusion
- Future work
Chapter 2: Informality

2.1. Introduction to Informality

Informality according to oxford dictionary means ‘Relaxed, friendly, or unofficial style or nature; absence of formality’ (Oxford English Dictionary, 2015). For that the abstract term shows a more positive meaning, yet in practice the term is usually perceived as a negative one, it is a well-known issue in the modern history. In fact this problem is driven from the fact that more than half of the world’s population lives in cities and this percentage is expected to hit the 66% by 2050 (UN, 2014).

This chapter will showcase main definitions that are essential to understand the notion of informal housing. Some essential keywords that are directly connected to the notion will be discussed such as Adequate housing and Informal areas types. The chapter will then go more in depth to the Egyptian case and the Informal settlements as one of the post industrial revolution results. At the end the chapter will conclude the main reasons and factors that lead to the emergence of this phenomenon in the Egyptian context, as well as the related challenges and implications of that Urban phenomenon.
The informal housing phenomenon have appeared first in the pioneer industrial communities specifically in England due to the attractiveness of the industrial cities for the labor segment. In London city for example and in the beginning in of the 19th century; the population numbers got a huge boost in a short time. For example, London city’s population doubled in the period between 1800-1850 (Flanders, n.d.; UN-Habitat, 2003b)

The increasing numbers of population in such cities made a big pressure on the infrastructure existed at that time as well as increasing the demand for cheap housing (Mike, 2004; Salheen, 2005; Sims, 2010). These rapid demands could not be provided by the state which had no capacity to cope with them in the needed time. Therefore, the emergence of the parallel informal housing market was a must to contain the escalating housing demand (Arimah, 2001).

The terminology of informal housing differs throughout the literature. ‘Slum areas, Informal settlements, popular housing, squatter areas or shanty towns’ are all various terms of the same Urban phenomenon with slight differences. According to (UN Habitat, 2007, p. 1), The ‘Slum household’ term is defined as “a group of individuals living under the same roof that have one or more of the following conditions:

- insecure residential status.
- inadequate access to safe water.
- inadequate access to sanitation and other infrastructure.
- poor structural quality of housing and overcrowding.”

The above mentioned conditions were also revised and more conditions were added in fact sheet 21 by (UN-Habitat, 2009) such as:
• the affordability of the housing unit.
• the accessibility for the different services like schools, health care facilities and social facilities.
• The cultural adequacy which takes in account the ability of self-expression in terms of the different cultural identities.

Informality became a worldwide phenomenon specially in the developing countries. In which people moved to the capitals and industrial cities where most of the industries and trade usually had taken place(Khalifa, 2011a; Mike, 2004; Sims, 2010). As a result, informal areas emerged also to supply the rapid demand in housing paralleled with the failure of the state to provide affordable formal residential units in such rate. As a result, the local governments had to intentionally keep their eyes away and allow them to grow informally as long as they are expanding on low value lands (Mike, 2004).

Especially when the city expands and gets so close or even expand over those previously neglected informal areas. Usually by time the city needs to expand and acquire new lands. The result of that is the increasing value of the empty or abandoned lands in the adjacent areas .Despite the informal areas normally lack different essential needs such as sanitation, healthy built environment and sufficient infrastructure, these areas where chosen by the people for some other qualities such as the speculated proximity to the city center or the availability of nearby roads and formal infrastructure.

At that point, the clash happens between the state to add more ‘formal’ lands for expansion, and the informal settlers to consolidate lobby to improve their built environment. A perspective that shows the problem as a land acquisition struggle .(Mike, 2004; Samper, 2012)

The problem of informal areas is usually dealt with from the Urban perspective as it represents a deteriorated urban aspect that usually impacts the city image (Mike, 2004; Roy, 2002; Samper, 2012). It wasn’t until the 1970s that the
informality was dealt with in literature from an economical point of view as an economy of survival for the urban poor. (AlSayyad, 2004; Herrle & Fokdal, 2011).

For that, the research will expose some of the related economic and political dynamics connected to the urbanization that had a significant influence on the informality practice in general and the housing market in particular in the Egyptian context.

Informal areas, in general, has no definite definition that could be fixed to standardize the practice all over the world. On the contrary; the informal areas take different physical shapes and hide different dynamics that varies from country to country. Else more, it can differ in the same country. (UN-Habitat, 2003a).
2.2. Informality in Egypt

Although slum areas could be defined as areas that lack one or more of the four previously mentioned depreciations, the slum areas in North Africa is of a different type and shape than the general concession about slums worldwide. Slums in this region are mostly safe and have robustly built structures yet lacks either sufficient basic infrastructure or legal land titling or both combined (UN Habitat, 2007). For that, the Egyptian slums is not a different case. Generally, they have well developed social and physical structures and represents a widely spread practice among many of the city residents.

Figure 2 Proportion of slum households in developing regions
source: UN-Habitat 2005, Urban indicators program phase III
2.2.1. Facts and definitions

The definition of the informal areas in Egypt is a dubious topic. As the definition of slums ‘Ashwa’iyyat’ have different interpretations. According to the Egyptian Building Unified Law No.119/2008 (The Egyptian building code), the term is not directly mentioned instead the term ‘unplanned ‘appeared. Defined as:’ Areas developed in contradiction with planning and building laws and regulations’ (MTI & GOGPO, 2009).

That definition was mainly concerned with the building condition in relation to the legal status. That also meant that all the households that does not comply with the building code goes under the informal areas and that means 15.7 million (i.e. nearly 22.3% of population) are included in that definition.

The problem was that it was a huge number and also included well-established households that only lake either permits or even deteriorated old buildings that needs maintenance etc. (Howeidy et al., 2009)
According to Faramawy & Alghohary (2010), ISDF replaced the ambiguous Arabic term ‘Ashwa’iyyat’ by the two terms: unplanned and unsafe. According to this classification, 60% of the urban areas in Egypt are considered as ‘unplanned’ as they don’t follow the building regulations (Izbet-Haganna and the other four mega slums are included within this category), and 5% are considered as ‘unsafe areas’ which share the same physical appearance with ‘slums’.

2.2.2. Types of informal areas

The informal urbanization in Egypt took many shapes and forms and could be concluded in the following types:

- In the morning of the 6th of September 2008 Egypt woke up facing a tragic catastrophe in El-Deweika area located in Manshiyat Nasser. A rockslide in that marginalized area lead to the death of 110 people in addition to hundreds who were reported missing (Ahram Online, 2014). This catastrophe dropped a bombshell and made an aggressive shake in the way the Egyptians deal with Informal areas in general and the unsafe areas specifically on both the official and popular scales. The momentum of the accident induced the government to Establish an entity to make fast track interventions aiming to prevent the occurrence of similar incidents.

To achieve that goal, a presidential decree No. 305 called for the establishment of an entity that is responsible for making a complete database about all the informal areas in Egypt and their different categorizations. The unsafe areas were put on the top of the priorities in order to relocate them to safe areas. The result of that was the establishment of named Informal Settlement Development Fund (ISDF) as a funding and monitoring institution. In order to
channelize the recommendations and the required actions easier and faster to the corresponding governmental bodies, The ISDF was directly operating under the authority of the Egyptian cabinet, headed by the minister of local development.

In addition to that, The ISDF had on board representatives from the following six ministries: Electricity and Energy, Finance, International Cooperation, Local Development, Social Solidarity and Housing & Urban Development. Additionally, three experts and three representatives from the private sector, from NGOs and civil society organizations are included (Presidential Decree, 2008; article: 3).

That was the first political acknowledgement of the problem and the first formal institution to deal with the problem in an official systematic way apart from being a fragment of the national housing program(Khalifa, 2015)
The unsafe areas were classified into four grades, deduced from ‘slum’ UN-Habitat criteria see figure (4), in order to determine level of intervention urgency. It ranges from grade (1), which is characterized by the highest priority and risk, to grade (4), which is mainly related to tenure security.

![UN Habitat Criteria vs ISDF Criteria](image)

**Figure 5 The ISDF criteria in comparison to The UN-habitat criteria.**

*Source: (Sims, 2010)*

Thirty-five areas in Egypt were classified as grade (1), 35 areas, Residents living in these areas were threatened by flooding, high voltage cables, unstable geological structures. Accordingly, communities living in such areas should be relocated to other safe locations.

Within grade (2), 281 areas, with unsuitable housing conditions, could be classified. Number of areas affected by health related risks is 68 which are categorized as grade (3). Twenty areas belong to grade (4) where tenure is unstable.

Consequently, there were 404 unsafe areas in Egypt where according to(Khalifa, 2011b), around 1.1 million people live. As higher grades revoke the lower ones,
dwellings in grade (1) could also be influenced by the other three lower grades. In 2011, the number of unsafe areas was reduced to 383 and reached 365 in 2013 and then to 347 in year 2016 according to ISDF annual report.

The following figure shows the numbers of the unsafe areas of the 2016 and their distribution among the four categories.

![Informal Settlements in Egypt](image)

**Figure-6 The Unsafe/Unplanned classification of the Informal areas according to The ISDF**  
Source: Dr. Mohab El-Refaie’s lecture based on the ISDF annual report 2016

### 2.2.3. Informal areas timeline in Egypt.

This part of the chapter is dedicated to understand the informal areas phenomenon and its development in the Egyptian context. The informal areas as a practice emerged after the WWII in small numbers and started. The informal areas in In order to understand the local triggers and the different reformation that took place in the Egyptian context, The researcher
draw a simple timeline with the major events and policies that fostered the informal areas development process. The following paragraph contains the main events that affected the pace of the informal areas growth in the Egyptian context.

♦ **1952 Revolution (Nasser in power):**

The problem dates back when the political transformation in the Egyptian state occurred after the 1952 revolution. The state before that date was a kingdom with a governmental housing arm that builds housing besides paving the way for other private sector investors to also invest in housing. The market was in a balancing state between the supply and demand and had the required variety to fulfill the market needs (Séjourné et al., 2009).

Shortly after the revolution many constitutional reformations occurred and the state mainly transformed to the presidential system. The revolution made many developmental projects and interventions that mainly focused on the industrial sector besides the redistribution of the agricultural lands among the farmers. They turned from workers to owners to the land they used to work on. (Sims, 2010)

This political sudden change made many changes in the market dynamics and made it finally move towards an aggressive urbanization process in both rural and urban areas. Combined with a fixed rent law (known as the old renting law), were strong reasons for the complete stop of the private housing sector leaving the national housing program alone to face all the market demands in addition to the flourishment of the informal housing sector specially on the agricultural land (Khalifa, 2011a)

♦ **1967 The six days' war (The defeat):**

In the 5th of June 1967 the Arab united army took a heavy defeat by the Israeli army marking a turning point in the history of the area on different sectors.
The result of that war was the loss of Sinai and the migration of many canal cities' residents to other more stable cities. Being the capital, Cairo received most of the migrants and due to the lack of funds to the national housing program, many of them settled the peripheral areas of the capital using shakes an primitive shelters. The priority back then were mostly directed to the war efforts and so as most of the country's financial resources.(Alfiky, 2014).

♦ 1973 The victory and the open door policy:

In that year, the United Arab army lead by the Egyptian army, have succeeded to regain back the power balance in the area. Egypt tried hard to reclaim back the land the was seized during the six days’ war. However, on an economical side, the oil weapon was used that lead to the increase in its importance as well as its price. Major sector of Egyptians who wanted to enhance their living standards headed to the oil neighboring countries to work. The result was a huge increase in the foreign currency that was pumped back to Egypt and were invested mainly in the housing market. The formal market was neither as affordable or as variable as the informal market. So most of the money flow was directed to this market and caused a constant expansion and growth on both agricultural lands and new a desert area.(Khalifa, 2011b)

The pace slowed down in the mid 1980’s not due to the government policies to introduce new towns in the desert, but because of the oil prices drop. That collaborated with the instability in the Gulf area caused by the Iraq-Kuwait war to reduce the flow of Egyptian workers to the Gulf area. However, in the 1990’s the market was still very dynamic but with a slower growth rate mostly because of the decrease in the population growth rate from 2.8% per year between 1976 and 1986, to 1.9% per year between 1986 and 1996) The government tried to seize that development by several moves. The major one was the Military
Decrees 1 and 7, which forbids encroachment on agricultural land. (Séjourné et al., 2009).

♦ 25th of January revolution:
In that date many Egyptians have expressed their anger and the feeling of depression due to many seizes to the freedom of speech and political representation. That felling was sparked by the bad economic conditions for the average person and the hope for a better life.

The incidents followed marked the absence of the government from the scene and the absence of all the security systems represented by the police which lead many people to squat on agricultural and desert and even state owned land to take advantage of the situation and make a fast profit by selling them to people to form a protection for their investments from possible future threats.

By 2014 the government started to pay attention to that important topic by promoting the ISDF to be a separate ministry with the same structure working with the ministry of housing and under the direct supervision of the prime minster. The mandate was to prepare strategic plan to deal with the informal areas and give technical support and assistance and implement measures to upgrade the informal areas through other governmental bodies However in 2016 it was dissolved again in the ministry of housing.
Informal areas timeline in Egypt

1952
Nasser in power
- The free officers movement stepped up to rule Egypt.
- The state focus went to the industrial and military sectors.
- The capital witnessed huge migration movement.

1967
Six Days war "El-Naskar"
- Israel made a sudden attack on the Arab countries.
- Most of the canal cities were evicted to Cairo and other cities.
- Military building took most of the state investments.

1973
The Victory and the Open door policy
- The economy was liberalized.
- The state's role was to provide economic housing while the private sector was free to invest in the real estate sector.
- The start of the exponential rise in land and units.
- The start of foreign currency pumping into the market by Egyptian expats.

1977
The old renting law

1982
Earthquake in "El-Baskand"

1992
The new renting law

1996
ISDF establishment

2004
Ending informal settlements and projects (GIMP)

2008
Establishment of MoURIS as a separate body form MOH

2011
The 25th of January Revolution
- Revolution called for equality, social justice and freedom.
- The state was busy in the escalating political situation.
- The informal housing practice expanded significantly.
- The power of the people hindered any activity of surveillance.

2014
Dissolving MoURIS within MOH
2.2.4. Informal areas Challenges

The informal areas in Egypt face different challenges such as :

- The lack of infrastructure and basic urban services specially the new areas.
- The inadequate and unhuman housing that have in some cases high density.
- Suffering from pollution and non-resilient structures towards natural hazards.
- The Unemployment and poverty.
- Health problems and illiteracy.
- The lack of security of tenure in most of the cases.

So after being exposed to the informal areas definitions and the history and the reasons behind the phenomenon in the Egyptian context, The next Chapter explores the notion of the Urban development in the informal areas with a special focus on the Egyptian context.
Chapter 3: Urban Development in informal areas.

3.1. What is the urban development?

The urban development is a term that is widely used in the urban planning literature, to serve the end goal of the urban planning which is to assure the natural and continues extension of the city. The term according to the Urban Development Department of Sociology and Human Geography:

It is defined aspects of the extension or the growth of the city. This growth makes development of the new occupied area in different aspects such as social, cultural, economic and physical development ("Urban Development - Department of Sociology and Human Geography," n.d.).

From the previous definition the urban development process is a spontaneous, unstoppable process. That process puts an increasing pressure on the existing cities as they are the main host for the rapid urbanization process. That rapid urbanization mostly occurs in an exponential rate in the developing countries mainly due to two main common reasons the first one is the natural growth rate and the second one is the increasing internal migration from the rural areas.(Moser, 1978).
The result of that rapid urbanization is that the big cities were forced to accept new numbers of inhabitants and to offer them the basic needs to live adequately. This usually was manageable at the beginning of these waves but after a while it not the case as the urbanization policies that was paired by small, not sufficient numbers of corresponding services and housing projects that should be financed by the government. These policies also were relying on the existing private market dynamics to bridge the needed gaps in these services. This expected role of the big cities raised an important question concerning the process and how the expected development should happen? and if there are different approaches to insure and plan this development which of them is suitable?

As the normal case of such development the planning agencies in the state driven from the decision makers are required to plan for the future development as well as reconsidering the plans that have been put to the existing boundaries of the city.

This normally happen as a prevention strategy to stop the land squatting action.

Unfortunately, most of the time unlike what happens on ground. And on a continues race towards a sustainable resilient community, the hard part comes while trying to achieve a sustainable urban development is while defining what to sustain and what is the main concern to emphasize on focus on?

In the Urban development discussion usually there is an agreement about the term sustainable urban development while as an abstract term. however, the main disagreement comes when interpreting this term. (Pugh, 1996)
For that there are generally two main schools concerning interpreting the term. One of them is concerned with conservation and the other one is concerned with meeting human needs. From these two possible interpretations, strategies, programs and plans are formulated to answer simply the question of what to sustain while development. (ibid)

The review of literature about Urban development shows different opinions about the term and its origin from the state point of view. However, In order to get the full picture, the other part of the story should be examined. What about the development that comes from within the informal areas themselves? How do these areas rise from small scattered shakes to complete consolidated communities? Those two questions are answered in the following part.

### 3.2. How Spontaneous Urban development take place in informal areas?

The urban development in the mega cities like Cairo is usually induced by the huge investments that are pumped in to develop and maintain it’s infrastructure.

This concept and market dynamics relies on a strong local government to invest in expanding and maintain the infrastructure as well as a strong tax system and billing system in order to close the cycle and regenerate the spent investments.

This simple system usually suffers either by a weak/corrupted local government or by an insufficient tax system. That leads to the deterioration of the provided services and the inability to extend them in other areas or to drain the national income to support this sector eating away the basic principles of decentralization and community justice.
‘cities that provide better public services are more likely to attract more tax-paying households and businesses’. (Boex, Edwards, Joel, & Lane, 2014).

For that matter, the alternative cheap way to overcome the inability to offer affordable services to the poor or the new job seekers, is to turn to the informal market. The focus here is the informal housing market. (Samper, 2012)

So in general, every informal area usually follow a model with seven major steps as mentioned by Jota Samper when describing the development process of Medellin. Despite the fact that these steps can’t be generalized in all of its details, they can describe well most of the cases; specially the presented case studies in this thesis. For that, this model was adopted to describe the history of the case studies. The seven steps however have been modified and tailored – when needed-to better fit the Egyptian case. The seven steps of the informal areas foundation are:

1. **The land acquisition:** In that step usually the new settlers ask the owners by the ‘hand claiming process’, who virtually owns the land and manages it, for their approval to divide the land and to start squatting in the area.

   Note that the chosen land in the beginning have a low or zero value but still located on a road that connects it to the main city.

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1 The ‘hand claiming’ is a process that is inspired by Sharia that gives the right of ownership to those who have settled any deserted land and started to bring people to live there. It was first
2. **The attacks from public/private entities:** The state or the entitled private investor tries to remove the people from the new location by destroying their newly built shacks.

3. **Community growth and capacity building:** The early settlers try to bring more settlers with similar situation to support their position. This is usually done by inviting families and friends either form nearby areas or from their hometowns welling to have a good access to the city.

4. **The fight back:** In this step, the community seeks a second wave of settlers to foster their position as with bigger numbers the attacks that is trying to evict them are expected to reduce dramatically due to the stronger opposition.

5. **The Victory:** In this stage the community reaches tangible ways to consolidate and organize their lines to reach out to higher levels in the state usually by active and educated members within the community and starts to advocate for their case. That step usually takes time as it involves many weapons such as the media, political parties, human rights organizations and even prosecuting the state.

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**Figure 8 steps of Informal areas creation**

*source: Author based on (Samper, 2012)*
6. **Community consolidation:** The settlers start to consolidate the building structures and expand more on nearby lands besides providing infrastructure and other main services like markets, kindergartens, schools, public spaces etc (...).

7. **Integration or disappearance:** The informal settlement reaches a state when one of the two scenarios is more likely to happen: The integration or the disappearance.

The integration state is reached when the community blends in within the city and connects to its sources, the settlement by then should have been extended and densified to a point when destroying it becomes unfeasible. (Mike, 2004)

The disappearance on the other hand happens when the pressure form the state/private sector escalates. At any stage this pressure could lead to the cleansing of this settlement due to either the political well or unexceptional rise of the land price –caused by any rising investment opportunity- or both combined. (ibid)

At that stage the state reaction towards the informal settling practices is what determines their future to a great extent. So back to the state point of view the following part elaborates more about the different possible approaches.

**3.3. What are the Different approaches in developing and dealing with informal areas?**

There are different types of interventions and approaches to deal with the informal areas from the official point of view.

Going through the different literature and practices, Three main approaches could be concluded:
3.3.1. Redevelopment:

This paradigm is amongst the oldest approaches and is based on a medical metaphor that is describing the unplanned development as a tumor that should be destroyed and replaced by planned and organized development. This paradigm was influenced by Haussmann's planning practices across Europe. (Mike, 2004)

The main advantage of that approach is that it eliminates the danger that may come from poorly constructed structures or nearby natural or man-made hazards. On the other hand, the main disadvantage could be the elimination of the original fabric in addition to disregarding of the existing socioeconomic bonds and dynamics that could be damaged. (Abdelhalim, 2010).

This approach includes two modes of interventions:

- **On site redevelopment:** Complete replacement of the area by gradual tear down of the existing structures and the construction of new alternative housing. That mode works best in case of deteriorated housing, irregular fabric or land with no tenure. (Egyptian example: Masaken zenhom in Manshiyat Nasser)

- **Relocation:** This is a radical intervention that eliminates the physical structure as well as locating the new settlement in a new far away area.

  Egyptian example: Masaken Othman in 6th of October that inhabited relocated people from Manshiyat Naser and Ezbet Khairallah.
3.3.2. Urban Upgrading:

In this approach, the settled areas are dealt with as a strong asset that could not be simply replaced or located. That could be due to either a strong cultural asset such as old or historic deteriorated Urban cores, or a huge agglomerate that the relocation cost becomes unfeasible anymore. The main advantage of such approach is preserving the local identity and existing urban fabric. Also poses a chance for a more mature socio cultural development. (Abdelhalim, 2010; Pugh, 1996; Samper, 2012)

The disadvantage of it on the other hand is the requirement of long term negotiations and plans to prioritize and precisely study and assess the needs of the inhabitants and that could be a long and frustrating process for both sides.

This approach includes several modes of interventions such as:

- **Servicing the informal areas**: to provide the main basic infrastructure to the areas by enhancing accessibility, fresh water and sanitation and that mode is normally the basic step in the urban upgrading to create a platform for other socio economic interventions. And that was done in many cases in the Egyptian context in many cases since the 1990’s.

- **Sectoral Development**: In that mode the development focuses on a particular sector usually in consolidated communities. For that all the focus from both the state and the different international agents are united to serve that goal. The sectors could be focused on either services, educational or healthcare sectors. In the Egyptian context many of these interventions could be spotted such as the ‘100 school ‘project
done by Heliopolis NGO for services under the supervision of Suzan Mubarak the first lady of the former president Hosni Mubarak.

• **Planning and partial Readjustment:** In that mode different tools are used to create empty lands for public amenities and to increase the safety and accessibility of internal streets by widening the streets and carefully re-planning the area. That usually leads to a higher land value and more connected healthy community but limited to small communities.

### 3.3.3. The integrated Approach:

In that approach, a set of different set and tools are used from both of the previous two models. There is no definite approach that could be used. That depends on various variables and data collected from each case and the correlated socio economic conditions. The most important part in that approach is to keep the negative impact of any external development to the minimal while maximizing the possible benefit and also maintain economical and feasible process not to ambitious or too conservative.

In order to achieve that a comprehensive development plan should be put including all the different stakeholders and drawing strategies by negotiations and trying to maintain maximum interest for all the beneficiaries (Abdelhalim, 2010)

That approach however is to wide and broad to narrate and includes more objectives to serve such as (Social inclusion, Poverty reduction, Good governance and a sustainable urban development).

In the following diagram a concluding diagram shows the previous approaches and modes for faster recap.
Figure 9 Conclusion of the Urban development approaches in informal areas

Source: Author based on various references
3.4. Development of the Informal areas in the Egyptian context.

The present sub-chapter will provide a condensed overview of the development of informal areas in Cairo, concentrating on aspects that are relevant for the understanding of the context for the chosen case study.

Cairo’s rapid urbanization within the last decades can be described as being dominated by an informal development. Current figures indicate that around 60% of Egypt’s Urban development is informal.

As mentioned before in the informal areas timeline, the rapid development of the informal areas essentially happened by disregarding the Unified building law (Sims, 2010), and due to several fostering socioeconomic reasons. The state however preferred to stay in denial. This state didn’t come from the lack of information of such practices on contrary; The state left these activates to grow knowing that they neither can stop it or provide an adequate solution. That don’t mean that the Egyptian state did intervene in some cases, The motives were usually strong media pressure or political interest (Mike, 2004).

The Egyptian government despite the different eras did have a single consistent singular point of view to solve the problem; since the 1970’s the establishment of the new urban communities agency NUCA declared the state approach. ‘conquering the desert ‘was the slogan. However, this narrow point of view seized the problems only to a matter of insufficient number of available housing units. Regardless of the correlated socioeconomic aspects that could heavily hinder or foster any effort exerted using that ideology (Samper, 2012). The state invested.
3.5. Issues of Informal areas development in Egypt.
Chapter 4: The case studies

4.1. Introduction.

This chapter is devoted to study two relevant cases in the Egyptian context in order to answer the main research question of the research (after a brief introduction of the related necessary literature review of the discourse.

That helped to give a better understanding to the desired case study and to understand the types of interventions to focus on in order to and after paving the way in the previous chapters by giving brief overview of the informal housing discourse to understand the different views and definitions that formed the key to structure the method used to answer the main research question.

As a start the chapter goes through the history of the two study areas (Izbet Khairallah and Manshiyat Nasser to first understand the history and the foundation steps of these informal communities, in addition the interventions done to enhance the living conditions done by the different stakeholders. based on the previous two chapters.
Firstly the chapter will provide a brief introduction to the two case studies accompanied by a timeline showing the six steps of informal areas foundation as concluded from chapter two; backed up with facts and dates and highlighting the main turning points.

Secondly, the chapter will present a brief catalogue of the major interventions done in the study areas and classified according to the three main categories which are: Basic Infrastructure, Housing upgrading, Health care and social services.

Finally the chapter will go through the carried out survey in both areas and will compare the results against each other to analyze and assess the measures done to improve them.

This last part is formulating the major core of the discussion in the following chapter as the researcher will interpret the results based on the data collected in the field survey and then analyzed by using the SPSS program. The discussion encloses the interpretation of the result form the researcher's point of view.
4.2. Methods and tools.

The two case studies were differently addressed by the researcher in terms of the field work conduction. The first difference was the introduction to the community in both areas. For Manshiyat Nasser area it was a brief introduction by one of the active NGOs in the area which is ‘Ana El-Masry’ NGO. The researcher was accompanied by members of the NGO throughout the fieldwork phase and the data was collected by him and two other members of the NGO. The area of Izbet Khairallah however was differently introduced to the researcher as it was the main case study for the Integrated case study during the third semester of his master's program. So during that period he was already well connected and introduced to the community through the course as a neutral researcher and not belonging to any NGO or CBO yet have connections with them.

It should also be mentioned that the main field work that was carried out in Izbet Khairallah area was done in cooperation with two other fellow architects Nourhan Mohammed and Mohammed Abedo according to a survey plan that was put by the researcher to insure the same standards.

The structured interview was the tool that was chosen by the researcher in order to carry out his field work investigation. The mentioned tool was used in order to allow the researcher to collect both required specific data as well as allowing some room for flexibility while talking to people to know other information that is related to the questions but not directly recorded in the survey cards. in order to measure the satisfaction of the residents of the different provided services in their areas. The structure of the interview was formulated in the form of a quality of life study that tackles the impact of the interventions done cross cutting several aspects. The research will assess the satisfaction of the residents concerning the provided services.
To Both case studies get at the beginning a brief profiling of the area concerned with these points:

- The population numbers and any available demographic studies.
- The main economic drivers in the area.
- A brief historical review viewing the different stages of the Informal area foundation and the existing services in the area.

4.2.1. Structured interview contents:

For the imperial data collection part, the data were collected by using the structured one to one interviews to cover the following points that have been mentioned in the UN-habitat report (UN-HABITAT, 2014), which aimed to assess the informal areas development thorough a set of criteria that is based on the adequate housing criteria declared by the UN report in 2003 as the following:
• **Right to land and housing**
  
  - Land and housing tenure security
  
  - Adequate not overcrowded housing (not more than 2 persons per room)
  
  - Housing built with permanent materials
  
  - Housing with its own toilet or sanitation services
  
  - Adequate housing selling and renting available at affordable prices

• **Basic infrastructure**
  
  - Available drinkable water supply
  
  - Available latrines or sewage services without contamination
  
  - Available drainage preventing flooding
  
  - Available power connection (electricity and gas)
  
  - Available telecommunication, Internet, etc services.

• **Accessibility**
  
  - Available adequate green areas well maintained
  
  - Available pre-schools, primary and secondary schools
  
  - Available hospitals and health center for primary and secondary attention
• Availability coverage of political service, religious places and civil defense

• Available services of public lighting and public cleaning

**Equipment**

• Available sidewalks and pavements allowing vehicular movements.

• Available bridges and traffic stop ensuring street safety

• Available public transport (trains, metro, etc) to cover long distances

• Available services of buses, taxis, motorbike and bikes to cover short distances

• Availability of ambulances, fire brigades, police and civil defense reacting on time in case of accidents

**Sustainability**

• Food security

• Availability of work, social security and income generation opportunities.

• Capacity to save expressed as income percentage per household and its reinsertions in habitat priorities.

• Tolerance and acceptance of multiple communities with different cultures and incomes

• Initiatives available to reduce disaster risks
4.2.2. Sampling:
The informal areas in Cairo is not an easy case in terms of collecting accurate statistics or official numbers about them. The numbers of both how many Informal areas that Egypt have as well as the population living there remain s unknown or to be more precise not accurately calculated till the moment (Séjourné et al., 2009, p. 29). According to the same reference and by comparing different official numbers, the inaccurate and contradicting numbers makes it nearly impossible to define a certain figure that could be used to make a representative sample. The following sample method have been followed in order to make the survey as representative as possible and to reduce the bias to the minimum.

Despite the small sample size in relation to the unavailable accurate population counts in both of the study areas, The research tried to use a set of sampling techniques to better serve the goal of the research, The followed sampling techniques were:

- The samples in both cases were taken following one main street as a datum and taking secondary street branches cross cutting different zones in the target areas as shown in following figure.
Figure 11 The samples path in Manshiyat Nasser Area  
Source: Author based on google earth imagery 2015

Figure 10 The samples path in Ezbet Khairallah Area  
Source: Author based on google earth imagery 2015
The samples were taken interviewing residents door by door.

- nearly half of the samples in both areas were taken from the main streets, while the other half were taken from secondary ones.

- Due to the nature of the study areas the head of the family is usually the one to be interviewed.

- The number of samples in each area is as the following:
  
  - 34 structured interviews in Izbet-Khairallah area.
  - 50 structured interviews in Manshiyat Naser area.
4.3. Profiling the area of study

The two case studies are considered two of the most congested informal areas in GCR in addition to having a long history of consolidation and development over the years. The following part will briefly go through the history of both areas and the major events that helped or hindered the development over the years.

4.3.1. The Historical background.

♦ Manshiyat Nasser:

*Figure 12 Manshiyat Nasser administrative boundaries
Source: Author based on GIS-Unit, PDP, GTZ (2008) and google earth imagery*

With a population of 650,000 capita, Manshiyat Nasser is considered one of
the biggest informal urban agglomerate not only in Egypt but also in the world (Sims, 2010). The area of Manshiyat Nasser used to be a limestone quarry and that justifies the different contours and the cliff that separates the area from the nearby Mokattam mountain which formed the so called cliff overlooking the area and in some places mixing with the settlement such as the case in El-Deweika area. (Sims, 2010)

This was a brief of the current situation but what was the history behind the area Urbanization?

The area of Manshiyat Nasser was considered a remote area outside the city till the 1950's when the urbanization has sped up to accommodate the new workers in the factories.

The area was inhabited by people who have been relocated from the nearby Gamaliyya district in order to establish a hospital there. It was then formally supplied by water and sanitation services by the order of Jamal Abdel Nasser after the population numbers increased to reach several thousand inhabitants.

The population of this area was then fragmented between relocated residents, building workers of Nasr city New settlement by then and some new migrants from the rural areas looking for jobs in the city.

The areas then by 1970's attracted the community of Christian garbage collectors Zabbaleen who have settled and used a part of the area for sorting the garbage as well as recycling it. The informal area started to develop and

2 As mentioned before this is one of many contradicting sources which was based on the MOH and ISDF definition and numbers
expand more since then specially after the open door policy that was adopted by Sadat in the 1980's. The policy that allowed the free move of the capital and part of it affected the real-estate development including the informal sector. Meanwhile the government used it as an opportunity for the poor to settle the unattractive areas of the city while making living and reduce the number of unemployment at least unofficially. (ibid)

The district of Manshiyat Nasser was not officially declared as an official part of Cairo administrative system until 1991.

The area is the most famous informal area in the Egyptian context and therefore many interventions took place there in order to develop the area. The most two active agencies in the area were the world bank that provided the area of 'El-Zarayeb' where the garbage collectors live in the 1980's, and the GTZ that implemented a several number of projects there the most remarkable project among them is the PDP.

With the help of these agencies that worked closely with the NGOs there, the government started to take actions towards upgrading the area instead of the old vision that imagined destroying the area and then relocation or the partial relocation were the only solutions.

In that brief we can find out that the area of Manshiyat Nasser started as a formal core then had accumulative informal extensions.

As a recap, Manshiyat Nasser have received many interventions throughout its history and the main basic services were provided long time ago including sanitation, fresh water and electricity in addition to hospitals, schools and youth clubs.
Izbet Khairallah:  

Izbet Khairallah a dense area that shelters an estimate of 650,000 person (Tadamun, 2013) has a different story than Manshiyat Nasser. As mentioned before, Izbet Khairallah has several similarities with Manshiyat Nasser; both of them are squatter areas on a state-owned land, both are built on the hilly contours of the surrounding rocky plateaus. However, the settling process and the struggle of Izbet Khairallah inhabitance are a different story.

The area of Khairallah forty years old was just an empty rocky hill in Maadi. The area was inhabited by the pioneer settlers in the mid-1970's as job seekers from Upper Egypt, Delta arrived in Cairo and settled there. The area was not
qualified for living as it was totally disconnected with barely any infrastructure in the area, the only advantage was the proximity to the Nile and Maadi district which makes it an excellent opportunity as a station for job searching. In addition to the nearly free accommodation.

As in the formal real estate market, the new emerging communities are cheaper than the existing consolidated ones. The same applies to the informal market of housing, and Khairallah was that emerging opportunity.

The story till now is quite peaceful and trouble free. Until the land ownership of Izbet Khairallah was allocated to El-Maadi company for development and reconstruction (MCDR) by a presidential decree that was issued in 1971 aiming to make a new housing project there (Tadamun, 2013).

The land was already inhabited by the settlers and the government represented in Cairo governorate have tried several time to evict the settlers. But each time the settlers went back and reconstructed their shakes and rebuilt the destroyed houses. For them there was no other choice as the renting rates rose significantly in the nearby areas.

The community decided after years of consolidation to unify their efforts to raise a case against the Maadi company to stop the demolition decree. In addition, they raised another case claiming the right to buy the land from the company. The catalyst was the existence of some lawyers and activists among the residents who helped to raise the awareness of the people and take positive steps towards the right direction. After fifteen years of prosecution and particularly by 1999, The supreme council issued a verdict stopping the administrative decree to demolish Izbet Khairallah. In addition, acknowledge their right of inhabiting the land as a step towards the legal ownership of the land beneath their homes. The residents also had a parallel struggle in the infrastructure provision. It started with self-organized efforts to provide sanitation and fresh water supplies. For many years the services provision was the task of the inhabitants until 2010 a mega project of infrastructure was carried out to supply more than 85% with adequate sanitation and fresh water.
The Ring road construction was a major event in the history of the area as it separated Izbet Khairallah agglomerate into two areas; The southern part and the northern one. As negative it may seem, the households value of the Units raised due to the better accessibility that the Ring road provided to the area. Till now the residents of the area are waiting for the supreme council verdict to be executed and to let the chance for the interested residents to secure their tenure by owning the land they are settling on. The area though is still considered and affordable choice for the new job seekers from upper Egypt. (Alfiky, 2014)

As a recap, the area is now serviced with the necessary basic services such as sanitation, fresh water, electricity and is indirectly connected to the ring road by using staircases that link the area to the upper level of the ring road.

Still lacking security of tenure in most of its parts and waiting for evictions in other limited parts that are located on the mountain cliff.

As a conclusion of the previous sub chapter, the following diagram, a combined timeline of both of the areas shows the main events and turning points discussed previously.
Figure 14 The parallel Urban development timeline of Manshiyat Nasser and Izbet Khairallah areas
Source: Author based on various reference
4.4. The quality of life survey results.

This part is dedicated to the empirical data results to analyze them and interpret them. In order to make the results easier and to eliminate the repetition, the data of both areas are shown and discussed in relation to each other cross cutting main service sectors.

4.4.1. **Basic information:**

♦ **Gender/Age:**

![Figure 15 The sample classification according to the gender in both case study areas](image1)

![Figure 16 The sample classification according to the age groups in both study areas](image2)

The previous figures show information about the conducted structured interviews in order to profile the sample. As mentioned before, the samples selection was based on a spatial method (the first building in each block) and was not based on either specific gender or age group concerns. For that, the sample was a mixture with 72% males in Manshiyat Nasser area and 65% in Izbet Khairallah. Concerning the age, the majority of the samples in both area falls in the range between 25-44 and 45-64 age groups.
Place of birth/ Date of moving in:

From the previous two figures, it could be concluded that the residents interviewed in Manshiyat Nasser area have been in the area for about two generations as the majority of the sample was born in the area while there is still an influx of new comers from upper Egypt and the Delta region.

Izbet Khairallah also shows similar demographic pattern in terms of the consolidation in the area for about one or two generations while the number of the people born in Cairo and the number of the old residents implies also another influx of internal migration from adjacent areas of Cairo to the reasonably priced and connected Izbet Khairallah.
4.4.2. Basic infrastructure:

♦ Fresh water supply:

![Bar Chart for Fresh Water Supply Satisfaction in Manshiyat Nasser Area]

![Bar Chart for Fresh Water Supply Satisfaction in Izbet Khairallah Area]

Figure 19 water service satisfaction according to the four age groups in both case study areas

For the fresh water supply service in both areas, the service in Manshiyat Nasser area appears to be satisfying for the different interviewed age groups. For Izbet Khairallah area, the situation is similar, despite the fact that the government have supplied the area with the water meter gadgets and the legitimate connections since 2005. Before that intervention, the people, NGOs were cooperating to provide the service by self-installed water connections. The service of course by then was not as good as now, that’s why the satisfaction rate
is high for this issue comparing to the situation back then.
♦ Sanitation services:

The sanitation as well as the fresh water supply that was mentioned in the previous page shows that the residents of both areas are satisfied with the provided service. As mentioned before, Manshiyat Nasser is the oldest to get the access to the main services including the sanitation except for ‘El-Zarayb’ area which was developed after the revolution taking advantage of the instable state situation followed. Izbet Khairallah residents also showed high rate of satisfaction about the provided services of sanitation but that was a cautious satisfaction as the
interviews with the residents showed. Some of the residents specially these who work in the construction field said that the quality of the installation was not following the standards (not enough depth, the quality of the used materials and the time management). for that many problems appears every now and then and is maintained by the residents themselves.
Electricity and gas supply:

The Electricity service in both areas is one of the most important services that the residents seek for since a long time. The electricity service however doesn’t include only the service installation but expand to include also the operation, the consumption tariff and the consistency of the service. In both areas, interviewed residents showed a high rate of satisfaction concerning the service installation and the operation time that was almost all the day long without any cutouts. However, on the other hand, the consumption tariff was so high according to some residents in Izbet Khairallah. That is mainly due to the fact that the calculation system depends on a representative

Figure 21 Electricity service satisfaction according to four age groups in both case study areas
that goes through the whole neighborhood to collect the fees and the meter readings. Due to the absence of the representative and the fact that some houses in the area could be skipped for more than three consecutive months, the consumption is calculated as an accumulative amount for only one month that leads to usually the promotion of the user to a higher tariff level. That lead to high consumption average for some users compared to other neighbors with similar consumption.
Butane gas and natural gas supply:

This service is one of the main and essential services that is provided to the residents. The service is provided till now in both areas in the form of the butane cylinders. The residents showed that the actual price of one cylinder is between 13 to 25 L.E and in some cases could reach more while the official declared price in the official selling points is 8 L.E. This shows a high overhead and implies that the ones controlling this market are swallowing the subsidy and make a high profit out of that basic necessity. The residents also showed a high desire to install the natural gas pipe system as a response to both the accessibility and the price of the service. The main two obstacles however are first the not ready streets for such intervention as the company and the civil defense requirements are nor met in the informal areas. In addition to the high installation cost for the householders. The First obstacle could be solved by a major rehabilitation project for the streets to serve also the accessibility in general. The second one also could be solved by small loans that could be given by NGOs or by collectively fund raising systems such as El-Gamyaa system.
4.4.3. Education, Healthcare services and social welfare:

♦ Education services:
  • The preschool education:

![Figure 25 comparison of the preschool education level satisfaction](image)

**Figure 25 comparison of the preschool education level satisfaction**

![Figure 25 The average commuting time to the nearest nursery](image)

**Figure 25 The average commuting time to the nearest nursery**

This set of figures examines the interviewed sample concerning the available nurseries; the data show that the majority of the residents in both areas are satisfied with the preschool classes. Many of the residents elaborated that many of the nurseries exist in the area either private ones or the ones made by the different active NGOs in the area.
For that also the average commuting time in both area falls in the standard range between 15 and 20 minutes.

- **The primary school education level:**

![Figure 26 comparison of the primary school education level satisfaction](image)

![Figure 27 The average commuting time to the nearest primary school](image)

Concerning the primary school educational level; the data shows that in Manshiyat Nasser area there is a high satisfaction rate as there are many schools inside the area. However, in Izbet Khairallah; there is only one primary school inside the area while most of the residents rely on the nearby schools of
Dar El Salam and Misr El Qadima. That is why the satisfaction rate falls in the range between neutral and dissatisfied.

On the other hand, the lack of primary schools in Izbet Khairallah didn't affect the commuting time as the ring road penetrating the area provides decent connectivity from Izbet Khairallah to the neighboring areas. The downside though is that the kids have to take a transportation or walk on the ring road side by side with cars which is extremely dangerous even if an adult is accompanying them.
- The preparatory school education level:

![Comparison of the preparatory school education level satisfaction](image)

![The average commuting time to the nearest preparatory school](image)

The preparatory school educational level satisfaction rates show that in both areas based on the interviewed residents, that the majority's opinion ranges from neutral to satisfied about the provided service. The problem however is the same concerning Izbet Khairallah area as there is no preparatory schools in the area so they are relying on the nearby schools in Dar El-Salam and Misr El-Qadima. That is not usually a problem until The average commuting time is checked. It could be noticed that the majority of the interviewed sample in Izbet
Khairallah need from 20 to 40 minutes to reach the school while in Manshiyat Nasser only 15 to 20 minutes are needed. The reason for that is that the students need to take a transportation form the ring road that puts extra pressure on the families or to walk which takes more time and wastes the energy of the students.

- **The secondary school education level:**

![Comparison of the Secondary school education level satisfaction](image1)

![The average commuting time to the nearest secondary school](image2)

Following the same pattern mentioned in the previous two levels of education, the secondary school is less accessible for both areas. That could be understood from the average daily commuting times in both areas that concentrates in the range between 40 to 60 minutes.
The second obvious observation in the top figures are the satisfaction rates that are different in both areas. In Manshiyat Nasser area the rates concentration ranges between neutral to satisfied while in Izbet Khairallah, the rates concentration ranges between dissatisfied and neutral.
♦ Health care services:

The health care services in both areas ranges from satisfied to neutral. The health care topic however is a big problem in not only the informal areas but also in the formal ones. The health care in Egypt is a national problem that is present in the community specially for the lower and lower middle classes who rely on the governmental health cover and can’t afford private health care services. The problem for some of the residents as shown in the graph, is the accessibility of cheap medicine. Also some of them pointed out that some of the drugs are not available in the subsidized governmental system anymore. At another part in Manshiyat Nasser area; some residents called for the establishment of some complementary and luxurious services in the area like plastic surgery clinics!
♦ **Work satisfaction:**

In the previous figures the satisfaction rates are compared to the educational level in order to look for any relation between them. The figures though shows different shades of educational levels scattered between the different satisfaction levels and shows now significant connection.

The obvious result as shown in the below figure is that the overall satisfaction in Manshiyat Nasser area is higher that the equivalent in Izbet Khairallah. Both though show an above average overall rate in terms of work satisfaction.

Additional interesting remark that those who are illiterate or have only primary education are the one who feel very satisfied about their work.
Work and education relation:

This is an interesting comparison between the education levels of the interviewed and their income as to get an impression of the sufficiency of the higher education levels to provide better income for its holders.

So as the figures of Manshiyat Nasser that the higher the education level, the higher the income. The figure also shows that the majority of the interviewed sample is earning 1000 to 2000 L.E per month.

The case in Izbet Khairallah is following the same pattern that the higher the education, the higher the income. But the main difference in this case is the high numbers of the sample in the non-educated category and among them there are 2 who gain more than 2000 L.E. For Izbet Khairallah area which is famous for its wood and marble workshops and construction related activities these results could be justified.

The high paid crafts and the uncertainty of suitable future job opportunity when reaching a higher level of education, foster the children drop outs and give the motive to join the work market early in order to support their families.
4.4.4. Accessibility and public services:

- Emergency response time and availability of nearby fire station and police station:

The previous figures show the difference between the two areas in terms of the emergency stations’ availability and accordingly the response time. It should be mentioned that the response times in Egypt are considered slow based on several personal experiences, even in well-served areas. However, the two graphs show that in Manshiyat Nasser, the availability of a nearby fire/police station has reduced the response time in emergencies compared to Izbet Khairallah where there is no such service provided for the area, and the only way to get these services into the area is by relying on the adjacent districts—the closest is Misr El-Qadima. According to the interviewed residents of Izbet Khairallah, the other reason why there is a difficulty in reaching the different zones of the area is the narrow streets and the disconnection from the ring road for vehicular movement.
Nearby Market availability:

In both areas the accessibility to either the daily or weekly market is very high due to the fact that one of the main economic activity that is taking place in the informal areas is trade. The area of Manshiyat Nasser have many markets inside and one big market overlooking the Autostrad that even the external residents of the nearby areas visit.

In Izbet Khairallah it is a similar story as there is a main commercial/ market street in the upper area of the Izba which is street El-Najaah. That is for sure in addition to several secondary daily shops all over the area.
♦ Affordable transportation availability:

In terms of different means transportation, both areas show high coverage of the services for the interviewed residents. In Manshiyat Nasser area; the service is available due to the high connectivity provided to the area thanks to the Autostrad road and the nearby Salah Salem street. In Izbet Khairallah; the ring road which passes through the area have significantly improved the connectivity to the whole city through that mega project. However, the major difference between both areas is the existence of public transportation in Manshiyat Nasser side by said with the private vans and mini vans. On contrary; Izbet Khairallah is only accessible by private vans and mini vans and internally by Tuktuks. Even the private transportation stops informally on the ring road overlooking some staircases implemented by the residents to enter the area.
Chapter 5: Conclusion and main findings.

This thesis had a main trigger and research question at the beginning which was ‘Have the different upgrading measures and interventions been done in the informal areas, lead them to evolve and develop? and, if so how the locals perceive that development?’

In order to answer that question the research started to introduce the terms ‘Informality’ and ‘Urban development’ in a brief literature review. That introduction helped to choose the two main case studies that was used by the researcher to do the field survey that aimed to measure the residents’ point of view and rating for the provided services as a part of the development plans for their informal areas. As the case study chapter goes, a cross cutting comparison was formulated to show the different satisfaction rates in both of the case studies in relation to each other.

The findings of that comparison could be concluded in the following points:

- The basic infrastructure satisfaction is considerably high in both areas while a slight difference in the favor of Manshiyat Nasser area could be noticed due to the fact that it is the older area that got more interventions. That of course does not deny the fact that most of the interviewed residents complain about the maintenance which they mostly do themselves and the cost per month of these provided services.

- The healthcare sector was satisfactory in both areas with a slight difference in Manshiyat Nasser due to the establishment of the New Sheikh Zayyed general hospital in the area. However, the general problem in both areas for many of the interviewed samples is the
accessibility to subsidized medicine due to the limited supply and variety. That forces most of them to get the medicine either on their own expenses or with the help of the NGOs working in the area.

• For the education sector, It is noticed in the two areas that the higher the education level, the lower the satisfaction rates. That is mainly due to the daily travel time. For the preschool stage it is not a problem as there are many nurseries that acts as successful local business field and helps working mothers to take care of the children. Schools however are usually located outside the area (in Izbet Khairallah case) or far away from most residents due to the limited availability of lands that can hold public facilities like schools. Also one main reason of the school drop outs is the child labor.

• The work satisfaction rates are above satisfactory in both areas. The interesting remark though is that the illiterate and those who have only primary education work in the crafts field or in the garbage collection for a good rate. As normal the higher the education level the higher the income rate and then the work satisfaction.

• The main significant difference that may have been a cross cutting reason in all the survey results is accessibility. While Manshiyat Nasser is more accessible and connected via paved road, public and private transportation, Izbet Khairallah have a problem because of the ring road that slices the area into two parts. The only vehicular accessibility for Izbet Khairallah is through three tunnels that connects both parts and there is no direct access to the area via the ring road except for pedestrian stairs alongside the ring road. That factor makes the travelling distances longer and more coasty due to the several needed transitions. That also explains the poor response times in case of emergency for Izbet Khairallah in comparison to Manshiyat Nasser.

All the above conclusions are illustrated in the following collective figures.
Figure 42 Satisfaction rates conclusion
As a final remark; The research was testing the satisfaction rates of the residents in Manshiyat Nasser and Izbet Khairallah according to a field research done by the researcher in year (2015) about the provided basic services regardless of how they were implemented. That could be a valid measuring point for monitoring the change in satisfaction due to the different new economic conditions. The research did not test the public participation in urban development process.

**Future work:**

- Comparing the participation as a tool in the urban development in relation to the actual public satisfaction using the results of this research and apply it on a specific sector scanning different valid projects in that field.

- Further investigating mobility in relation to the overall satisfaction in Izbet Khairallah and trying to find out smart solutions to be implemented in the area to make it more safe and connected.
Appendices.

There should be two main documents:

- The main survey papers that was used in the field work
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ملخص الرسالة

العشوائيات واحدة من أكثر الموضوعات تداولاً في الوقت الحالي خاصةً في الدول النامية، هذه الظاهرة لها العديد من الأسباب من أهمها عدم كفاية الإسكان الرسمي لتلبية احتياجات السكان، مما يدفعهم إلى خلق حلول خاصة بهم لتوفير المأوى عبر الإسكان العشوائي. برزت هذه الظاهرة في مصر في فترة الخمسينيات، وكان لسقوط صخرة النوبة منطقة منشية ناصر في 2008 دوراً كبيراً في جذب انتباه الحكومة لهذه الظاهرة، ببع ذلك حدوث نقلة نوعية وتبني أسس مختلف في التعامل معها، ومنذ ذلك الحين حدث الكثير من التدخلات بغرض التنمية، وتم تبني الكثير من الاستراتيجيات للتعامل مع هذه الظاهرة.

وكان رفع الكفاءة للمناطق العشوائية أحد هذه الاتجاهات.

يهدف البحث إلى مناقشة تأثير استراتيجيات رفع الكفاءة والتدخلات التي تمثلها من وجهة نظر السكان، وهذا يعني مؤشرًا عن كيفية استقبال السكان المحليين لهذه التدخلات والمشروعات، بالإضافة إلى التقييمات المستمرة الأخرى التي قد يحملونها عن تلك التدخلات، ووضع ذلك في الاعتبار سيساعد في تحسين هذه التدخلات في المستقبل. وقد تم تحقيق هدف البحث بواسطة النهجية التالية:

البدء بالبحث في أدبيات موضوع العشوائيات في الفصل الأول، بعد ذلك يناقش البحث مصطلح التنمية العمرانية والتطبيقات ذات الصلة في المناطق العشوائية، بالإضافة إلى مقدمة مختصرة لمؤشرات جودة الحياة ذات الصلة، وذلك لقياس نتائج التنمية. بدأ فصل الدراسة الميدانية باختيار منطقتين في إقليم القاهرة الكبرى واللتان تعرضتا للكثير من المشروعات من قبل العديد من شركاء التنمية الفاعلين، ومن ثم تم تعريفها كنموذج في نفس الموقع، ركزت الدراسة الميدانية على الحصول على انتباعات وآراء سكان هاتان المنطقتين عبر مقابلات منظمة تم إعدادها قبل الباحث والتي تم تصميمها لتستعرض العديد من الجوانب التي تشمل البنية التحتية الأساسية، إمكانية الوصول، التعليم، الخدمات الرعاية الصحية، وفرص العمل.

في النهاية يخلص البحث إلى أن سكان المنطقتين الشعوانيتين اللتان تم دراستهما يشعرون بالرضا إلى حد كبير تجاه الخدمات الأساسية المقدمة إليهم، إلا أنه مازال هناك شكاوى بخصوص الصيانة وجودة التنفيذ بالإضافة إلى الرغبة في تنفيذ الكثير من خدمات الأخرى التي ترون أن لها أولوية. يقدم البحث في النهاية نقاط أخرى للبحث المستقبلي وذلك للاجابة عن الأسئلة التي لم يتطرق إليها وطرح بعض الجوانب المتعلقة بها.