

**Methodical assessment of the integration of quality-of-life indicators
into Egypt's informal housing policies**

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ABSTRACT

This research presents a study of the interactive relationship between society and the urban environment on the one hand, and the concept of quality of life through its main indicators that must be available in the society on the other hand, in addition to analyzing the standards and indicators related to the population and the behavior of individuals in this society, as well as the extent of satisfaction of individuals with the residential area in which they live. This is done through studying some local and international experiences that analyzed the concept of quality of life.

The research concluded that the concept of quality of life has a broad scope, encompassing many different indicators. The main factor underlying the evaluation process is human beings, and that there is a correlation between the concept of quality of life and the policies dealing with informal housing areas, as improving informal housing policies is to improve quality of life. One way is to integrate community participation into urban improvement to help poor people who cannot take care of their housing consumption needs.

This study explores the following topics: (1) quality of life (concepts and opinions); (2) policies dealing with informal housing areas; (3) the results of international experiences in dealing with informal housing areas; (4) proposed quality of life indicators. Finally, the study concludes a set of suggestions to increase the link between approaches to enhance informal housing policies and raising quality of life through indicators that control informal housing policy selection.

Keywords: Quality of Life - Informal Housing - Urban Quality of Life Indicators - Environmental Quality of Life Indicators.

INTRODUCTION

The urban environmental crisis will continue to be one of the most pressing problems facing humanity in the 21th century, as the most serious environmental threats facing urban communities in most of the world's nations are quality of life, which is affected by availability of water, waste disposal, energy consumption methods as a result of high population density and urban life activities. Informal housing occupied a large area of Egyptian cities as a solution to the housing problem, which placed a burden on the poor population as a result of the failure of State agencies to intervene to find suitable shelters for them⁽¹⁾. Additionally, despite the State's quick efforts to advance social and economic development, it does not produce any environmental statistics or make any effort to advance both socioeconomic and environmental development as a whole⁽²⁾. This has led to many environmental problems such as lack of proper development planning, besides increased demand for services, facilities and

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infrastructure have made it difficult to provide adequate housing and shelter, which has directly affected the living conditions of the urban poor⁽³⁾.

The concept of quality of life encompasses the criteria of the overall economic developmental process and local production (as physical standards) and non-material quality of health, education, recreation and social affiliation, with the aim of reflecting collective personal values⁽⁴⁾, where housing is considered a key component of quality of life in the sense that poor housing causes health problems⁽⁵⁾. The quality-of-life measure is the highest perspective of the degree and quality of life and environmental problems, monitoring and diagnosing the causes of the current state of urbanization to control the rhythm of future ecology⁽⁶⁾.

Research Problem

Although there are particular measurements of quality-of-life indicators that may be used to tackle the problems of informal areas in all the dimensions of the urban, especially the physical and environmental dimension, yet most projects employ subjective personal approaches due to deficiencies in methodologies and criteria for identifying and selecting quality of life indicators that are frequently not linked to and integrated with Egypt's informal housing policies/strategies.

Research goal

The selection of quality-of-life measures that influence the formulation of plans and policies for dealing with Egypt's informal housing areas, as well as how these indicators are quantified through:

- Study elements of quality of life for residential areas.
- Conclude the criteria by which quality of life in informal housing areas can be assessed.
- Develop ways of measuring quality of life indicators for informal housing areas.

METHODOLOGY

An analytical theoretical study of previous studies in the fields of quality of life and policies for dealing with informal housing areas has been carried out, in addition to getting abstracts of researchers in this topic. These have been used as a Theoretical Framework for this study. Also, data and basic information on the current situation and the policies for dealing with informal housing areas in Egypt have obtained.

By reviewing the literature and discussing previous studies and data obtained through the review of global and local experiences, the main indicators were drawn up, which were linked to informal housing policies, as well as drawing outlines that were discussed within the main variables of this study to:

- Compile all indicators that have been attained into a model.
- Come to conclusions and make suggestions for measures to effectively deal with areas of informal housing and quality of life indicators.

RESULTS AND DISCUSSION

1- General Framework of Quality of Life Approach

The term quality of life is a broad multidimensional concept which typically includes the personal assessment of all the positive and negative aspects of life, and is used in a wide range of contexts, including the areas of housing, international development, politics and health care and focusing on the physical and environmental aspects of society^(5, 7,8,9,10,11)

The quality of life measures reflects people's feelings of (subjectivity) how they live as well as objective (quantitative) measures such as access to resources and the living environment (crime, health, air quality, education, etc. ⁽⁷⁾). Therefore, the concept of quality of

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life includes: (1) Subjective Quality of Life, measure the extent and degree of satisfaction of individuals with their communities and environment as well as the efficiency of the services available to them. (2) Objective Quality of Life, reflects the individual's and group's standard of living⁽¹²⁾.

There are three key sectors that define the fundamental components of quality of life⁽¹³⁾. These include: (1) the social and economic sector, (2) the urban sector, and (3) the environment, infrastructure and services sector. Many bodies are interested in classifying urban indicators to measure quality of life⁽¹⁴⁾, the most important of which are:

- **The United Nations Centre for Human Settlements** classified quality of life indicators into 46 at (1996) comprising housing, transport, infrastructure and economic and social development indicators, then added 5 new indicators at (1999).
- **Istanbul Conference** at (1999) brought together 32 indicators (23 quantitative and 9 qualitative) that each country must adopt to assess quality of life.
- **World Urban Observatory at the United Nations Centre** released 51 indicator systems in seven clusters: (1) Compilation of general background indicators (10); (2) Set of economic and social development indicators (9); (3) Compilation of infrastructure indicators (5); (4) Transport indicators set (5); (5) Environmental management indicators set (5); (6) Local indicator set (9) and (7) Housing indicators set (8).

2- Components of the concept of quality of life in urban communities.

The components of the concept of quality of life in urban communities was illustrated in Figure (1) and this concept is also concerned with individuals' income to measure the economic factors and variables of individuals and communities and to measure the well-being of these communities⁽¹⁵⁾.



Fig. 1. Components of the concept of quality of life in urban communities
Source⁽¹⁵⁾

In an urban setting or society, the term "quality of life" cannot be used to describe the standard of living for all residents. Even in cities where the quality of life of individuals is relatively high, this cannot guarantee that the quality of life or the overall standard of living of the city is also high. There are many factors that determine the quality of life at the personal level that cannot be transmitted at the community level (such as the state of an individual's health). On the other hand, there are also important factors that have been shown to affect the quality of life in a given place, which do not necessarily constitute a determinant of the quality of life of individuals (such as weather and climate). However, despite the mismatch between subjective and societal factors, personal quality-of-life screening is a required starting point for checking city quality-of-life determinants⁽¹⁶⁾.

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Verlet and Devos⁽¹⁷⁾ indicated that the subjective dimension of the concept of quality of life could be measured through a personal assessment of the following areas: overall satisfaction, satisfaction with life in society, current occupational status, individual and family financial situation, well-being of life in the home, and satisfaction with the neighbourhood and local government.

Attempts have also been made to categorize the concept of quality of life due to its diversity, most of which rely on the four components of the concept of quality of life (economic, social, environmental and urban), and on the fact that the concept of quality of life is multidimensional, and varies from one society to another, which is taken into account when assessing the quality of life of urban communities for sustainable development. These dimensions can be shortened to seven main dimensions⁽¹⁾ under which some sub-indicators fall, as illustrated in Figure (2), such as environmental, social, natural, technical, psychological, economic and political dimensions.

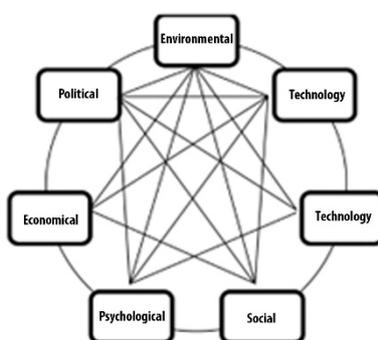


Fig. 2. The seven dimensions of urban quality of life
Source⁽¹⁸⁾

Youif⁽¹⁹⁾ defined a scale of quality of life as a means of measuring the quality of life of a given city or territory. It consists of a set of indicators divided into four basic criteria as shown in Figure (3). This includes economic, social, urban and environmental. Each criterion gives us a detailed reading of the quality of life in the studied urban area. The total four criteria give us a ruler and a compass of quality of life.

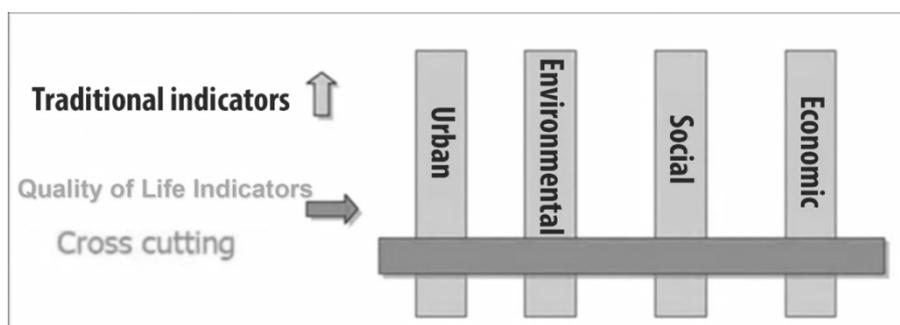


Fig. 3. A a scale of quality of life and its indicators. Source⁽¹⁹⁾

There are two main categories for quality-of-life indicators in urban areas. (Self/material standard - objective/moral standard) according to the classification of the concept of quality of life⁽²⁰⁾, and the main dimensions and sub-indicators of urban quality of life that will be relied upon in the research are given in Table (1).

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Table 1. Main dimensions and sub-indicators of urban quality of life

Main dimensions		Sub-index	
First dimension	Quality of natural environment	1- Air quality. 2- Quality of water 3- Land quality/ quality of elements 4- Quality of local environmental	5- Quality used energy 6- Waste management and recycling 7- Land developed to neglected 8- Green areas to build areas
Second dimension	Quality of urban environment	1- Quality of urban planning 2- Quality and availability of residences 3- Quality of open green areas	4- Quality of designing land use 5- Quality of the services 6- Quality of management and maintenance
Third dimension	Quality of facilities and transportation	1- Quality pedestrian and bike paths. 2- Quality of transport and mobility	3- Easy traffic. 4- Quality of infrastructure
Fourth dimension	Quality of social life	1- Social justice. 2- Social connectedness. 3- Behavioural performance.	4- Safety in society. 5- Community health and quality of treatment. 6- Quality of education.
Fifth dimension	Quality of psychological comfort	1- The identity of the place and society.	2- Satisfying the population
Sixth dimension	Quality of economic life	1- Economic development. 2- The economic level of the population. 3- Employment opportunities.	4- Unemployment rate. 5- Annual income. 6- Economic activities.
Seventh dimension	Quality of political life	1- Provision of civil and political rights.	2- Urban policies and strategies

Source: Authors from⁽²⁰⁾

3- General Framework of Informal Housing Areas

The informal housing patterns differ significantly from each other, and as a result, there are differences in the characteristics, level of risk, and consideration of development priorities. Since the idea of informal dwelling areas is distinct and has multiple names, it is often referred to as slum areas, random urbanization zones, or informal housing zones^(21, 22, 23). The informal area phenomenon "Informality" was mentioned in an ILO study in Geneva, Switzerland, which predicted that by 2000 most developing countries would be surrounded by many poor and crowded neighborhoods "Slums", the so-called "poverty belts", characterized by fractured and underserved places and adequate infrastructure networks^(24, 25).

Patterns of informal housing zones are classified according to the perspective of the Government and official entities^(26, 27, 28, 29) according to the nature of the upbringing, according to the construction situation, size of informal zones at the global level and Egypt in particular.

4- Developmental Roles of Informal Housing Areas

Invisible roles are undoubtedly played by informal housing zones on all levels of the physical, social, and economic systems. By reviewing these three levels, we show the importance of studying these zones to determine the entry points for development to exploit all its available possibilities and raise the level of quality of life.

4-1 The Urban Role of Informal Areas:

The State has recently moved towards a policy of participation and support for the decisions of the users' community to support local materials that increase their impact and effectiveness in the housing provision process. The policy of participation in local development processes depends on the user deciding what he needs and the state participates in these needs and this trend has emerged as one of the outcomes of the formation of informal regions and their growth mechanisms as an effective investment. This has led the State to many projects with increased local participation roles, and has supported low-cost housing projects, urban development projects and the upgrading of informal and dilapidated housing areas⁽³⁰⁾.

- **The social role of informal areas:**

Despite the constant belief that informal housing areas and slums are a burden on society and the State, they reduce pressure on high demand for housing and house a large proportion of the Egyptian urban population, as well as by focusing on the many negative images represented by informal areas; We ignore the possibilities offered by these areas, here are many of the advantages achieved as a result of the origin of these areas, which attracted a large proportion of middle class and low-income earners⁽²⁹⁾. On the other hand, informal housing areas are regarded as a space to accommodate rural arrivals to urban areas by providing a pattern of housing commensurate with their social and material needs. These areas have provided this class with jobs that do not require expertise and are commensurate with their levels of education. Thus, this type of housing strengthens social networks, and has also helped to coexist and integrate within life according to the urban pattern developed for this class⁽³¹⁾.

- **The economic role of informal areas:**

The informal economy's output reaches 40% of national output in Egypt through systems of informal productive, service and craft activities, which in some regions represent a whole economic system in all its dimensions with a strong economic output depending on a particular craft such as in the Nasser establishment area⁽³²⁾.

5-Methods of dealing with informal housing areas

5-1 Informal Housing Handling Policies

There were several policies and initiatives implemented by the State to address the situation in informal settlements and zones, but these policies did not have established criteria on the basis of which a decision was taken to remove or develop informal zones.⁽²⁸⁾ Upgrades are also often seen as programs designed to improve the urban environment of residential areas by supplying the areas with infrastructure networks (sewage and electricity systems, internal road regulation, garbage collection systems) without attention to other factors associated with the population's affiliation with the areas they have established⁽³³⁾. Figure (ξ) illustrates Egypt's national strategies for addressing informal areas from 1993 to 2019 and Figure (ϵ) illustrates methods for addressing informal housing areas, which include:

- **Eviction - Clearance:** This policy aims to re-plan, and depends on the removal of either total or partial indiscriminate and degraded housing areas such as nest and tin areas, and to re-plan them in light of the planning criteria for building a new and good urban environment^(34, 35).
- **Total Removal:** This policy depends on the low urban environment of the informal housing areas, the aim of which is to completely remove some deteriorating informal housing areas with a view to redesigning them in a new urban manner and following the right planning criteria^(36, 37).

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- **Partial removal:** This policy deals with informal housing areas in a more moderate manner, in order to avoid the disadvantages of the policy of total removal in economic and social terms. It is based on prioritizing the removal process by identifying the most dangerous buildings and housing units, searching for alternative sites adjacent to the temporary eviction process, and repeating this process until everything that requires removal is removed⁽³⁸⁾.
- **Progressive substitution:** Its approach depends on the development of radical solutions to the region's indiscriminate problems. One of its most important features is sustainability and sustainability, and it often seeks to provide a healthy environment as it provides adequate housing, infrastructure and public services. It is a long-term return investment method⁽³⁹⁾.
- **Intervention (upgrading and development) Upgrading:** Upgrading's concept of intervention and upgrading of informal areas depends on the inclusiveness of urban, economic and social upgrading, within a strategic framework to address the problem of informal housing in a holistic and effective manner^(35,40, 41).
- **Protection and preservation of Conservation & Preservation:** This method is concerned with protecting housing areas and improving the situation in these areas for the better but this is done in an integrated manner, in stages commensurate with the existing conditions, which does not harm the population or housing units and is balanced with available possibilities^(35, 42).
- **Upgrading and building self-efforts in Situ Upgrading and Self Help:** It is a policy of empowerment, based on the volunteering and participation of the population in making and implementing decisions that directly affect their lives. The population also attempts to provide basic elements of infrastructure with their individual efforts, provide the necessary plots of land for certain services such as electrical transformers, and improve the environment⁽³⁵⁾.
- **Bundling of informal zones:** The bundling process is carried out in conjunction with the development of informal housing zones itself, in order to prevent the extension and expansion of these zones, as a result of the lack of clear boundaries of the city's urban areas, and is carried out through the encirclement of stretchable zones and the formation of planned zones and neighborhoods that prevent the continued extension and encroachment on the land of the State⁽⁴³⁾.

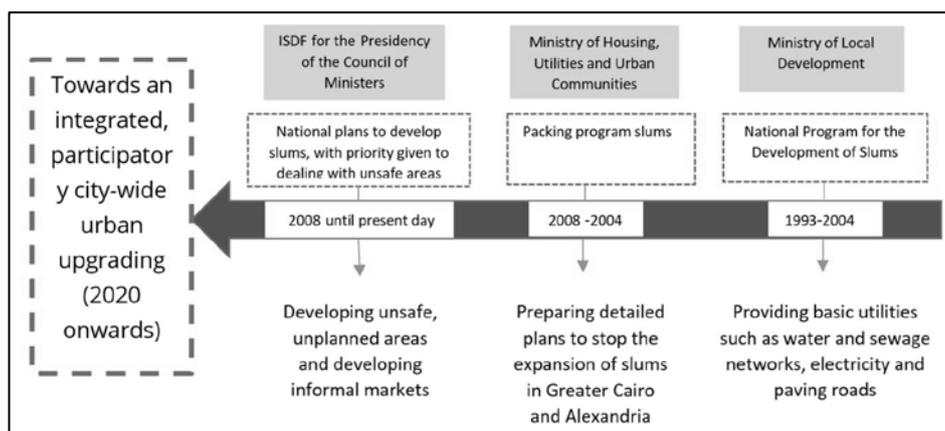


Fig. 4. Egypt's national strategies for addressing informal areas from 1993 to 2019.
Source⁽⁴⁴⁾

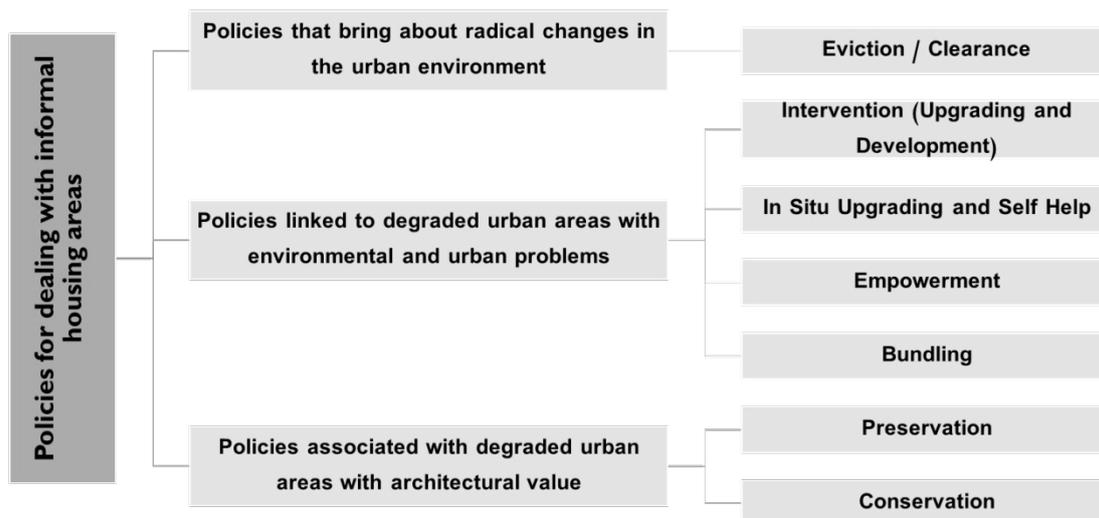


Fig. 5. Treatment Methods of Informal Housing Areas. Source: Authors.

5-2 Criteria that determine the methods of dealing with informal housing areas

According to the governorates' report published by the Information and Decision Support Centre of the Egyptian Council of Ministers, the criteria on which methods of processing are defined depend on the extent to which development work can be carried out in the informal housing areas, in terms of the situation of buildings and housing units, the density of the population in the area, the level of facilities and infrastructure and their degradation, street shows and organization, the level of basic services in the area⁽²⁹⁾. The location of the area for the city, the economic value of the area in terms of its investment potential and economic revenues, and the value of the land on which the area is located, with the possibility of relocating the population to another neighboring area or not⁽²⁹⁾.

6-Quality of life in informal housing areas

There are many studies conducted to understand the relationship between housing areas and quality of life. Some studies have produced quality of life indicators to compare neighborhoods and assess the potential impact of improved public utilities and services on housing prices and quality of life for different social and economic groups. Other studies have focused on determining the population's criteria for assessing the quality of housing in informal areas. In addition, other studies have discussed ways to improve housing quality in informal areas. Overall, research in this area is still ongoing and aims to provide a better understanding of the challenges and opportunities to improve the quality of life in informal housing areas.

6-1 Ability to measure quality of life in informal housing areas

The study of Robin et al.⁽⁴⁵⁾ highlights the lack of interest in quality of life in informal areas by researchers in the past. The study suggests that improving our knowledge of the quality of life of the informal population requires addressing the kinds of issues that shape the quality of life in these areas. They also found a positive correlation between self-well-being and self-perception of well-being in informal housing areas. Measuring quality of life in informal housing areas requires a comprehensive understanding of the unique challenges faced by residents in these areas. Measuring quality of life in informal housing areas can be difficult due to several factors. One of the main challenges is the complexity of the term "quality of life", which varies across time and context⁽⁴⁶⁾. Another challenge is the lack of

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attention to quality of life in informal areas by past researchers⁽⁴⁵⁾. The study of⁽⁴⁷⁾ assesses the quality of life of informal housing areas using five key indicators, including building density, utility services, road infrastructure, urban coordination and social services. This study focused on important factors in improving the quality of life of residents in informal housing.

Researchers also investigated environmental linkages to health-related quality of life in informal areas. These studies aim to close the gap in quality-of-life research that has not focused specifically on informal housing areas in cities.

The population's perception of the quality of housing in informal areas can be assessed by setting the criteria by which the population assesses their housing conditions⁽⁴⁸⁾.

Several studies examined the most important factors in improving the quality of life of the population in informal areas. Studies have found that access to basic services such as water supply, sanitation and electricity, as well as safety and security, are the most important factors in improving quality of life in informal areas⁽⁴⁵⁾ and other factors found to be the task of access to education, health care and employment opportunities⁽⁴⁹⁾. All of these researches supported the notion that a variety of factors and improved social, economic, physical, service, and access are important indicators. Also, Population has the biggest influence on enhancing the urban fabric's quality of life, whereas security index has the least influence. There is also an important relationship between indicators, and citizens' mental perspective changes under social, service, economic and material conditions. This confirms that the quality-of-life measure in informal housing areas has a significant impact on policymaking in these areas. By identifying the most important factors in improving quality of life, policymakers can develop targeted interventions that meet the specific needs of informal housing areas^(45, 50). In general, measuring quality of life in informal areas can help policymakers make more informed decisions and allocate resources more effectively to improve the well-being of the population in these areas. Consequently, the components of quality of life in the informal areas are the same components of quality of life in any urban area⁽⁵¹⁾.

6-2 Effective ways to measure quality of life in informal housing areas.

Numerous studies have examined how to evaluate quality of life in informal housing areas. These studies focused on the most important factors in improving the quality of life of residents in informal areas, as well as the main obstacles to improving the quality of life. Some of these studies have been conducted in South Africa, specifically in Alexandra Town and other informal areas, and studies suggested that factors such as access to basic services, safety and social cohesion are important for improving quality of life in informal housing areas. Different methods were used to measure these factors, including surveys and interviews with the population⁽⁴⁵⁾.

Some of the methods used to collect data on the quality of life in informal areas also include surveys, interviews and observations. Surveys and interviews are commonly used to collect data on people's perceptions of their quality of life, as well as their access to basic services such as water, sanitation and health care. Observations can be used to collect data on the physical environment, such as housing condition and infrastructure. In some studies, regression analysis was used to identify the most important factors in improving the quality of life of residents in informal housing areas. In addition, some studies used statistical programs such as SPSS to analyze the collected data⁽⁵²⁾.

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Researchers identify and measure "quality of life" in informal areas by investigating the most important factors in improving the quality of life of residents in informal housing areas. They used different methods to collect data on quality of life, such as surveys, interviews, observations and regression analysis. Quality of life is a complex and multifaceted concept that is difficult to determine and to objectively measure⁽⁴⁵⁾. One of the studies⁽⁵³⁾ used regression analysis to gain an understanding of the types of issues that shape quality of life in these areas. The study identifies the main obstacles to improving the quality of life of residents in informal housing areas, including poor access to basic services, inadequate housing conditions and limited economic opportunities. Another study⁽⁴⁶⁾ examined the relationship between housing quality, home-based enterprises, and quality of life. The study identified the specific factors of inadequacy in existing informal housing and contributes to knowledge in the field of informal housing in terms of housing quality.

A study of⁽⁴⁵⁾ explored the quality of life of informal dwellers in three distinct city areas in South Africa and investigated the factors that are most important in improving the quality of life of residents in informal housing areas. The study concluded several research directions that would improve our knowledge of quality of life for informal settlement residents. Another study measured quality of life in informal areas and found that the average quality of life indicators in these urban neighborhoods are below average, with housing being an important factor.

Successful informal housing policies can have a positive impact on the quality of life in informal areas. Here are some ways they can do this, based on search results:

- Improving housing conditions: Policies and planning can lead to the development of physical infrastructure, which can improve housing quality in informal settlements⁽⁴⁶⁾ for example, low-cost housing projects can provide better living conditions than informal housing⁽⁵⁴⁾.
- Better health outcomes: Informal areas are often associated with poor housing conditions and inadequate services, which can increase the risk of disease and ill health⁽⁵⁴⁾, policies that address these issues, such as the provision of clean water and adequate sanitation systems, can improve health outcomes⁽⁵⁵⁾.
- Increasing social and economic opportunities: Policies that support economic development and job creation can improve economic opportunities for informal populations⁽⁴⁷⁾. This can increase income and improve quality of life.
- Improving public spaces: Policies that support the creation of public places for trade and recreation can improve the quality of life in informal settlements⁽⁵⁵⁾. These spaces can provide opportunities for social interaction and community building.
- Reducing social inequality: Policies that address social inequality, such as government-supported housing provision for households in need, can reduce disparities in living conditions between different households in informal settlements⁽⁵⁴⁾.
- Increased security: Policies addressing issues such as crime and insecurity can improve the safety and security of informal residents⁽⁵⁶⁾.

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7-Global and Local Experiences

7-1 Methodology for selecting global and local experiences

A series of global and local experiences of informal housing areas were reviewed, which covered the integration of quality of life thinking and policies to deal with informal areas. This study covered a comparative analysis of these experiences in several ways, including:

- Scope of application and stakeholders;
- Objectives;
- Principles and entry points for development and upgrading, and
- Criteria and indicators measured during the trial

A comprehensive comparison was conducted as part of the experiment investigation, analysis and elaboration of methodological frameworks that can be drawn from experiences to understand the applicability of the quality-of-life entry as a more comprehensive entry point for dealing with informal housing areas. The study covered several experiences to achieve diversity in order to cover the field of study and all policies to deal with the different areas of informal housing in terms of the different entrances, standards and dimensions that may be associated with quality-of-life inputs.

7-2 Criteria for selecting experiences

Global and local experiments include two sets of experiments, the first including planning guides and the second projects already implemented and assessed after a period of operation. The criteria for selecting experiences include the following:

- It must be based on the measurement of indicators, physical and environmental standards, and indicators of infrastructure that may have a relationship with quality-of-life.
- The objective of the experiment must be comprehensive to the principles of urban planning.
- It must follow an entrance from modern entrances in dealing with informal housing areas.

Summary of the most important global and local experiences discussed in this research is shown in Table (2).

Table 2. Summary of global and local experiences to link quality of life indicators to informal housing policies

Author	Informal area	Indicators	Informal Housing Policies	Urban aspect	Environmental aspect
Ahsan & Özbakir ⁽⁴⁷⁾	Boa Walla, Lahore, Pakistan	Quality-of-life indicators	Development and upgrading	Relatively compatible	Relatively compatible
Zakerhaghighi et al. ⁽⁵⁶⁾	Hesar Imam Khomeini, Hamedan	Economic Indicators	None	Not Relevant	Not Relevant
Kariman and Maha ⁽⁵⁷⁾	Rawdat Al-Sayeda Zainab area, Cairo, Egypt	Sustainability indicators for urban schemes of informal areas within areas of value	Rehousing unsafe areas	Compatible	Relatively compatible
		Analysis of indicators (age dimension - environmental dimension socio-cultural dimension)			
Heba ⁽⁵⁸⁾	Ezbat Khairallah, Cairo, Egypt	None	Green restoration & sustainable reconstruction	Relatively compatible	Relatively compatible
Farhanisadr & Davoudpour ⁽⁵⁹⁾	City of Mahshahr Iran	Respondents' satisfaction with the quality of urban life	None	Not Relevant	Not Relevant
Yousef et al. ⁽⁶⁰⁾	Tehran	Average level of satisfaction in quality of life indicators.	Participation and empowerment	Not Relevant	Not Relevant
Hammad ⁽⁶¹⁾	Alexandria, Egypt	life conditions	Implementation of informal tourism	Not Relevant	Not Relevant
Mabrouk ⁽⁶²⁾	Wajadju - Burkina Faso	None	Upgrading - Sites and Servers	Relatively compatible	Relatively compatible
	Al Salam District - Ismailia City, Egypt	Social Characteristics Economic Characteristics Physical Characteristics	Improvement	Relatively compatible	Relatively compatible
	Al-Zabaleen neighborhood - Manshiyet Nasser	Assessment of experience on the one hand (socio-economic – urban)	Upgrading and Development Projects	Relatively compatible	Not Relevant
Faraj ⁽⁶³⁾	Rio de Janeiro	None	Implementation Upgrading Programme Legalization of tenure and ownership	Not Relevant	Not Relevant
Ahmed & Shawki ⁽⁶⁴⁾	Mintaqat 'ard alliwa'	Urban Form Elements	upgrade	Relatively compatible	Relatively compatible

Source: Authors

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8-Challenges in implementing informal housing policies that improve quality of life

Some of the frequent obstacles to measuring quality of life in informal housing areas include the lack of trustworthy data, the diversity of informal areas and the difficulty of determining and measuring the quality of life itself. The government often does not recognize informal housing areas, making it difficult to obtain accurate data on the population and their living conditions. Plus. In addition, informal areas are often diverse in terms of their population, culture and geography, making it difficult to develop a uniform approach to measuring quality of life. Finally, quality of life is a complex and multifaceted concept that is difficult to determine and objectively measure⁽⁴⁵⁾.

Research results indicated that there are many challenges in implementing informal housing policies that improve quality of life. One challenge is the lack of data on the housing situation of people living in slums and slums, which prevents effective policy development and implementation⁽⁵³⁾. Another challenge is the complex and multidimensional nature of deprivation, which is reflected in existing literature with a strong focus on deprivation at the household level with limited attention to deprivation at the regional level⁽⁶⁵⁾.

Challenges to the implementation of successful informal housing policies include:

- Lack of infrastructure: Informal areas often lack infrastructure to support health and wellness, including clean water, adequate sanitation systems, permanent housing and public spaces for trade and recreation⁽⁵⁵⁾.
- Resistance to formalization: Informal settlements are often established due to lack of affordable housing and rural-urban migration⁽⁶⁶⁾. Residents may resist formalization due to concerns over the loss or relocation of their homes⁽⁵⁵⁾.
- Limited resources: Governments in low- and middle-income countries may have limited resources to allocate to improve informal housing areas⁽⁵⁵⁾.
- Inadequate planning: Policy and planning must be carefully developed to meet the specific needs of informal areas⁽⁴⁶⁾. Inadequate planning can lead to unintended consequences, such as population displacement or the creation of new random areas⁽⁵⁵⁾.
- Social inequality: informal settlements are often characterized by social inequality, which can make it difficult to implement policies that benefit the entire population equally⁽⁵⁵⁾.
- Environmental challenges: Informal settlements are often located in areas exposed to environmental hazards, such as floods or landslides⁽⁶⁷⁾. Policies must take these challenges into account in order to ensure the safety and well-being of the population.

Overall, the implementation of successful informal housing policies requires careful planning, adequate resources and a focus on addressing the specific needs and challenges of informal areas.

9- Relationship between quality of life indicators and informal housing policies.

Improving housing quality is essential to improving quality of life in informal areas⁽⁴⁵⁾. However, past experience showed that collective social housing projects do not always succeed in improving the quality of life of the population, as they were often located in marginal areas and ignore the population's needs⁽⁶⁸⁾.

Improving the living conditions of slum dwellers is an urgent concern for both international agencies and national Governments⁽⁶⁹⁾. Upgrading is becoming an increasingly common response by city and national governments, which is important because it involves formal acceptance of people's rights in informal areas⁽⁷⁰⁾.

Assessing quality of life indicators can have a positive impact on informal housing policies⁽⁴⁶⁾. A conceptual model for assessing the quality of life in informal areas based on the

reality of these areas and an overview of theoretical models was also developed⁽⁵⁶⁾ quality of life dimensions and standards in informal areas have been assessed and classified, and prominent indicators of quality of life in informal housing areas include confidence, standard orientation and social capital^(71, 72). The environmental linkages of health-related quality of life among women living in informal areas have also been studied⁽⁷³⁾.

By assessing these indicators, policymakers can better understand the needs of residents of informal housing areas and develop policies that improve their quality of life. Quality of life indicators are important in assessing the impact of informal housing policies. Here are some that illustrate the importance of quality-of-life indicators for residents of informal housing areas:

- Adequate housing is a human right, and its absence negatively affects equity, urban inclusion, health, safety and livelihood opportunities⁽⁷⁴⁾.
- Informal areas (slums) lack permanent housing, adequate living and public spaces, and access to basic services⁽⁷³⁾.
- Assessing the quality of life in informal areas requires selecting indicators based on the reality of these areas and an overview of theoretical models⁽⁵⁶⁾.
- Factors affecting quality of life in informal housing areas include: land and infrastructure use, natural environment, health and wellness, productivity, livelihoods, market access, jobs and basic services^(74, 46).
- In order to guarantee that everyone has access to appropriate and affordable housing by 2030, policy must be given fresh focus⁽⁷⁴⁾.

Many previous studies and several trends have been drawn on to link/integrate quality of life indicators with informal housing policies, by reference to various global and local experiences dealing with the relationship between the two parties and the most important findings of the study. Zakerhaghighi et al.⁽⁵⁶⁾ gave a model for assessing the quality of life in the informal areas to understand the objective variables by the inhabitants of the informal areas as shown in Figure (6).

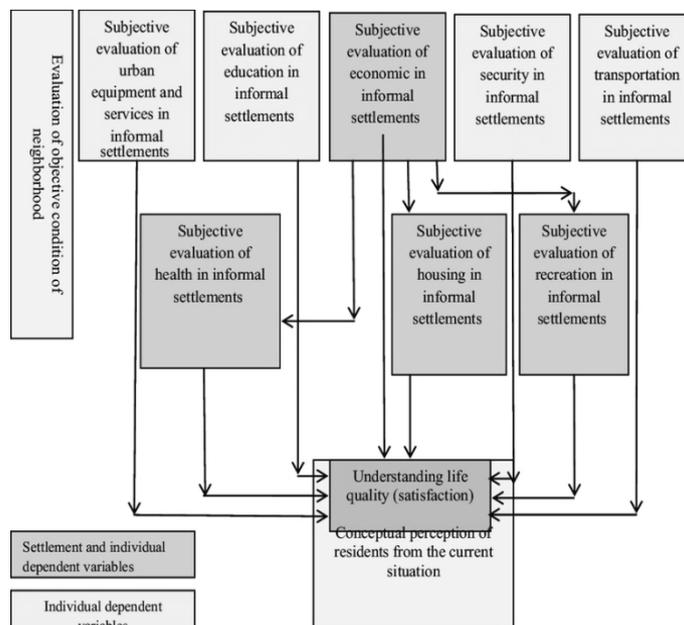


Fig. (6). A model for assessing the quality of life in informal areas to understand objective variables by slum dwellers. Source⁽⁵⁶⁾

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Also, Figure (7) illustrates the final criteria derived from the theoretical framework reached through all previous studies and the study of global and local experiences that addressed the relationship between quality-of-life indicators and informal housing policies.

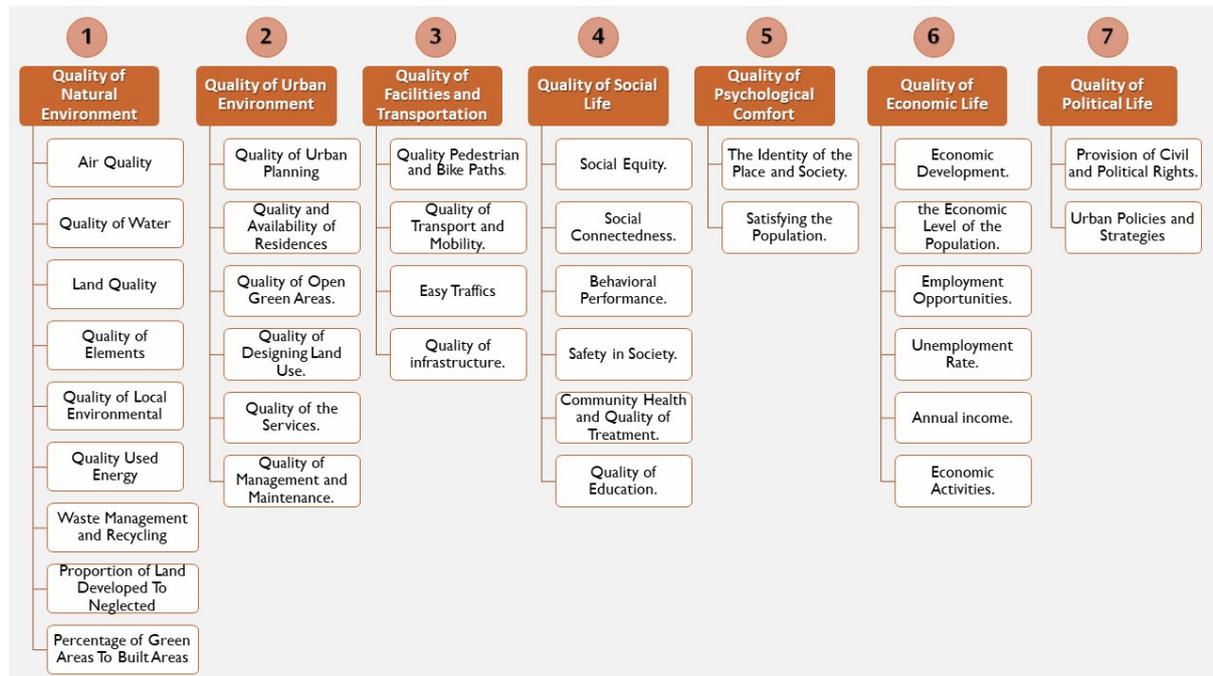


Fig. (7). Quality of life indicators derived from the theoretical framework. Source: Authors

Conclusions and Recommendations

Research results indicated that there are several ways than can be introduced in the current informal housing policies in Egypt. One way is to integrate community participation and outdoor advertising into urban improvement to help poor people who cannot care for their housing consumption needs. Another way is to understand the basic processes that generate and give meaning to the self-built environment of informal areas, which is critical to improving the quality of life of the population. Longitudinal research can also be used to investigate the impact of continued living in informal housing on health outcomes and to understand health issues in housing policy. However, it should be recognized that plans to improve informal areas are criticized for failing to keep pace with infrastructure maintenance costs, undermining health standards and the effectiveness of poverty alleviation initiatives. Generally, integrating quality-of-life indicators in informal housing policies can improve quality of life in informal areas and vice versa.

The following are the proposed strategies that can be applied to achieve informal housing policies in informal areas of Egypt according to previous studies:

- Address inequalities in affordable shelter⁽⁵⁵⁾.
- Implementing policies and planning for the development of physical infrastructure, improving the social economy, environment and health⁽⁴⁶⁾.
- Adopt the concept of sustainable urban development⁽⁷⁵⁾.

- Focus on the effectiveness of upgrading the site to improve the quality of life ⁽⁷⁶⁾. (Maganadisa, Letsoko, & Pretorius, 2021)
- Alignment with sustainable development goals to improve quality of life in informal areas ⁽⁷⁷⁾.
- Provision of infrastructure to support health and wellness, including clean water, adequate sanitation systems, permanent housing and public places of commerce and recreation ⁽⁵⁵⁾.
- Providing a variety of housing options for acquisition and payment, such as short-term rent, long-term rent, coexistence and financed purchase; investment in education, health care and infrastructure; engaging residents in decision-making processes; and coherence with the population's best interests ⁽⁵⁵⁾.
- Avoid forced evictions and demolition of existing informal areas as an "easy" way to eliminate informal housing areas ⁽⁷⁶⁾.
- Encourage progressive construction and enable small builders to provide large-scale formal housing while improving the quality of housing provision ⁽⁷⁸⁾.
- Finally, a systematic framework could be used to predict deprivation of multidimensional housing using geospatial and remote sensing variables, which could support planning and policy interventions to achieve the sustainable development goals of the most disadvantaged ⁽⁶⁵⁾.

REFERENCES

- 1-ابراهيم، م. ع. ، كامل ، ش. م. (2015). دور الجمعيات الاهلية فى تحسين الظروف المعيشية للمناطق العشوائية، عرض لمشروع ارشادى مقترح. القاهرة: مركز الدراسات التخطيطية و المعمارية.
- 2-شليبي، د. م. (2004). رسالة ماجستير في التخطيط الاقليمي والعمراني- كلية التخطيط الاقليمي والعمراني، جامعة القاهرة.
- 3-Moosavi, M. (1999). An Introduction to Environmental Challenges of Life in Slum Settlements of Tabriz. Tabriz, Iran.: Department of Architecture, Tabriz Branch, Islamic Azad University, .
- 4-Young, R. (2008). Quality of Life Indicator System- Definitions, Methodologies, Uses, and Public Policy Decision Making. At: <https://www.semanticscholar.org>.
- 5- سلامة، ص. (2012). جودة الحياة.. كيف نحققها؟. جريدة العرب الوطنية الشرق الاوسط. 12439 ,
- 6-هاشم، ح. (2011). جودة الحياة من منظور جغرافي تنموي. جريدة الاهرام اليومية.
- 7-Ann, B. and Joy, W. (2001). Towards the Good Life: A population Survey Dimensions of Quality of life. J. Happiness Studies, Kluwer Academic Publishers, 55–81.
- 8-Kelly, G.I. and Coggan, A. (2007). Quality of Life and Sustainability on the Central Coast, CSIRO Sustainable Ecosystems - Final Report. Australia: Lucia QLD.
- 9-Sirgy, M.J.; Rahtz, D.R.; Cicic, M. et al. (2000). A method for assessing residents' satisfaction with community-based services: a quality-of-life perspective. Social Indicators Research 49, 279–316. <https://doi.org/10.1023/A:1006990718673>
- 10-صالح، ن. (1990). مؤشرات نوعية الحياة"، نظرة عامة علي المفهوم والمدخل. المجلة الاجتماعية القومية، المجلد ٢٧، العدد ٢، 20-21 ,
- 11-الفتاح، غ. م. (2014). هندسة القيمة كمدخل لتقييم وقياس جودة الحياة داخل المباني السكنية في المدن الجديدة. القاهرة: رسالة ماجستير غير منشورة، كلية الهندسة، جامعة القاهرة.
- 12-حلاوة، م. (2010). جودة الحياة: المفهوم والأبعاد. المؤتمر العلمي السنوي لكلية التربية، كلية التربية بدمهور، جامعة الاسكندرية.
- 13-Hancock, T. (2000). Quality of Life Indicators and the DHC. Ontario: Health Promotion Consultant.

Methodical assessment of the integration of quality-of-life indicators into Egypt's informal housing policies

- 14-محفوظ، ج. (2017). تقييم جودة الحياة الحضرية في ظل التحولات المجالية بالمدن الجزائرية الكبرى- حالة مدينة سطيف. الكويت: ماجستير في تسيير التقنيات الحضرية، تخصص: تهيئة- عمران وتنمية محلية، جامعة الكويت- مجلس النشر العلمي
- 15-عباس، إ. (2010). تطوير وتقنين مقياس جودة الحياة لدي طلبة الجامعة في سلطنة عمان. مجلة أماراباك - مجلة الاكاديمية الامريكية العربية للعلوم والتكنولوجيا.
- 16-Psatha. E; Deffner. A and Psycharis. Y. (2011). Defining the quality of urban life: Which factors should be considered? Barcelona, Spain: European Regional Science Association, 51st European Congress.
- 17-Verlet, D. and Devos, C. (2009). The Main Determinants for Subjective Well-Being: A Quest for the Holy Grail? In V. H. Møller, Quality of Life and the Millennium Challenge. Social Indicators Research Series, 35:193–219. doi:https://doi.org/10.1007/978-1-4020-8569-7_13
- 18-Ariane, S.E. (2012). Neighborhood Urban Quality of Life. Egypt: Ph.D, Thesis, Faculty of Engineering, Cairo University
- 19-يوسف، أ. م. (2022, 1 15). قياس وإدارة تنمية المجتمعات العمرانية الجديدة من خلال مؤشرات جودة الحياة . Retrieved from www.urbanharmony.org:
- 20-محمد، ن. م. (2017). دور المناطق الخضراء المفتوحة في تحسين مستوى جودة الحياة بالمدن السكنية- دراسة تحليلية للحدائق العامة بالقاهرة الكبرى. القاهرة: رسالة ماجستير غير منشورة، كلية الهندسة، جامعة القاهرة.
- 21- احمد علام علام، عباس الزعفراني، و عصمت عاشور. (٢٠٠٢). مشكلة الإسكان في مصر. القاهرة: مكتبة نهضة مصر.
- 22-سليمان، أ. م. (1996). الإسكان والتنمية المستدامة في الدول النامية"- كتاب منشور. بيروت- لبنان: دار الراتب الجامعية.
- 23-حافظ، ن. م. (2015). كفاءة المجتمعات اللارسمية في مصر- تفعيل العلاقة بين جماعة المستخدمين والنتائج البنائي . القاهرة: رسالة ماجستير غير منشورة في علوم الهندسة المعمارية- كلية الهندسة- جامعة القاهرة.
- 24-نظمي، ن. م. (1993). الارتقاء العمراني بالمناطق المتدهورة- تقييم لتجربة زبالين منشأة ناصر بالقاهرة. القاهرة: كلية الهندسة- جامعة عين شمس.
- 25-القاضي، ج. (2009). التحضر العشوائي"- ترجمة منحة البطراوي- المركز القومي للترجمة. القاهرة: دار العين للنشر.
- 26-EL-Kadi, G. (1987). L'urbanisation spontanée au Caire. Caire: Tours: Urbama, Orstom. Annales de géographie, Année 1987, 548:486-488
- 27-Göll, E. and et al. (2009). Cairo's Informal Areas -Between Urban Challenges and Hidden Potentials-Facts. Voices. Visions. Cairo, Egypt: GTZ Egypt. Participatory Development Programme in Urban Areas.
- 28-القطاط، ه. ر. (2008). العشوائيات داخل محافظات جمهورية مصر العربية"، دراسة تحليلية للوضع القائم والأساليب المختلفة للتعامل. القاهرة: رئاسة الوزراء، مركز المعلومات ودعم اتخاذ القرار.
- 29-قناوي، ع. ا. (2007). تحديد المناطق العشوائية في إطار عملية المخطط الاستراتيجي لتطوير المناطق العشوائية بالمدن. القاهرة: كلية الهندسة- جامعة الأزهر.
- 30-الحليم، خ. ع. (2011). تطوير المناطق اللارسمية بالمشاركة- الدليل الإرشادي لصانعي القرار. القاهرة: برنامج التنمية بالمشاركة في المناطق الحضرية في مصر، وكالة التعاون الإنمائي الألماني.(GIZ)
- 31-والبناء، ا. ا. (2011). منهجيات التنمية بالمشاركة للمناطق اللارسمية. القاهرة: المركز القومي لبحوث الإسكان والبناء.
- 32- الشيخ، ك. م. (2014). مظاهر التعايش البيئي في المجتمعات الوظيفية. القاهرة: رسالة ماجستير- غير منشورة- كلية الهندسة- جامعة القاهرة.
- 33-عفيفي، أ. (2007). نحو تفعيل آلية متكاملة لإدارة مشروعات التطوير العمراني للمناطق السكنية المتدهورة- دراسة حالة منطقة زينهم. المؤتمر الدولي السابع للعمارة. اسبوت: كلية الهندسة- جامعة أسبوت.
- 34-اسماعيل، ن. ط. (2010). المناطق العشوائية، وطرق معالجتها في ضوء المعايير التخطيطية للمناطق السكنية"، دراسة تخطيطية تحليلية. بغداد - العراق: المعهد العالي للتخطيط الحضري والإقليمي، جامعة بغداد.

- 35-الدين، ل. ع. (2017). آليات وحلول تصميمية لتطوير مسكن المناطق العشوائية. القاهرة: رسالة ماجستير، كلية الفنون التطبيقية، جامعة حلوان.
- 36-الاسكوا. (2003). السياسات الإسكانية والتحصن. نيويورك، الولايات المتحدة الأمريكية: اللجنة الاقتصادية والاجتماعية لغربي آسيا، الأمم المتحدة.
- 37-مطلبك، ج. ب. (2016). تحديد مقترحات لحل مشكلة السكن العشوائي"، دراسة تحليلية لمدينة بغداد للفترة من ٢٠٠٣-٢٠٠٨. مجلة المخطط والتنمية. 33.
- 38-الخياط، ح. (1988). المدينة العربية الخليجية. الدوحة: مركز الوثائق والدراسات الإنسانية - جامعة قطر.
- 39-فوزي، ج. م. ع. (2015). دراسة تحليلية لسياسات التعامل مع المناطق العشوائية، دراسة حالة منطقة عشش محفوظ بمدينة المنيا. المنتدى الوزاري العربي الأول للإسكان والتنمية الحضرية. القاهرة: UN-Habitat، وزارة الإسكان والمجتمعات العمرانية.
- 40-الهيضاء، ا. ح. (2001). نحو استراتيجية شمولية لمعالجة السكن العشوائي. مجلة الجامعة الإسلامية، المجلد التاسع، العدد الأول.
- 41-Alan, T. (1991). *The Cities of The Poor*. London, UK: CroomHelin.
- 42-عيد، م. ع. (2004). الدروس المستفادة من الإسكان العشوائي في إطار تيسير الإسكان. كلية الهندسة، جامعة اسيوط.
- 43-العمراني، ا. ا. (1986). نحو تعريف موحد للسكن العشوائي"، دراسة مقارنة حول مفهوم السكن العشوائي. القاهرة: وزارة الإسكان والمرافق والتنمية العمرانية المصرية.
- 44-UN-Habitat. (2020). *Informal Settlements in the Arab Region*. Giza- Egypt: Islamic Development Bank Gourp.
- 45-Robin R., et al. (2007). Measuring quality of life in informal settlements in south Africa. *Social Indicators Res.*, 81:375–388.
- 46-Amao, F. L. (2012). *Housing Quality in Informal Settlements and Urban Upgrading in Ibadan, Nigeria :A Case Study of Apete in Ibadan*. *Developing Country Studies*, 2(10).
- 47-Ahsan, M. and Özbakir, B. A. (2023). Empirical evidence on analysing the quality of life of informal settlement for regeneration project: case study of Boa Wala Settlement, Lahore. *Int. J. Multidisciplinary Res. Analysis*, 6(1):236-248. doi:10.47191/ijmra/v6-i1-29
- 48-Opoko, A.; Oluwatayo, A.; Ezema, I. and Opoko, C.A. (2016). Residents Perception of Housing Quality in an Informal Settlement. Ota, Ogun State, Nigeria: *International J. Appl. Engin. Res.*, 11(4):2525-2534
- 49- Ghaderpour, et al., (2021). Analysis and Measurement of Parameters of Quality of Life in Informal Settlements Surrounding of Tehran Metropolis. *Hindawi, Mathematical Problems in Engineering*.
- 50-Bache, I. (2013). *Measuring Quality of Life for Public Policy: An Idea Whose Time has Come? Agenda-Setting Dynamics in the European Union*. *J. European Public Policy*.
- 51-محمد، س. ع. (2011). جودة الحياة واستراتيجيات التعايش (المواجهة) للصم وضعاف السمع. مجلة كلية التربية- جامعة بنها.
- 52-Pourahmad, A., et al. (2018). Measurement of quality of life in informal settlements. Case study: Islamabad neighborhood of Tehran. *Urban Social Geography*, 1-22.
- 53-Amit, P., et al. (2022). Predicting housing deprivation from space in the slums of Dhaka. *Environment and Planning B: Urban Analytics and City Science*, 49(8): 2112–2128. doi:10.1177/23998083221123589
- 54-Weimann, A. and Oni, T. (2019). A Systematised review of the health impact of urban informal settlements and implications for upgrading interventions in south Africa, a rapidly urbanising middle-income country. *Int. J. Environ. Res. Public Health*. 16(19):3608. doi: 10.3390/ijerph16193608.
- 55-Smith, K. and Berlanda, T. (2019). *Strategies for improving informal settlements*. Global Health Equity- University at Buffalo.
- 56-Zakerhaghghi, K.; Khanian, M. and Gheitarani, N. (2014). Subjective quality of life; assessment of residents of informal settlements in Iran (A Case Study of Hesar Imam

**Methodical assessment of the integration of quality-of-life indicators
into Egypt's informal housing policies**

- Khomeini, Hamedan). Applied Research in Quality of Life. DOI: 10.1007/s11482-014-9320-8
- 57- كريمة احمد شوقي، و مها عزالدين (2022). مؤشرات تقييم استدامة مشروعات إعادة تسكين المناطق غير الامنة (دراسة حالة منطقة روضة السيدة زينب). Journal of Urban Research. - مجلد ٤٣ عدد (١): ٢٣-٤٣. doi:https://dx.doi.org/10.21608/jur.2021.79379.1069
- 58- Heba, N. (2023). Green recovery and sustainable reconstruction policies to deal with slums in Egypt Case Study: Izbet Khairallah. African J. Biol. Sci., 19 (1): 101-123.
- 59-Farhanisadr, N. and Davoudpour, Z. (2017). Evaluation of quality of life in urban informal settlements in urban management perspective, case study: city of Mahshahr. Faculty of Business Economics and Entrepreneurship International Review Special Issues.
- 60-Yousef, G.; Mohammad, R.A.T.; Bahareh, R.; Mona, M.; Mohammad, H.A. and Ali, S. (2021). Analysis and Measurement of parameters of quality of life in informal settlements surrounding of Tehran Metropolis. Mathematical Problems in Engineering, vol. 2021, Article ID 4759461, 10 pages. <https://doi.org/10.1155/2021/4759461>
- 61-Hammad, A.A. (2021). Exploring the Role of Slum Tourism in Developing Slums in Egypt: Applied on Slums of Alexandria City. J. Association of Arab Universities for Tourism and Hospitality, 58-77.
- 62- Mabrouk, M.A. (2003). Environmental dimension of projects to upgrade the indiscriminate environment in the Arab Republic of Egypt. An unpublished thesis, a thesis submitted to obtain a master's degree in urban planning - Faculty of Engineering - Cairo University
- 63- Faraj, M.S. (2011). Strategies for the development of informal areas in Gaza governorates Gaza: an unpublished thesis, a master's thesis submitted to the Department of Architecture, Faculty of Engineering, Islamic University of Gaza.
- 64- Ahmed, A. and Kariman, S. (2018). Urban analysis for informal housing areas "Urban form indicators for replacement projects of deteriorated housing areas. Journal of Urban Res., 29(1)51-74. doi:https://dx.doi.org/10.21608/jur.2018.88620
- 65-Ángela, A., et al. (2022). Domains of deprivation framework" for mapping slums, informal settlements, and other deprived areas in LMICs to improve urban planning and policy: A scoping review. Comput. Environ. Urban Syst. doi:10.20944/PREPRINTS202102.0242.V1
- 66-Enwin, A.; Nkpite, B.-E. and Kianen, B. (2021). Appraising the challenges faced by informal settlement settlers in planned neighborhood development of Eagle island, Port Harcourt. Am. J. Engin. Res. (AJER), 10(8):1-6.
- 67-Porio, E. Kombe, W. and Loyzaga, A. Y. (2018). Housing and Informal Settlements. New York: Cambridge University Press.
- 68-Basile, P. and Ehlenz, M. (2021). A Framework for Informal Settlements and Community Land Trusts. Retrieved from patriciabasile: <https://patriciabasile.org/2021/02/27/a-framework-for-informal-settlements-and-community-land-trusts/>
- 69-Luthango, M.B.; Reyes, E. and Gubevu, M. (2016). Informal settlement upgrading and safety: experiences from Cape Town, South Africa. J. Housing and the Built Environment, 471-493.
- 70-Satterthwaite, D. (2012). Upgrading Informal Settlements. In: S.J. Smith, M. Elsinga, L.F. O'Mahony, O. S. Eng, S. Wachter, & K. Datta, International Encyclopedia of Housing and Home (pp. 206-211). Oxford: Elsevier.
- 71- Niya, A.M and Mosayyebzadeh, A (2022). Investigating the dimensions of quality of life in informal settlements a case study the Urmia city. J. Geographical Urban Planning Res., 10(1):187-205.

- 72-Moghadam, S.K.; Mozaffar, F. and Hosseini, B. (2014). Determining social capital indicators affecting the residents life quality in informal settlements. *Current World Environment*, 243-252.
- 73-Winter, S.C.; Obara, L.M. and Barchi, F. (2019). Environmental correlates of health-related quality of life among women living in informal settlements in Kenya. *Int. J. Environ. Res. Public Health*. 2019 Oct 17;16(20):3948. doi: 10.3390/ijerph16203948.
- 74-UN-DESA. (2022). The Sustainable Development Goals Report 2022. United Nations Statistics Division.
- 75-El Menshawy, A.; Aly, S.S. and Salman, A.M. (2011). Sustainable upgrading of informal settlements in the developing world, case study: Ezzbet Abd El Meniem Riyadh, Alexandria, Egypt. *Procedia Engineering* 21 (2011) 168 – 177.
- 76-Maganadisa, K.; Letsoko, V. and Pretorius, O. (2021). Effectiveness of in situ upgrading in improving the quality of life of beneficiaries living in informal settlements in south Africa. *REAL CORP*, (pp. 301-312). Vienna, Austria.
- 77-Neves, P. (2020). SDGs to Improve quality of life in informal settlements bishkek program for Ak-Bosogo, Archa-Beshik, Bakai-Ata, Kalis Ordo and Rukhiy Muras. *UNECE webinar to start-up Bishkek Program*. Bishkek- Kyrgyzstan: UNECE .
- 78-Haas, A.R. (2021). *Can We Do Informal Housing Better?* New-York: CIC- Pathfinders.

التقييم المنهجي لدمج مؤشرات جودة الحياة في سياسات الإسكان الغير رسمي في مصر

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المستخلص

يقدم هذا البحث دراسة للعلاقة التفاعلية بين المجتمع والبيئة العمرانية من ناحية، ومفهوم جودة الحياة من خلال مؤشرات الرئيسية التي لا بد من توافرها في المجتمع من ناحية أخرى، الى جانب تحليل المعايير والمؤشرات المرتبطة بالسكان وسلوك الأفراد في المجتمع، وكذلك مدي رضا الأفراد عن المنطقة السكنية التي يقطنوها، مع دراسة لبعض التجارب المحلية والعالمية التي قامت بتحليل مفهوم جودة الحياة.

وقد استخلص البحث أن مفهوم جودة الحياة له نطاق واسع يشمل داخله العديد من المؤشرات المختلفة، وقد وجد ان هناك علاقة بين مفهوم جودة الحياة وسياسات التعامل مع مناطق الإسكان غير الرسمي حيث أنه من طرق تحسين سياسات الإسكان غير الرسمي. وقد وجد انه من الضروري دمج المشاركة المجتمعية في عمليات التحسين الحضري لمساعدة الفقراء الذين لا يستطيعون رعاية احتياجاتهم من توفير السكن اللائق.

وقد تضمنت هذه الدراسة أربعة محاور: (١) جودة الحياة (مفاهيم وآراء) ، (٢) سياسات التعامل مع مناطق الإسكان غير الرسمي ، (٣) نتائج التجارب العالمية في التعامل مع مناطق الإسكان غير الرسمي ، (٤) مؤشرات جودة الحياة المقترحة. وأخيرا يقدم البحث مجموعة من التوصيات بهدف تعزيز العلاقة بين طرق تحسين سياسات الإسكان غير الرسمي وتحسين جودة الحياة عن طريق قياس مؤشرات جودة الحياة العمرانية والبيئية التي تؤثر على اختيار سياسات الإسكان الغير رسمي.

الكلمات الدالة: جودة الحياة – الإسكان غير الرسمي – مؤشرات جودة الحياة العمرانية – مؤشرات جودة الحياة البيئية.