



Participatory Methods for Urban Development



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Abstract: Many developing countries as well as some developed countries suffer from the problem of slums. They constitute a real defect in the economic and social development plan of the concerned countries. The methods used to finance development projects in countries vary according to the different social, economic, and legislative influences. The process of providing the expenses required for these projects is one of the most important problems that governments face. The study aims to establish some rules and principles in a proposed theoretical framework and to document some of the experiences of supporting cities globally as well as in the African and Arab countries, by using a general analysis model that includes Egyptian experiences to understand the most important problems related to sustainable development and how to achieve efficiency and effectiveness in the development of urban planning and management. An analytical study is conducted to the experience of participatory development of Manshiyet Nasser is presented and the proposed development programs to determine their advantages and disadvantages. The study concluded to identifying several recommendations for dealing with slums and setting an integrated urban development model for low-income areas that can be replicated in other similar sites. The study also concluded that in development projects, focus is placed on popular participation and decentralization in decision-making, seeking to solve existing problems in society and taking the initiative to experiment new methods from which the government refrains for fear of failure.

Keywords: Sustainable urban development; Slums; community participation; Manshiyet Nasser; The Millennium Development Goals

1. Introduction

The problem of slums is one of the most important challenges threatening Egypt. As a result of the increasing size of this problem and its critical repercussions during the past three decades, it has become one of the pressing problems that need a comprehensive confrontation to limit its spread and mitigate its negative impacts [1].

"Informal housing represents the people's attempt to provide immediate housing on their own" especially with the intensification of the housing crisis (in all its aspects) and the small number of housing units offered to suit their low incomes. Therefore, they resorted to building communities without direction, supervision or planning from the country [2].

The continued growth of slums, which are called "cancerous areas" because they are (rapidly growing and inflationary - irregular in shape – and difficult to reduce or control) and the consequent pressure on facilities and infrastructure networks, were both reflected in the image of the deteriorated existing residential areas and the deterioration of the environment in addition to the low indicators of quality of life and its validity in slums.

The problem of slums should not be dealt with through short plans that depend on transferring their residents to alternative housing units, but rather it should be dealt with through a long-term strategy in which the ministries of housing and utilities, urban development, agriculture, irrigation, and water resources participate. This depends essentially on urban development in Egypt as a whole [3].

Egypt has sought to find an appropriate method of financing to get rid of these slums that pose a threat to the lives of its residents. In recognition of the importance of Egypt's role in the world in general and the Middle East in particular, many donor organizations have prepared development strategies that aim to achieve sustainable

development in light of the current challenges facing Egypt, which requires more efforts by the Egyptian government and development partners alike to achieve the Millennium Development Goals Donor countries such as the United States of America, the European Union and international funding agencies such as the World Bank as well as international organizations of the United Nations such as the United Nations Human Settlements Program (Habitat) to aid the developing world in improving their urban environment [4].

This study is based on Participation in the development of informal areas is essential where there is a feeling of marginalization, neglect and mistrust between the residents and their government. Through participation, residents develop a sense of ownership of public services and a sense of pride in their area. However, the effective participation of residents of informal areas in planning and implementing development procedures requires decentralized government administrative structures that are activated and enhanced by integrating participation in the institutional framework and developing the capabilities of workers implementing it.

The Egyptian government along with the German government agreed to choose an area of a high population density to be developed through a participatory development methodology. Thus, Manshiyet Nasser neighborhood was chosen as the largest slum in the governorate. Despite of the suggestions to remove it, the Egyptian government decided to develop it through improving and raising the efficiency of the level of services. Therefore, Manshiyet Nasser neighborhood is a suitable choice for the Egyptian-German cooperation.

2. Theoretical Background

In the field of urbanization, the difference between the concept of degraded areas and the concept of slums lies in the legal form of the area (Figure 1). The absence of planning and the lack of services and facilities is a subject of controversy, as there are old neighborhoods that suffer from problems like slums, despite their planning or legal status. However, the concept of slum becomes more comprehensive by taking the urban situation into consideration as a priority.

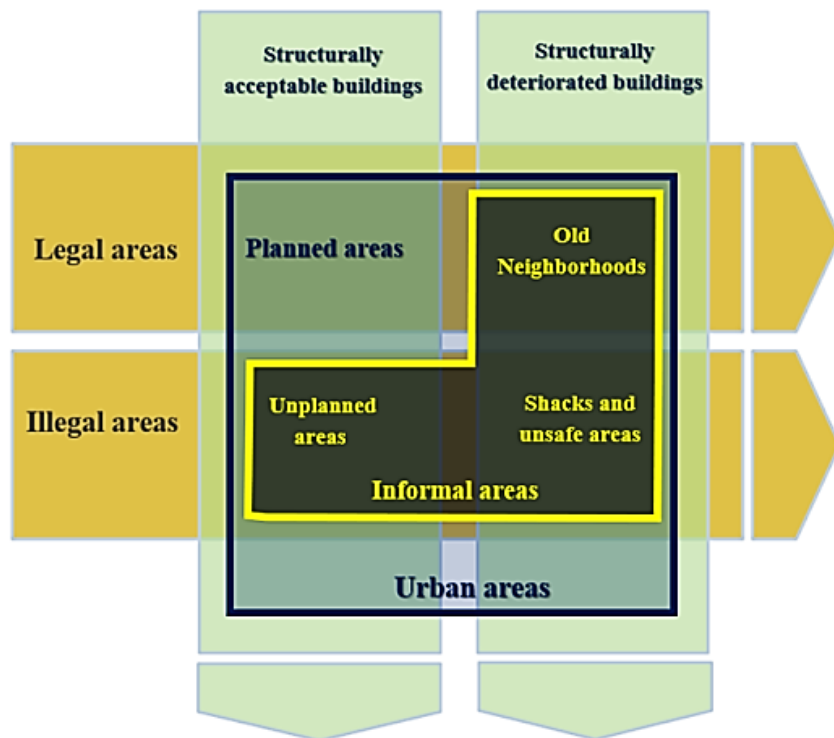


Figure 1. Classification of urban areas according to the legal and construction status (researchers)

The new Building and Urban Planning Law (Law No. 119 of 2008) defines informal areas and categorizes them into two main types [5] as shown in Table 1.

The emergence of slums in the world began on the outskirts of cities with high population density, such as Cairo, Damascus, and Casablanca. A study conducted by the Arab Institute for Urban Development revealed that about 60% of slums in communities are located on the outskirts of cities where 30 % are outside the urban area and 8 % in the center of the capital. In addition, the study indicated that 70 % of those slums were built individually and 22 % were built collectively. In the following, (Figure 2). shows in pictures the largest examples of slums in the world while (Figure 3). shows some global examples to support Cities in the development of slums.

Table 1. Types of slums in Egypt (according to Central Agency for Public Mobilization and Statistics Agency 2020) [1]

Type	Unsafe areas	Unplanned areas
Definition	Areas which does not us its privileged location in an appropriate manner	Areas that have not been developed according to detailed plans or land division plans and are not subject to planning and building requirements
Density	60% of the urban mass 200 people / acre	60% of the urban population people / acre
Building heights	1 - 2 floors	2 - 14 floors
Housing	No safe housing. Requires immediate critical intervention	A minimum of safe housing Requires medium and long-term development

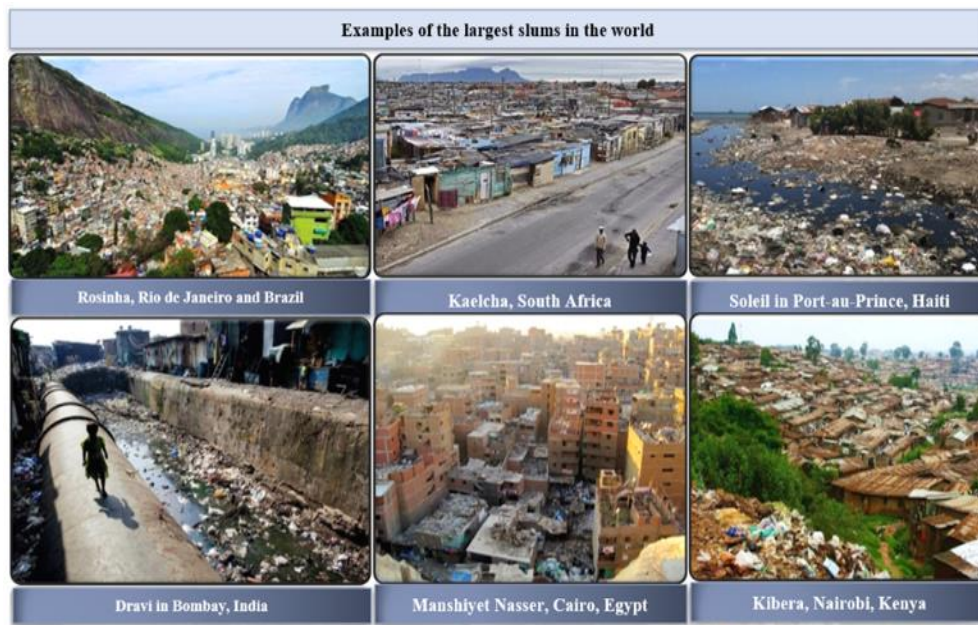


Figure 2. Examples of the largest slums in the world (researchers)

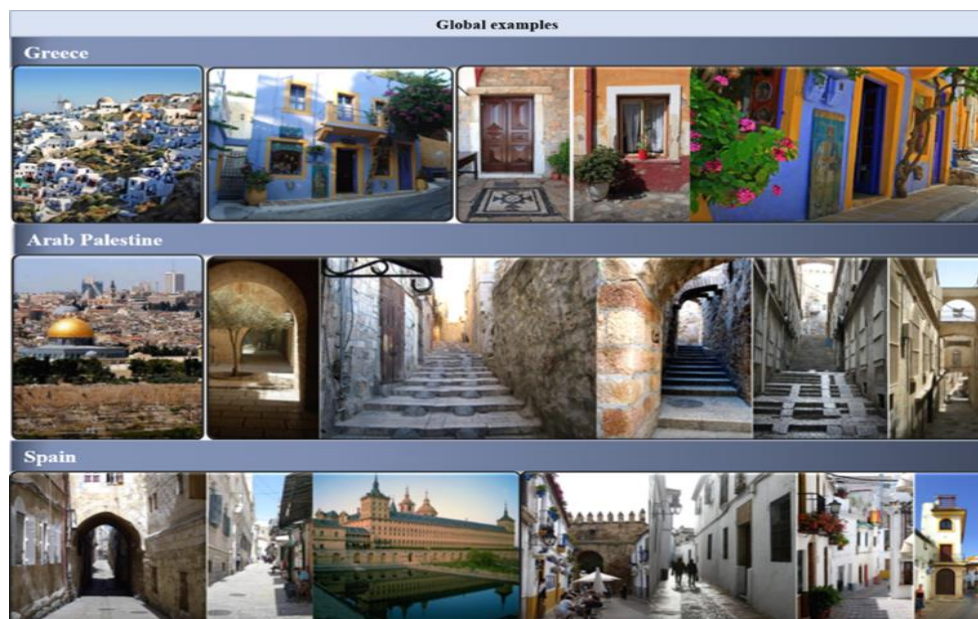


Figure 3. Global examples (researchers)

2.1 Model Responses

Despite the efforts made to control the growth of informal areas, they are increasing steadily. Thus, removing them and providing alternatives of formal housing for all their residents or compensating them for their investments becomes impossible due to the magnitude of this phenomenon and the limited resources allocated for this purpose compared to other development priorities.

Development is the only possible option in dealing with these areas, and many interventions can be carried out aiming to improve the living conditions of its residents. Each of these interventions focuses on different aspects of the living environment, such as urban improvements or human and social development. In addition, urbanization can target integrated development and focus on solving critical problems according to the priorities of the needs of the population.

Based on the diversity in development patterns, it is important that all concerned parties agree on development objectives and interventions leading to them before starting any project [6].

The following is a presentation of the different ways of dealing with informal areas (Table 2).

Table 2. Methods of dealing with informal areas

The method	Description
Supplying informal areas with public utilities	<p>This method of dealing allows the provision of public facilities and basic services to the informal areas. The focus is on urban improvements in the informal areas by implementing some or all of the following measures:</p> <ul style="list-style-type: none"> • Improving access and movement hubs in the area • Paving and lighting of main roads • Connecting or developing utilities (water, sewage, and electricity) • Introducing and improving the waste collection system • Establishing or developing public services (schools, health units, bakeries, youth centers, police stations, fire stations, etc.) • Organizing street markets and microbus stops
Sectorial development	<p>Sectorial development is not limited to service improvement or material development. Donor agencies and NGOs target informal areas with social and economic programs such as microcredit projects, health awareness programs, etc.</p> <p>Most of the urban development and public services in informal areas in Egypt fall under the umbrella of sectorial development. These initiatives might be provided by from ministries, donor agencies, the private sector or large NGOs.</p>
Complete redevelopment of informal areas at the same site	<ul style="list-style-type: none"> • This mode of intervention refers to the complete replacement of the urban structure through gradual demolition and the construction of alternative housing on the same site. • It respects the legal right of residents to alternative housing taking into account the dependence of their livelihood on staying in the same location of the city. • It targets informal areas where building conditions are severely degraded, urban fabric is uneven, construction is unsafe, and tenure is illegal.
Complete redevelopment with relocation of residents to another place	<ul style="list-style-type: none"> • It includes the complete removal of informal enclaves as well as the resettlement of residents, as they are often transferred to new government housing projects on the outskirts of the city or in new cities. • It mainly applies to slums in distinctive sites targeted for redevelopment to benefit from selling part of the high-value lands or investing them in real estate. • This pattern was adopted in Egypt with unsafe slums that pose a danger to its residents.

2.2 An Introduction to Participatory Development of Informal Areas

For the development policy to achieve the globally agreed goals in terms of sustainable urban development and social integrity, it must focus on the population and involve them in improving the areas and the living conditions.

Participation in the development of informal areas is essential where there is a feeling of marginalization, neglect and mistrust between the residents and their government. Through participation, residents develop a sense of ownership of public services and a sense of pride in their area. However, the effective participation of residents of informal areas in planning and implementing development procedures requires decentralized government administrative structures that are activated and enhanced by integrating participation in the institutional framework and developing the capabilities of workers implementing it [7].

Although most specialists, concerned parties and practitioners of the community development process agree on the importance of community participation in local development processes, there is no unified concept of participation. Participation is a complex and multidimensional concept. Some of the most important definitions of participation are listed in Table 3.

Table 3. The concept of community participation

Place	Definition
The United Nations body	That process by which efforts can be directed to both the people and the government to improve the social and economic conditions in the local communities to help them integrate into the life of the nation and contribute to its progress as much as possible.
The World Bank	A process by which users influence, participate and control the setting of priorities and decision-making, directing resources and public services.
The Canadian International Development Agency	It promotes self-help through an approach characterized by the participation of the target groups in the design, implementation and evaluation of projects, with the aim of building the capacities of the poor to preserve the project's developmental gains and ensure its sustainability.

2.3 The Millennium Development Goals Document

It is a document signed by many countries of the world, including Egypt. It included basic challenges for the world to face, foremost of which is combating poverty, securing adequate housing, securing tenure, developing education, bridging the quality gap, empowering women, promoting gender equality, developing health services and reproductive health...etc. The principles of this document are mainly concerned with improving the urban and living conditions in degraded and slum areas [8]. There are three basic principles.

The first principle: Emphasizing the concept of a strong civil society, meaning effectiveness and efficiency in achieving goals and reaching target groups.

The second principle: Emphasizing the value of partnership, an idea that emerged in the nineties of the twentieth century and was stipulated in international charters starting with Cairo Conference on Population and Development in 1994.

The third principle: Basic community participation, i.e., mobilizing citizens in the local community to contribute to facing the challenges of human development.

2.4 Community Engagement Goals

1. Contribution to the costs of the project, where the participants are required to contribute money, labor, or raw materials during the implementation of the project or during the operation phase.

2. Increasing the efficiency of the project, by seeking the opinions of the beneficiaries during the planning of the project or the participation of the beneficiaries during the management of the implementation process or the operation of the project.

3. Increasing the effectiveness of the project, with the participation of the largest number of beneficiaries, to ensure that the project achieves its objectives, and to ensure that the benefits go to the concerned groups.

4. Building the capacity of the beneficiaries by ensuring that the participants are linked to the process of planning and implementing of the project (such as forming self-service building groups), or through training and activities that increase the degree of awareness of community members in general and leaders.

5. Developing a sense of responsibility. This part is concerned with trying to increase the control of society members over the resources and decisions that affect their lives.

2.5 The Importance of Community Participation in the Development Processes in Slums

In this context, the importance of participation in the fields of development in general, and the development of poor communities represented in degraded and slum areas, can be summarized in the following elements [9].

1. Investing the civil, financial, and human efforts and capabilities available in the community which leads to alleviating the burdens placed on the country.

2. Creating and discovering influential and effective local leaders in various aspects of social work.

3. Achieving the goals of the development process, which depend on community work and their response to the development demands.

4. Strengthening the link between the people and the social projects that serve their interests and expanding the scope of services.

5. Developing a sense of collective responsibility and overcoming the negative and isolationist values in the society.

6. Strengthening human relations and bonds between individuals, families and groups and achieving social balance.

3. Participatory Informal Area Development Methodology

Participatory development methodologies vary in their types of interventions in the targeted communities; some

of them are preparatory, with the aim of exploring and analyzing the situation in each informal area, while some other methodologies are concerned with the implementation and making of tangible improvements. This last type of strategic method helps to obtain a general picture of the current situation and the tangible impact of development. All methodologies are linked to each other, and Figure 4 illustrates the methodology of developing informal areas with participation.

Table 4. Participatory development methodology of informal areas

Participatory development methodology of informal areas	
Exchange of information	It is considered one of the main methodologies for the development of informal areas by participation, where information about decisions related to plans, approved budgets, projects, time frame and results is circulated by the government, while information about needs, priorities, resources and local activities is circulated by the parties concerned with the local community.
Determine the general direction and strategy for dealing with informal areas	It is important to categorize informal areas and determine the best intervention strategies for each category. Accordingly, an official register of informal areas should be issued and made available to the public, which contributes to achieving sustainable urban development and supports good governance.
The Canadian International Development Agency	It promotes self-help through an approach characterized by the participation of the target groups in the design, implementation and evaluation of projects, with the aim of building the capacities of the poor to preserve the project's developmental gains and ensure its sustainability.
The cooperation of the parties involved	Many diverse parties involved in the development process collaborate to discuss, organize, and carry out each action in harmony. These parties operate and interact at many different levels (local - regional - national). To encourage stakeholder collaboration in the participatory development process, decision-makers must have a clear grasp of the various stakeholders' roles. This comprehension serves as the foundation for developing and promoting the participatory framework and motivating all parties to contribute. To achieve this, two tools can be used: stakeholder analysis, management of relationships between them, and resource mobilization and coordination.
Supporting self-effort initiatives	Supporting self-effort initiatives is an effective method to reduce poverty within the local community. Support and promotion of local initiatives can take the form of facilitating administrative processes for community activities, enhancing public services in response to citizens' requests, or addressing an urban problem that affects the area, such as clearing the accumulated trash. It can also take the form of giving grants to local communities to carry out specific projects that address local priorities.
Recognizing the local community	Participatory development requires knowledge of the local organizational problems, resources, and capacities in each informal area. Residents are usually fully aware of their community, their built environment, their position on planned interventions, common and different interests, and top priorities. They can provide innovative solutions to suit their local needs. Moreover, assessing the capacities of NGOs is essential to qualify them to participate effectively in the local development process. The methodology of identifying the local community can be applied through the following tools: Participatory needs assessment and capacity assessment of development partners.
Integrated development planning and management	Planning is a process of converting the priorities of society's needs into necessary activities (projects or procedures) by employing available resources, whether local or external, with the aim of meeting those needs, identifying resource deficiencies, and making lists of projects that need investments. Participation of the local community in the budget planning process would make the allocation of government resources more effective, which in turn leads to empowering citizens and building confidence in their own capabilities and in the credibility of government agencies and NGOs. This methodology can be applied through the two tools: planning and participatory budget planning and participatory management of public utilities [10].
Direction towards impact assessment	Assessing the extent of the impact of these projects in improving the living conditions of the community in a comprehensive way. This methodology of moving towards impact assessment can be applied through a set of simple and easy-to-use methods represented in: <ul style="list-style-type: none"> Referring to the beneficiaries and ask them about the development they feel with each improved intervention or service. Asking other local stakeholders about the mode of operation of that service and the extent of its sustainability. This assessment must be conducted by an unbiased body. The results must be well analyzed and made available to local stakeholders for consideration in future plans and interventions. The relevant departments must respond to the assessment's recommendations, which improves the efficiency and effectiveness of services and enhances confidence.

Participatory development methodologies require implementation steps by decision makers and stakeholders at the three levels: local (such as local communities and neighborhood administrations), regional (such as governorate administration) and national (such as ministries) [11]. The above Table 4 is a presentation of the stages of the participatory development methodology of informal areas.

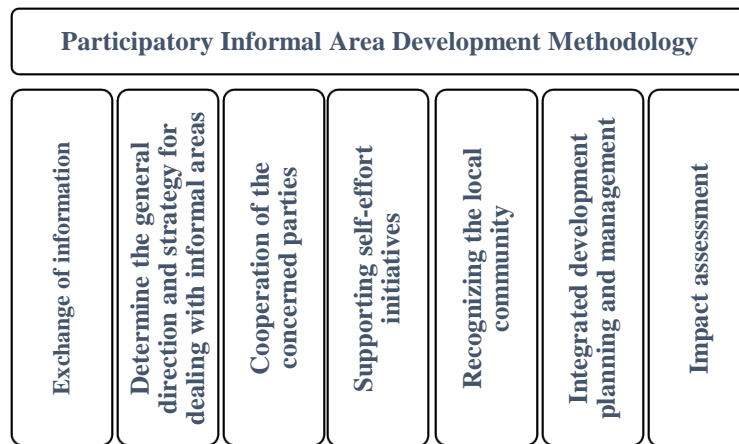


Figure 4. Methodology for developing informal participatory areas, source: Participatory Development Program in Urban Areas in Egypt (2011) Participatory Development of Informal Areas - Guidelines for Decision Makers - German Development Cooperation (GIZ)

4. Participatory Development of Case Study

The experience of participatory development of Manshiyet Nasser is presented as follows:

4.1 Definition of the Study Area and Reasons for Selection

Manshiyet Nasser is located within the Greater Cairo Region in Cairo Governorate, east of the Autostradas Road and the Fatimid Cairo area, near the center of Cairo (Figure 5).

The area of Manshiyet Nasser is estimated at about 850 acres, with a population of 350 thousand people, i.e., with a total density of about 400 people/acre which is considered one of the high rates. Manshiyet Nasser includes several homogeneous areas in terms of urban, economic, and social characteristics, which are: Al-Khazan area, Al-Mahajar area, sheltering area, Ezbet Bakhit, Al-Duwaiqa, below the artisans' mountain, Al-Razzaz, Al-Ma'adasah, Al-Za'rib and Al-Herafian areas.

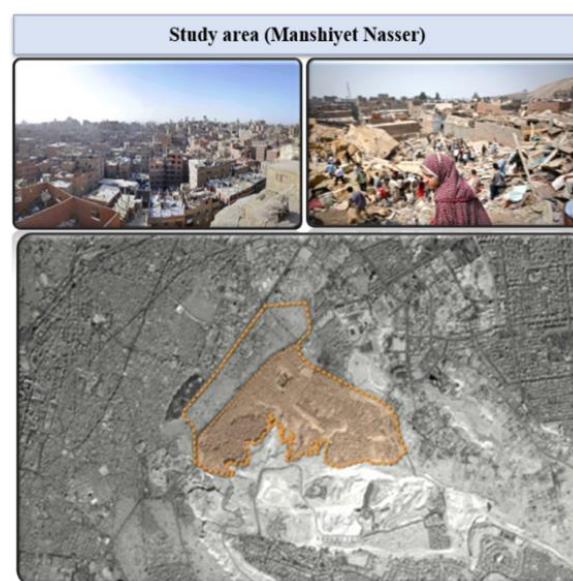


Figure 5. Study area (Manshiyet Nasser)

4.2 Background on the Organization that Carried out the Project and Its Goals

GIZ is a German development agency that pursues in its activities the model of sustainable development Table 5, which aims to strike a balance between economic development, social inclusion, and environmental protection.

Table 5. The German Agency for Technical Assistance (GIZ)

The German Agency for Technical Assistance (GIZ)	
Establishment	The German Agency for Technical Cooperation was established in 1974 as a limited liability company for the implementation of non-profit projects. Utilizing human resources and individual efforts in collaboration with institutions, moving away from central administration, and achieving self-management through structured programs.
Objectives	Maintaining appropriate living conditions and a reasonable standard of living for the people, protecting and advancing human rights, enacting the basic principles of a democratic government, and encouraging environmental balance.
Policy/Vision	The German Agency focuses on areas and sectors with an economic impact on the society of developing countries and on social development that has a positive impact on the situation of the population, especially the low-income, and gives priority to combating poverty, promoting education, training and urban development to the dilapidated urban environment. It also focuses on following the method of population participation in the development process as a principle essential to further development.
Projects	The German financial cooperation is based on supporting rural development programs, equipping medium-sized cities with basic facilities and services, helping to solve the problems of urban deteriorating areas and slums on the outskirts of major cities, supporting technical cooperation, implementing national training programs and other measures in the field of human resource development.

4.3 Reason for Choosing the Area as a Case Study

The Egyptian government along with the German government agreed to choose an area of a high population density to be developed through a participatory development methodology. Thus, Manshiyet Nasser neighborhood was chosen as the largest slum in the governorate. Despite of the suggestions to remove it, the Egyptian government decided to develop it through improving and raising the efficiency of the level of services. Therefore, Manshiyet Nasser neighborhood is a suitable choice for the Egyptian-German cooperation.

4.4 Monitoring Problems for the Study Area

The urban fabric in the region is a random fabric that has many disadvantages related to the lighting and ventilation of the dwellings, the narrowness of the streets, the lack of open spaces, the high population density, and the poor living conditions. The buildings in Manshiyet Nasser are characterized by their deteriorating condition in terms of construction and health specifications, facilities, construction materials and the aesthetic form. There is no architectural character for the area as there are no requirements or limitations for construction Table 6.

These problems can be summarized as follows:

- The high rate of poverty, unemployment, and illiteracy
- Few and inappropriate entrances to and from the area
- Narrow roads, lanes, and steep slopes
- Inadequate sewage, water, energy, and communications networks
- A deficit in schools, health services and public services
- Existence of dangerous mountain edges and geological faults
- The inefficiency of the solid waste collection and disposal process
- The instability of the property situation and the increasing urban growth

The study of the current situation of Manshiyet Nasser focuses on the environmental, social, and economic aspects in addition to the existing infrastructure. Thus, the problems were identified and prioritized (Figure 6), the main determinants of the region were identified, the available capabilities were determined, and the extension area was observed as a replacement and development area to improve the environmental conditions of living for its inhabitants. Based on the foregoing, the general plan for Manshiyet Nasser was drawn up along with the required services programs, and stages for the implementation of the general plan. The need for resettlement is linked to two parts:

- Removing some buildings to reduce the risk of housing above and below the edges of the cliff.
- Removing some buildings to widen the roads, in addition to some simple removals required to create open areas and spaces for public services. Thus, the number of properties, families and commercial establishments that will be affected has been estimated according to the preferred alternative.

Table 6. Monitoring problems for the study area

Type	Description
Site planning problems	Inside Luxor and Al Orouba Streets
	<ul style="list-style-type: none"> • Inadequate entrances and exits for automatic traffic to and from the area. • The narrowness of the main streets in a way that does not allow for services of fire trucks, ambulances...etc. • Mixing in land uses. • The deteriorating condition of most of the buildings. • Lack of yards, green areas and children's playgrounds. • Lack of services such as markets ...etc.
	At the general level
Urban problems	<ul style="list-style-type: none"> • Ezbet Bakhit's relationship with the surrounding area from the north of the highway. • To the east, the railway line (currently idle) and the obstacle it represents to connect the networks of Izbat Bakhit to the public network (Al-Tayaran Street). • The lack of entrances to the south and west of the area due to the hills surrounding Ezbet Bakhit (Duwaiqa) which poses a danger due to the falling rocks on the buildings of the area.
	<ul style="list-style-type: none"> • The mountainous nature of the area. • Instability and the occurrence of collapses in the rocks in the mountainous area of Mansheya, such as what happened in the Duwaiqa incident 2008, which led to the suspension of work on many service buildings located near the unstable rocks, such as: <ul style="list-style-type: none"> • Mubarak School. • Health Center. <p>This made it difficult to connect the areas of Manshiyet.</p> <ul style="list-style-type: none"> • Not exploiting the differences in elevations (the contour) and distorting its image, making it areas for littering from Ezbet Bakhit and Al-Duwaiqa. • Irregular urbanization in the area, especially (Ezbet Bakhit, Al-Orouba Street). • The poor aesthetic condition of all the buildings in addition to the structural deterioration of many buildings. • The problems in the drainage network in many buildings, which has negative effects on the construction, as well as the finishing of the external facades of the buildings. • The lack of internal transportation to connect the parts of area, except for a small number at the entrance to the housing area in the direction of the railway.
	<ul style="list-style-type: none"> • An increase in the average number of family members in the area, which is estimated at 8 as the average number of members per family. <p>The high rate of illiteracy, where:</p> <ul style="list-style-type: none"> • It reaches 52.9% for the area as a whole. • It reaches 61.1% in Ezbet Bakhit. • The percentage of those who have obtained a university degree in Izbat Bakhit doesn't exceed 1%. • High unemployment rate in the area: • Most of the residents of the region work in small companies and informal sectors, and accordingly, the economic recession has led to high unemployment rates.
Social problems	

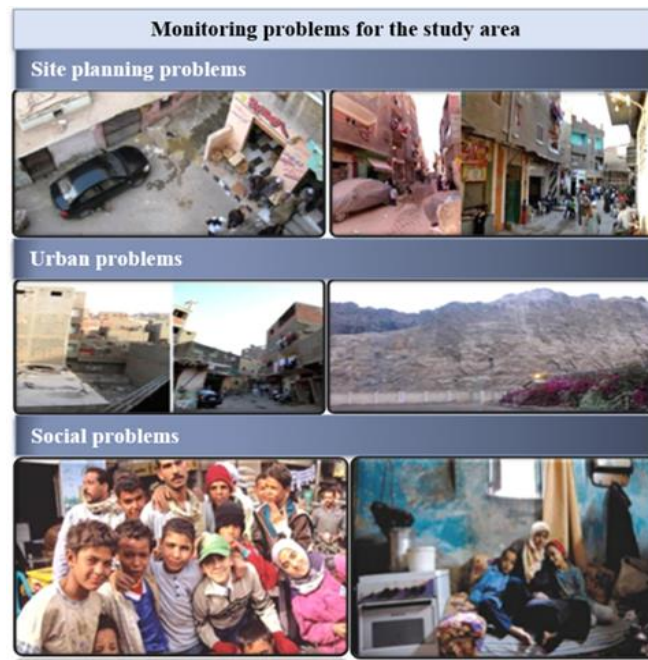


Figure 6. Problems for the study area

5. The General Strategy for Development

The general strategy for the development of the Manshiyet Nasser deals with several topics while exploiting the common capabilities. Based on this integrated framework of the planning process, several principles were adopted, which are considered essential to build a strategy for the development of the area. These principles are as follows:

A: Connecting the area schematically to Cairo:

This is due to its strategically important location in that it is an area that attracts informal slum housing for workers in Cairo, with the presence of many economic and service activities associated with the region, especially Fatimid Cairo.

B: Emphasizing social and economic development:

Although many aspects of the plan are concerned with urban improvements in the area, it is important not to ignore the large number of families with very low incomes who live in Manshiyet Nasser and face many difficulties. The problem is mainly related to poverty, unemployment, security and lack of economic opportunities.

Therefore, these problems (including human resource development) must be addressed as a priority when conducting development plans for the different regions.

C: Progressive development, long-term development, and resilience:

Due to the large size of Manshiyet Nasser, as well as the size of the problems facing the area, it is necessary to set guidelines for development to be implemented over several years. This requires development on several stages (planning areas or specific overlaps). Furthermore, it requires high flexibility in setting development priorities and making decisions as well as the ability to take advantage of opportunities and commitments that are difficult to anticipate in the present time.

D: The importance of the planning process and the participation of the concerned parties:

The indicative scheme is nothing but a map for the development of Manshiyet Nasser. The implementation of such a complex process requires the inclusion of several specific parties from the government along with the local and civil society in the implementation process. The development of Manshiyet Nasser is a project that deals with several new development trends in Egypt. Practical mechanisms must be devised by the concerned institutions to ensure an effective implementation process throughout the stages of planning and implementation of priority areas.

- This approach results in several dependencies:
- The need to develop a number of mechanisms for the different sectors of the local community to express their concerns and to create realistic representation structures
- Continuous participation and coordination of responsibilities between the designated government bodies
- The need to develop a mechanism for expressing concerns and organizing activities that can continue and

- develop with the preparation of detailed plans, programs and the implementation process
- Supporting the role of Manshiyet Nasser development partner group, for which a ministerial decision was issued

E: Maximum participation of the local community and the principles of self-reliance:

One of the basic principles is that development in Manshiyet Nasser must include the people's participation in both planning and implementation. Thus, the local community has an important role in the implementation process and must participate in cash or in kind in several development investments.

F: The minimum resettlement and change in the Urban Fabric:

For social and financial reasons, the detailed plans for Manshiyet Nasser must adhere to the minimum removal of some buildings and the re-housing of the people. The minimum change in the urban fabric means the minimum change in the local social networks, which represents one of the important local strategies in dealing with poverty. Furthermore, the process of re-housing requires high public investments (normally supported), which carries a high economic cost in terms of land value. These principles apply to the development of the study area as well as the larger area included in the master plan.

The projects included in the general plan for the development of Manshiyet Nasser:

The plan mainly aims at the social and economic development of the area in addition to linking the area to the rest of Cairo neighborhoods. To achieve this goal, it was necessary to maximize several activities stemming from the population's capabilities and exploiting the site's supplies and resources, while solving all problems in the site such as garbage, poor entrances, connecting with the surrounding area, and others (Figure 7).

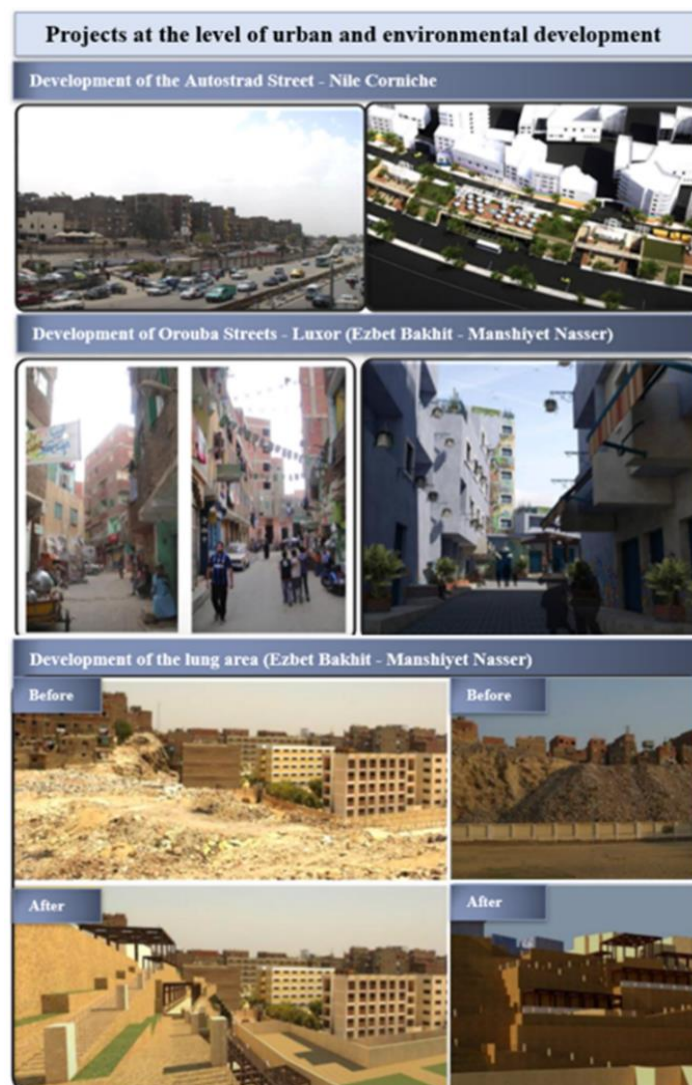


Figure 7. Projects at the level of urban and environmental development



Figure 8. Project of the extension area



Figure 9. Project of the social activities

Several discussions and exchange of ideas and dialogue with many residents of the area and NGOs took place. Based on the study of the site and activities in the study area, it was necessary to work for [12].

- Maximizing the commercial and cultural activity of the region by creating several activities in the upper region at the edge of the plateau (Figure 8).
- Exploiting of the front area from the side of Al-Nasr Street, which is the entrance to the project for community activities
- Coordinating the site and making entrances that help connect the area with the rest of Cairo neighborhoods (Figure 9).

An integrated and balanced urban plan has been prepared, considering the nature and location of the area in the adjacent desert lands, "the extension area", to provide the lands needed to extend services and facilities and reduce densities.

6. Results and Discussion

6.1 Lessons Learned from Manshiyet Nasser Experience

From studying the experience and through field visits, it became clear that there are several positives and negatives of the experience as follows (Tables 7, 8).

Table 7. Lessons learned from Manshiyet Nasser experience

Lessons learned from Manshiyet Nasser experience	
Positives	<ul style="list-style-type: none"> • Civil initiatives are the main driver of development according to the priorities of needs and problems in the different areas of Manshiyet Nasser. • Opening the space for women and youth participation and allowing them to participate in decision-making and new initiatives. • Not wasting real estate wealth in the area, as the same good condition was maintained, while only degraded buildings were removed. • The population's understanding of the development processes and their cooperation with the planning and implementing agencies. • The project focused on developing the capabilities of the people and raising their awareness. • The decentralization of the developed services and the diversification of their distribution in the region. • Discouraging and supporting coordination and cooperation between the organization, civil groups, and existing government services in order to develop new solutions to social and environmental problems and problems related to human resource development in the region.
Negatives	<ul style="list-style-type: none"> • Non-participation of community members and organizations effectively in each of the stages of design, implementation and evaluation of activities. • Failure to provide a large amount of technical support to support groups and NGOs in order to raise their capabilities to create development concepts, follow-up and assessment, and present ideas and projects. • Failure to develop a good plan for the maintenance of the project after its delivery, which led to the failure of the required maintenance.

Table 8. The proposed theoretical framework and the three criteria extracted and their application to case studies

The proposed theoretical framework and the three criteria extracted and their application to case studies	
case studies	Case Study
criteria	Participatory Development of Informal Areas (Development of Manshiyet Nasser)
Improving the quality of life	<p>The positive side: the project focused on developing the capabilities of the people and raising their awareness while maintaining the value of the real estate in the area. Thus, buildings in good condition were preserved, while only the deteriorated ones were removed.</p> <p>The negative side: It is necessary to provide a large amount of technical support in order to increase the capacity of the people to develop concepts, follow-up and assessment. Besides, it is necessary to present ideas, concepts and projects so that groups and NGOs can create and implement development initiatives.</p>
Establishing effective partnerships	<p>The positive side: civil initiatives are the main engine in development according to the priorities of needs and problems in the different areas of Manshiyet Nasser. It contributes to opening the way for women and youth participation and allowing them to participate in decision-making and new initiatives, in addition to the population's understanding of development processes and their cooperation with the planning and implementing agencies.</p> <p>The negative side: coordination and cooperation between the organization, civil groups and existing government services should be encouraged and supported in order to develop new solutions to the various social and environmental problems related to the development of human resources in the region. In these activities, community members and organizations are actively involved in each of the design, implementation and assessment phases of activities.</p>
Sustainability	<p>The positive side: the decentralization of the developed services and the diversification of their distribution in the region.</p> <p>The negative side: the failure to develop a good plan for the maintenance of the project after its completion, which led to the failure to maintain it properly.</p>

7. Conclusion

- The primary goal of developing slums is to raise the standard of living for their residents. To achieve this goal, accurate data must be collected to study and evaluate the status of the region before beginning to re-plan, develop, or clear it.
- When re-planning slums, consideration shall be given to applying planning and design standards in accordance with the provisions of laws and regulations.
- It is necessary to constantly monitor the proposed plans and the current plans besides the continuous evaluation of the implemented plans so that the situation can be adjusted in proportion to the changes and lessons learned.
- The main determinants of the development process are, in their entirety, the outlines of the proposed policy of slums. These determinants include the outlook considering a number of unknown factors that can be drawn from previous experiences that these regions have gone through. Finally, it can be said that the planning strategy for slums should achieve the development goals of the country, to help achieve a sustainable development to serve the present and future generations' welfare.
- In development projects, focus is placed on popular participation and decentralization in decision-making, seeking to solve existing problems in society and taking the initiative to experiment new methods from which the government refrains for fear of failure.
- It is necessary to determine the roles of the two parties, the donor and recipient countries (development partners), have no conflict in their needs, achieve good coordination between them, besides the existence of clear mechanisms for cooperation between them at all levels, starting from the decision-making process to implementation, and distribute tasks and responsibilities in a way that satisfies all parties. In addition, a balance of responsibility and duty must be achieved between donors and recipients of support.
- It is necessary to identify the most important priority projects that meet the needs of the people through the available strengths and opportunities on the one hand and addressing weaknesses and avoiding risks on the other. Responsibilities must be clearly distributed to the various participating parties to ensure that there is no conflict through a general project coordinator.
- It is necessary to enable local communities to participate and follow up in all stages of collecting and analyzing spatial and geographic data using modern technologies in an integrated manner with the experiences of the local population in the development of integrated databases that strongly reflect the current situation and future challenges for the development of the city.
- Future research recommends studying ways to expand the process of participation between international donor organizations and Egyptian universities and their affiliated research centers, to contribute the development of support programs that suit the needs of society.
- Future research recommends studying ways to expand the process of participation between international donor organizations and the private sector in implementing the strategies of various support programs.

Data Availability

The data used to support the research findings are available from the corresponding author upon request.

Conflicts of Interest

The authors declare no conflict of interest.

References

- [1] R. Amany and R. El-Ashmawy, "Strategic actions of urban development to define the intervention policies of slums," *City Territory and Architecture*, vol. 8, no. 1, pp. 1-18, 2021. <https://doi.org/10.1186/s40410-021-00139-w>.
- [2] M. El-Batran and C. Arandel, "A shelter of their own: informal settlement expansion in Greater Cairo and government responses," *Environ. Urban.*, vol. 10, no. 1, pp. 217-232, 1998. <https://doi.org/10.1177/095624789801000109>.
- [3] G. Jawdat and L. Tayoun, "A holistic approach to slum reduction: finding gaps in Cairo's 'how-to-deal' model with international collected experience," *Cities & Health*, vol. 6, no. 1, pp. 22-36, 2022. <https://doi.org/10.1080/23748834.2020.1735156>.
- [4] A. Nour, "Challenges and advantages of community participation as an approach for sustainable urban development in Egypt," *J Sustain. Dev.*, vol. 4, no. 1, pp. 79-79, 2011. <https://doi.org/10.5539/jsd.v4n1p79>.
- [5] M. A. Khalifa, "Redefining slums in Egypt: Unplanned versus unsafe areas," *Habitat. Int.*, vol. 35, no. 1, pp. 40-49, 2011. <https://doi.org/10.1016/j.habitatint.2010.03.004>.

- [6] H. Tomáš, S. Janoušková, and B. Moldan, "Sustainable Development Goals: A need for relevant indicators," *Ecol. Indic.*, vol. 60, pp. 565-573, 2016. <https://doi.org/10.1016/j.ecolind.2015.08.003>.
- [7] A. E. Ahmed and S. El-khateeb, "Mapping Informal Areas in Egypt Between the Past Interventions and Next Urban Revolution," *J. Urban Res.*, vol. 21, no. 1, pp. 116-129, 2016. <https://doi.org/10.21608/jur.2016.89852>.
- [8] F. P. Sakiko, A. E. Yamin, and J. Greenstein, "The power of numbers: a critical review of millennium development goal targets for human development and human rights," *J. Hum. Dev. Capabil.*, vol. 15, no. 2-3, pp. 105-117, 2014. <https://doi.org/10.1080/19452829.2013.864622>.
- [9] J. Minnery, T. Argo, H. Winarso, D. Hau, C. C. Veneracion, D. Forbes, and I. Childs, "Slum upgrading and urban governance: Case studies in three South East Asian cities," *Habit. Int.*, vol. 39, pp. 162-169, 2013. <https://doi.org/10.1016/j.habitatint.2012.12.002>.
- [10] A. Ragheb and R. EL-Ashmawy, "Urban waterfront development for designing space in coastal cities," *Int J. Sustain. Dev. Plan.*, vol. 15, no. 3, pp. 345-352, 2020. <https://doi.org/10.18280/ijstdp.150311>.
- [11] D. K. Shehayeb and K. M. Abdelhalim, "Issues of participation in Egypt," *J. Arch. Plan. Res.*, vol. 2012, pp. 45-64, 2012.
- [12] "Greater Cairo Urban Development Strategy," Unhabitat, 2012, <https://unhabitat.org>.