The Role of Urban Land Management on the Informal Settlements

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Abstract. The research deals with the concept of the Informal settlements, as they are unauthorized subdivisions of lands in the urban environment that start with a sudden invasion on the lands of others without legal capacity, for a specific group of individuals, where they reside their houses, without official permission from the owner. They are located in city centers or urban vacancies. So the paper aims to build a comprehensive theoretical framework for solving and addressing the problem of Informal settlements through the Programs and strategies of the urban land management system. The problems of the Informal settlements (security of tenure, ownership issues, increased demand for shelter, violation of the scheme of land use, basic services) are the main issues and tasks of urban land management. The research defines urban land management as the responsible authority in the urban sector that has the responsibility to solve and address obstacles that prevent achieving urban development aims, including these obstacles (informal settlements, housing, and infrastructure services). The research problem was represented by The lack of a clear perception of the role of urban land management programs and strategies in solving and addressing the problem of the Informal Settlements, while the research hypothesis was that Solving and addressing the problem of Informal Settlements is through the programs and strategies of the urban land management system, which is represented by the formal urban land management programs for informal settlements, a sustainable urban land management system and urban land management development in varying proportions. The paper built a theoretical framework for solving and addressing the problem of Informal settlements through the Programs and strategies of the urban land management system. The research concluded that The importance of programs and strategies for each of (formal urban land management approach, sustainable urban land management system, decentralized urban land management system and urban land management development), including (securing tenure for informal settlement dwellers, developing informal settlement areas and converting them into formal areas, providing basic infrastructure services, developing Participatory approaches between the public and private sectors, community participation, recognition of the right to decent housing), in solving and addressing the problem of informal settlements, albeit partially, which contributes to reducing or limiting the resort to informal settlements and thus their gradual disappearance.

1. Introduction

Obtaining adequate housing with high urban growth rates as a result of natural population growth and internal and external migrations, especially in developing countries, exceeds the capabilities of governments and the competent authorities to meet those housing needs, as a housing gap has been created between the demand for housing and meeting those needs, forcing the population to establish their own housing in an illegal way through the seizure or sudden invasion of others’ lands, whether
they are public or private property, and their units are constructed of poor materials such as boxes or remnants of building materials, etc. and often lack basic infrastructure services. Informal settlements represent one of the obstacles to achieving the aims of sustainable urban development and that the authority responsible in the urban sector for solving and addressing these obstacles is the management of urban land, in addition to the main tasks and issues of urban land management which are the problems of informal settlements represented by secure tenure, property issues, the increasing demand for shelter, a plan violation land use, basic services. The research problem was determined by the lack of a clear perception of the role of urban land management programs and strategies in solving and addressing the problem of the Informal Settlements. The research aims to build a comprehensive theoretical framework for solving and addressing the problem of Informal settlements through the Programs and strategies of urban land management system. While the research hypothesis was that Solving and addressing the problem of Informal Settlements is through the programs and strategies of the urban land management system, which is represented by the formal urban land management programs for informal settlements, a sustainable urban land management system and urban land management development in varying proportions.

To achieve the research aim, the following methodology was followed:

- Building a comprehensive knowledge framework on the concept of informal settlements, the reasons for emergence at the public and private levels, and the general characteristics of informal settlements.
- Building a comprehensive theoretical framework for urban land management programs and strategies.
- Apply the vocabulary of the theoretical framework extracted to an elected sample (two models for two informal settlements).
- Findings, conclusions and recommendations.

2. Informal Settlements Definitions

There are a lot of definitions of informal settlements and their equivalent terms that differ from one country to another due to the difference in the size of the problems that have become large, as each country has tried and is seriously trying to find effective strategic solutions to improve living and housing conditions by identifying the factors and conditions that led to the formation of these housing. (Turner) as architect defined informal settlements as it is one of the manifestations of urban growth, and it is housing units whose forms are distorted and many of them are increasing both over time, constructed from poor building materials and small sizes, not subject to control and bypassing the law, which are outside the control of governments, since obtaining housing exceeds the laws, rules and standards in force [1], and the United Nations Organization (UN-HABITAT) (2003) defined it as residences that were built on others lands without legal status (hand placement) lacking basic urban services and security of tenure, inconsistent with local legal planning and building regulations, these houses are located in Urban neighborhood centers, vacant urban locations along the main roads and periphery of cities (margins). Their residents are constantly subjected to forced evictions, violence and command, social and health status [2].

(Rao) defined it as a term with broad meanings in the architectural and urban context, including poor construction materials used and urban poverty, and they may be carefully planned structures that were exposed to social and political conditions that negatively affected their organization, It is a phenomenon that is identified through the architectural and urban scales (random / non-structural Official/Illegal) Established by non-competent, informal and violating laws and structural standard [3].

3. The reasons for the emergence of the informal settlements in cities

The reasons for the emergence of informal settlements in most countries of the world are a problem that necessitated sudden changes that occurred in cities, and despite the different patterns of development, they are similar in many of the reasons for their emergence and aggravation, the reasons of development were addressed through two levels:

3.1 Reasons of emergence at the general level

(Turner) indicated that there is a correlation between the reasons for the emergence of informal settlements, levels of entry of individuals, and population and that the beginning of urban expansion
was due to the low incomes of individuals [1]. It is believed that New York City was the first informal settlement that was established in (1825) that includes Irish and Italians, as in Figure (1), and it expanded over time to a large informal settlement neighborhood, and after discussions of housing policy and the removal of informal settlements, it turned into neighborhoods (Little Italy, Chinatown, and others) after operations. The huge urban renewal that the city witnessed at the time, but in the year (1890), the freed slaves established the informal village of Seneca (an African American village), as in Figure (2), and after twenty years they were driven out by the wealthy of Manhattan and they established instead (Central Park) a park for their recreation as in the figure (3) [4].

The reasons for the emergence of informal settlements at the general level, were as follows

3.1.1 Organizational planning reasons, represented by: [2]

- Insufficient laws and planning and regulatory standards that have led to increased legal abuses, especially in developing countries, which suffer from overpopulation in a large way.
- In the absence of regulatory organizations, buildings that are not subject to the law are produced through several mechanisms and they are unplanned / illegal, and therefore not controlled.
- Change in the uses of the land without taking into account the laws and basic plans of the cities, by the owner himself.
- Legal structural violations represented by (bouncing back, building density at the level of the housing unit, heights of any permitted floors, projections, etc.).
- An inefficient planning system to deal with urban housing problems, represented by the inability of the responsible authorities to provide adequate housing, due to the high costs, thus excluding the low-income group from their right to adequate housing.[5]

3.1.2 Demographic reasons

In (1976), one/third of the world's population lived in cities, and according to Habitat predictions in (2004), the number will double by the year (2050) as the world is rapidly urbanizing and increasing population growth. The increase in population is the result of natural population growth and waves of migration flowing from the countryside. To cities, one of the advantages of developing countries, and that this increase is offset by a large decrease in the number of housing units and job opportunities in city centers. These people migrate towards the outskirts of the city and establish their housing by their own efforts. Informal settlements take growth through urban expansion, forming new marginal areas [6].

3.1.3 Economic and political reasons / the economic reasons were: [7]

- The urban economy is the influencing force in bringing about changes in cities. The fact that the pattern of capitalist growth in the developing world is weak and underdeveloped has led to the emergence of waves of displaced persons from the countryside towards the cities to improve their living conditions.
• The high prices of urban lands in cities and the difficulty of providing them for people with low incomes.
• The failure of some governments to fully address informal settlements and provide services.

As for the political reasons, it was represented by the ineffective role of urban land systems in increasing access to lands for housing or providing adequate housing, in addition to the lack of support for housing projects, especially for the low-income group[8].

3.2 The reasons for the emergence of informal settlements locally / Iraq

The reasons for the emergence of informal settlements in Iraq do not differ much from the reasons for their emergence in the Arab and world countries, where the reasons for the emergence were divided according to the time periods in which the informal settlements originated, as follows:

3.2.1 First period (1923-1958)

The first informal settlements appeared at the beginning of the twenties of the twentieth century, represented by Sarayef and huts on the outsides of Baghdad in the Karkh and Rusafa sectors, as shown in Figure (4) [7].

![Figure 4](https://example.com/image4)

**Figure 4.** Forms of Sarayef in Baghdad in the early twenties / the first informal settlements in the Karkh and Rusafa sectors[32]

The reasons for the emergence in this period can be summarized as follows: [8]
A- The sudden increase in the number of the population of Iraq, which was accompanied by the waves of migration from the countryside to the city of Baghdad, and the lack of absorption of the number of dwellings for this increase at the time, which forced them to build their own housing by the sudden invasion and occupation of others 'lands.
B - The deterioration of the economic situation of the rural population, as a result of the feudal rule in that period, which forced them to move towards the centers of cities in an attempt to improve their economic and social reality, where economic activities and employment opportunities were concentrated in the city of Baghdad in that period.[7]
C-Within the year (1923) the government ignored the basic plan for the city of Baghdad, by the British engineer (G.Millson), in addition to the plan for future expansion that suits the development operations taking place in the city. This neglect contributed to the increase the informal settlements.[9]

3.2.2 Second period (1960-2003)

Informal settlements appeared in the (1960s) within the Rusafa side, (the Tariq neighborhood and the new Tariq neighborhood), near Sadr City, in which agricultural land use was changed to residential use, when a group of individuals seized it, within Al-Karkh side appeared at that period at the Baghdad Gate and the Al-Turath neighborhood (Al-Tanak neighborhood), followed by many areas that are spreading over time, and the reasons for the emergence of informal settlements in this period can be summarized as follows:
A- The large increase in the population of the mid-sixties, which led to an uneven urban expansion, exceeding the guesswork frameworks of the basic plan, which caused the inefficiency of the services completely. [7]
B- The state's insignificant role in housing production, in addition to the weak role of housing associations in the field of construction.
C- Despite the improvement in the living conditions as a result of the increase in oil revenues, the flow of migrations and the emergence of new informal settlements in the hope of their ownership of land continued, as happened in the seventies for the informal settlements of the Baghdad Gate side of Al-
Karkh or their registration and provision of services as in the housing projects east and west of Baghdad, which was prepared by the Dioxides Company. [10]

D- The absence of an integrated organizational planning system to address urban housing problems, in addition to the neglect of successive governments for the housing sector and low-income housing projects, as well as the absence of a supervisory role to prevent misfortunes. [11]

E- The early eighties and nineties, the real estate bank stopped granting loans due to money wasted during the Iranian war, followed by the nineties, where the Iraqi per capita income decreased significantly as a result of the economic blockade that was accompanied by high land prices, construction costs and a complete absence of housing projects, which increased the economic deterioration that affected negatively on all aspects of life and increase of the informal settlements. [10]

3.2.3 Third period (post-2003 up to date)

This period, the cities of Iraq, especially the city of Baghdad, witnessed forms of informal settlements that differed from their forms in previous periods and are increasing and spreading rapidly in several areas, including on the Rusafa side (Al-Baladiyat, Al-Amin, the second municipality of Al-Sadr neighborhood, Tariq neighborhood and Tariq Al-Jadid neighborhood), and Al-Karkh side (Baghdad Gate, Chukuk, Al-Shaljia, Al-Turath neighborhood, Al-Tanak neighborhood) and others [7]. As for the reasons for the emergence during this period, they are as follows: [11]

A- After (2003) informal settlements spread further, due to the absence of the oversight role of government agencies and institutions and the security vacuum that prevailed in Iraq, in addition to forced displacement and displacement due to successive political events, government buildings and state departments (service lands, public parks) and Establishing informal settlements dwellings on it.

B- The old and not updated building laws and standards have made obtaining legal and official housing extremely difficult, in addition to the continuous delay in developing solutions, which has prompted individuals to resort to informal settlements [12].

4. General Characteristics of Informal Settlements

Informal settlements are generally similar in most of the following characteristics:

4.1 Urban Characteristics

- Narrow streets, which may resemble corridors, are winding and irregular, and may reach between (2-4) meters in width. The urban fabric is characterized by a lack of open and green public spaces, as in Figure (5). [13]

- Distorted urban scape, due to a loss of visual harmony and uneven differences in heights and reverberations as a result of overriding building regulations and laws, the urban street lost its continuity and aesthetics. [11]

- Building materials are Inferior and cost-effective, which makes the general appearance distorted and unacceptable, as in Figure (6).

- Irregularly blocked buildings, various shapes, small sizes, the shape of which may follow the building materials used and the lack of technical and social infrastructure services, as in Figure (7).
4.2 Social and Economic Characteristics
- The lack of residential privacy, due to the proximity of housing stock and the narrow separation distance (alley, street).
- The complete or partial lack of necessary human rights and services, which led to the emergence of negative social situations such as social and class hatred. [13]
- The low level of education and the spread of illiteracy among informal settlements dwellers.
- A low standard of living, high unemployment and few job opportunities.
- High population density, in addition to overcrowding, where more than one family occupies one housing unit originally constructed for one family [7]

4.3 Environmental Characteristics: [13]
- Deterioration of technical infrastructure services (water, electricity, sewage systems, etc.) and social (hospitals, health centers, schools, universities, etc.).
- Noise caused by handicrafts and street vendors, as well as air pollution due to poor ventilation and lack of sunlight inside the housing unit due to Narrow Street and alley conditions.

5. Procedural Definition of Informal Settlements
Low-quality housing built on the land of others through sudden invasion (hand-laying) bypassing the legal and legislative aspect, builds of lousy building materials such as boxes, cans, wood, etc., lacking the most basic services and with negative consequences for the urban environment, concentrated in city centers, margins, railroad incubators and main roads, i.e. it begins to bypass a certain group and expands by increasing the number of overtaking, which aggravates the problem quickly.

6. Urban Land Management
Braham et al. Defined the Urban Land Management as the responsible party in the urban sector that has the responsibility to address the obstacles that prevent the achievement of urban development aims, and these obstacles include (informal settlements, housing, and infrastructure services), indicating the reason behind the dominance of informal settlements over land that lacks For basic services and a complex tenure system is the unavailability of serviced urban land [8].

Ojewale defined it as a broad term referring to a group of processes that deal with land acquisition, property rights, and regulation of urban land use and development, and with organized legal channels and regulations. Problems arise in an urban land management system due to the inability of governments to deal with problems urban housing emerging as a result of rapid urbanization processes and the increasing and continuous population growth [14]. Also, Al-Saadi defined it as a set of programs and mechanisms aimed at preparing the land for simultaneous urban uses and the necessities of urban development, and the adoption of effective standards and procedures that work to secure the possession of land and ownership of land for those who transgressed after it. Paying its value to the original owner, as well as adding the atypical plots of land to the urban land balance [15].

7. Urban Land Management Aims
The Urban Land Management aims to achieve and reach the following: [16]
A-Organizing the distribution of urban land uses over the city as a whole, taking into account the issues of urban expansion.
B - Preventing urban sprawl and informal development, which is represented by the occupation of public and private lands, followed by self-construction (informal settlements, slums), also illegal / unlicensed subdivisions of private lands, followed by the sale of divided plots and housing construction on them by the efforts of their own residents, informal development arises as a result of the framework of the bureaucracy of urban land management which exclude the right of the poor to adequate housing and to exclude them from effective participation in urban land development. [17]
C- Reducing the gap between formal and informal housing (informal settlements) due to the lack of acceptance by formal urban areas of informal settlements. [18]
D- Redevelopment as an alternative approach to urban land management for the housing of poor groups in urban areas.
E - Applying appropriate strategies and policies for the participatory process between governments and civil society organizations.
F- Directing the growth of cities by adopting successful approaches and strategies for other countries in addressing urban housing problems, such as informal settlements, by providing land, housing, and services.

8. Obstacles to Urban Land Management

Urban land management faces many problems in most developing countries and countries in transition, which in turn hinder sustainable urban development. Among these problems and obstacles are as follows:[19]

A- The increasing urban growth at an unprecedented rate and migrations, whether internal or external, and as a result of the insufficient capacity to produce housing for the increasing population numbers resort to informal settlements housing / informal / unplanned /Irregular, which lacks basic services.

B - The absence of deliberate planning to change urban land uses that caused the change of land uses by an informal / illegal mechanism, which led to the growth and increase of informal settlements as a result of uncontrolled urban sprawl. [20]

C - Urban deterioration and problems in urban patterns as a result of informal development.

D- Inadequate and insufficient technical and social infrastructure services, as a result of the illegal built housing, which causes increasing pressure on services in general.

E- Insufficient ability to provide and estimate the requirements of the population now and in the future for housing and estimate the ability of the land to find solutions to existing and expected problems. [21]

F- The lengthy procedures for organizing urban land management, as well as weak institutional and professional capabilities, which are one of the obstacles to quick and cost-effective solutions. [22]

9. Urban Land Management Issues and Tasks

(UN-Habitat) focused on major issues of urban land management, which emphasized that a planning, holistic and integrated approach should be consistent with current and future urban expansion processes. Among the issues of urban land management are the following: [2]

9.1 Housing issues, solving and addressing the informal settlements

It is considered a basic social issue represented by urban poverty and inequality. Emphasis was placed on (reducing social inequality and eliminating urban poverty) in addition to encouraging the process of empowerment and community participation and activating the role of the formal private sector in housing and its interconnectedness with the informal sector, which works to:

- Special attention to housing demand for informal settlements dwellers and the urban poor.
- Developing new housing finance tools to meet the financial needs of the poor for housing purposes.

The housing development process is one of the methods and strategies followed for urban land management, which works to provide housing for all groups, especially the poor, and these methods include the following: [16]

A- Green Fields

Development in green fields is considered one of the forms of urban growth, and it is the most preferred for developers, due to:

- Its relative simplicity.
- Land costs are often low.
- Best if you want a large-scale visual project.

Ensuring compliance with the principles of sustainable housing and good urban development can be difficult, so development in green fields must be treated as scalable communities, not a series of housing units with different urban facilities, as well as the importance of good access and transportation.

B- Infill

Exploiting unused land in existing urban areas is an efficient approach as dictates work to:

- Avoid urban sprawl.
- Residence near work places.
- Use of infrastructure, including transportation.
- Support smart and compact urban development and improve accessibility.
C- Redevelopment / Densification

It may include redevelopment / intensification, changes in the use of urban land, (formerly) industrial land, which are now internal cities within the city’s fabric, due to urban expansion, which are no longer suitable for industry, as industrial areas have been converted to more suitable sites. The redevelopment of sites as mixed-use residential complexes is characterized by the following:

- Areas within the footprint of the built city and close to the existing infrastructure that may or may not require development.
- Contribute to preventing urban sprawl.
- Replacing informal housing areas (informal settlements) with similar uses for residential land, while improving planning standards and managing formal urban land in the form of integrated complexes.
- Work to increase urban intensification, which helps support commercial activities and investments in infrastructure.
- Technological innovation that depends on participation and growth in the infrastructure for housing and community.
- Removing informal settlements is a potential issue that requires political will to preserve the local advantage of poor families.
- Developers find themselves facing the challenges of environmental reform by developing informal settlements areas in two ways:

The first aspect/theoretically, by allowing residents to live near workplaces.
The second aspect/compact efficient cities with improved accessibility, higher density, and more sustainable public transportation.

9.2 Basic urban services that aim at: [16]

- Providing services through a new strategy in partnership with beneficiaries in urban areas, providing and managing services according to a sustainable system.
- Raise the level of basic infrastructure services for the poor, with the support of non-profit organizations, which the World Bank has emphasized.

For example, the British Department for International Development in India provided citywide water supplies, and the Swiss provided citywide social services.

10. Urban Land Development

Habitat III actions emphasized urban land development through decentralized governments and community participation. [23] The primary definition of urban land development refers to supplying urban land with infrastructure and services and making the land ready for development and construction, or it is the process of converting undeveloped urban land into developed and thus increasing the value of urban land. (Batbileg) defined urban land development as the creation of new urban areas such as residential and industrial neighborhoods and new infrastructure and represents a tool for change in urban or rural land uses through planning organizational mechanisms that include: [24]

- Land tenure.
- Land subdivision.
- Legal evaluation and planning approvals.
- The participatory approach of the public and private sectors in investment.
- Project design and construction work.
- The joint efforts of actors, including architects, urban designers, public organizations, contractors, and others.

During the stages of urban land development, the value of the land increases, whether it is agricultural land or an urban margin (the urban rural fringe), which is an important area because the majority of urban development takes place in these areas, which is characterized by: [25]

- An almost complete absence of non-agricultural activities.
- Lack of urban housing and other jobs.
- The almost complete lack of services and an urban lifestyle.
The Urban Land Management represents the entity concerned with urban land development through the following: [24]

- Control development proposals and change urban land uses within the framework of planning and legal regulations.
- Issues of ownership and securing tenure for informal settlements as tasks for managing urban land is crucial because it guarantees urban land development.
- The interest of the urban land administration in land development in relation to records and aspects of land reform, which are essential to the successful management of urban land but are not substantial. Figure (8) illustrates the relationship between urban land management and urban land development.

![Figure 8](image)

**Figure 8.** The relationship between urban land management and urban land development [24].

11. **Procedural Definition of Urban Land Management**

The official destination in the urban sector is responsible for achieving the aims of urban development and addressing the problems resulting from urban housing and control such as informal settlements and changing the use of urban land and informal development in addition to being responsible for providing decent housing for all segments of society, especially those with low incomes, through the establishment of advanced programs, mechanisms and strategies to accommodate sudden urban changes.

12. **Literatures review**

This paragraph aims to address the previous literature that dealt with solving and addressing the problem of informal settlements through the urban land management system, as follows:

First / Fekade, (2000), **(Deficits of formal urban land management for land informal Responses under rapid urban growth)**

The study deals with the possibility of implementing the urban land management system for European countries in Africa, the fact that the systems in African countries have become ineffective and out of date, to find solutions and remedies for the uncontrolled growth of informal settlements due to the illegal occupation of public and private lands, as a result of rapid urbanization and the increasing population growth. The informal sector is a haven for a large part of the population due to its ability to respond and adapt, and that the establishment of housing on lands without legal status has created a wide gap between formal and informal housing in the non-acceptance of formal urban areas for informal areas being far from what qualifies them to achieve aims, because[18] :

- Monotonous and outdated regulatory standards.
- Unmodified tenure regulations.

Therefore, it is necessary to find more rational alternatives through a formal approach to urban land management to solve sudden urban housing problems, including informal settlements, by applying different strategies and programs, including:

**A- The Public Housing Program (applied in Nigeria)** was started by building housing for low-income people, considering that housing in urban areas is a legitimate right for all. (14%) of the planned units were built only between the years (1975-1980), which led to higher unit costs residential which excluded the poor class.

**B- Sites and Services Program** After the government realizes the ineffectiveness of the public housing program, a more realistic and approached program was adopted, which is the sites and services program, considering shelter the basic pillar of development directed towards the basic needs of the World Bank in addition to the infrastructure services, and as a result of the adoption of the sites and
services program on constructing a new building basically, and not supplying the housing stock (informal settlements) with basic services, it has not achieved success in African countries as it represents high economic costs.

C- The Informal Settlements Upgrading Program governments tried to correct mistakes in previous programs, as this program allows informal settlements dwellers to continue to live in them while they are provided with technical infrastructure services (water, electricity, sewage networks, roads, etc.) and social (schools, hospitals, markets, etc.). These densely populated areas are located in city centers (degraded and old parts of the city). Therefore, after providing services, it will be easier to obtain legal recognition.

D- Empowerment strategy the solutions that followed these programs to provide housing and basic services for low-income residents were represented by the empowerment strategy instead of direct government intervention, and that governments should recognize the restrictions imposed on them and the public sector must be supported through:

- Policies and regulatory frameworks.
- An economic system dedicated to housing and services.
- Encouraging the manufacture of original building materials.

We conclude from the above, the lack of control of urban land management in African countries to solve the problem of informal settlements, since the systems and methods used are old and ineffective and have not been able to get out of molding old concepts of rapid urbanization and sudden population growth.

Second / Holger & Babette, (2002), (Applying Good Governance to Urban Land Management -Why and How?)

The study referred to a campaign promoted by (UN-HABITAT) which is the global campaign for good urban land management from a broader perspective and includes (land tenure, land policy, re-planning and organizing urban lands) as a result of the failures in the current urban land management system, represented by the following: [22]

- Land management and urban planning are highly centralized, as central governments have limited enabling capabilities, and which are followed by traditional procedures in planning and organizing programs.
- There is no clear distinction of responsibilities between ministries at the local, national and regional levels.
- The occupational weakness of urban land management in addition to complex regulations and lengthy procedures.

In order to overcome the problems that hinder the improvement of the urban land management system, standards of good urban governance have been integrated with urban land management, which will contribute to sustainable urban development, reduce urban poverty and achieve social justice, and among these criteria is that the management of urban land is sustainable and this standard is achieved through programs the following:

- A comprehensive reform of the urban land management system, land development and setting policies for its management, as well as certainty of the law and its sovereignty.
- Formalizing informal settlements areas and allowing them to integrate into the urban fabric of the city.
- Emphasis on decentralization in management, which is still central in most countries.
- Introducing an information system for low-income land use.
- The participatory approach between the public and private sectors in addition to flexibility and innovation in management and planning with the integration of the formal and informal system for the integration of land and services.

We conclude from the above, that sustainable urban land management is the best solution to control the problems of rapid urban growth, especially the problem of informal settlements, by formalizing slums and allowing their integration into the fabric of the city.

Third / UN-HABITAT, (2003), (Urban Land Management and Tenure)
The study deals with the interventions aimed at solving and addressing the problem of informal settlements in recent decades by moving from the sectoral project-based approach to the more comprehensive and integrated urban and housing programs, as the multilateral policies indicated that within these programs are major parties directly responsible for developing solutions and addressing slums and from these agencies Urban land management [2].

The lack of security of tenure is a basic feature of informal settlements, and the lack of official documents for the residents of these areas and non-compliance with the land use plan, i.e. the residential use of land not designated for housing, which is called (the conquest of non-urban lands) is clear evidence of the illegality of housing. The urban areas for informal settlement, included urban and housing programs as follows:

A- Rehabilitation of informal settlement areas by providing them with basic infrastructure services.
B- Secure tenure for informal settlement dwellers and the appropriate procedures for registering land ownership.
C- Organize and secure tenure for the urban poor.
D- Providing adequate shelter for informal settlement dwellers with legal tenure and basic services.
E- Emphasis on decentralized urban land management, which included programs and strategies as follows:
- The gradual disappearance of informal settlements coinciding with economic growth.
- Developing informal settlements and providing basic infrastructure services.
- Illegal forced evictions and the promotion of monolithic tenure.
- Compatibility and combining informal settlement areas development, job creation and local economic development.
- Reforming policies and making institutional changes to reach issues of organizing and addressing informal settlements.
- The World Bank's new urban strategy is directed towards correcting the path of failure in the urban economy first and the failure of governments secondly in planning urban land use and urban transport management.
- Develop participatory approaches to achieve urban management aims.

We conclude from the above, the transition from the sectoral approach to comprehensive and integrated urban and housing programs for urban land management to solve and address the problem of informal settlements by securing tenure, providing services and preventing forced eviction, in addition to emphasizing decentralized urban land management and correcting the path of the urban economy.

Fourth / Bahram-et.al., (2017), (Land in New Urban Agenda: Opportunities, Challenges and Way Forward)

The study addressed the new urban agenda for the twenty-first century (NUA21) within the work of Habitat III in (2016) in Ecuador included (housing issues, sustainable urban development) [8], (NUA21) was defined as a comprehensive and concise practical document aimed at guiding the next twenty years towards Sustainable urban development and transformational urban development all over the world by making cities and human settlements benefit from urbanization, paying attention to the poor, the right to live in dignity, and benefiting from what cities give to all residents. The rapid population growth has brought about increasing pressures on land, especially in urban areas, which have become remarkably scarce, while cities need environmentally sustainable growth to balance population inequalities through sustainable urbanization, which is one of the axes of urban land management. Among the principles of sustainable urbanization, lack of poverty, decent housing and secure tenure, social equality, a good healthy environment, prevents speculation in urban lands. The reason for the domination of informal settlements on lands lacking basic services and a complex tenure system was the result of the lack of urban lands provided with services. Therefore, most areas of expansion in developing countries lack basic urban services as well as being informal and directly related to urban poverty. Therefore, (NUA21) indicated to the critical importance of developing urban land management, which works to achieve the aims of sustainable urban development in addressing obstacles to achieving development aims through effective planning programs that include [8]:
• Securing land property rights, security of tenure for all, and applying modern approaches and tools for urban land management.
• Create sustainable cities.
• Establishing regulations and laws to curb speculation in the land market, which is considered one of the principles of sustainable urbanization.
• Reducing the gap between rural and urban areas, which limits population migration flows from rural to urban areas.
• Establishing a framework for enabling urban land management that includes (recognition of the right to adequate housing in international legislation and laws, ending abuses, promoting community participation, especially the poor, and developing flexible procedures and standards that are compatible with local requirements).
• Enhancing the adaptive and preventive strategy in increasing access to land through partnership between the public and private sectors, in addition to the strategic expansion of basic infrastructure to increase housing production and upgrading neighborhoods.

We conclude from the above that urban land management systems and mechanisms have become outdated and ineffective to address obstacles to achieving sustainable urban development aims. Therefore, modern and innovative methods must be followed to develop urban land management systems as they represent the core of sustainable urban development and are concerned with addressing informal settlements, housing problems and basic services according to (NUA21) To achieve the aims of sustainable urban development that the world's cities be environmentally sustainable and that urban areas of the developing world do not turn into informal settlements by (2050).

13 - Criticism of previous literatures

It is clear from the above literature that the urban land management is responsible in the urban sector, which is responsible for addressing the obstacles that prevent the achievement of the aims of sustainable urban development and these obstacles include (informal settlements, housing, infrastructure services), and being one of the vocabulary that has been addressed by the orators to solve and address the problem of informal settlements being one of the official destination responsible for solving and addressing this problem of informal settlements, but this role is not clear in detail.

14 – Research problem, Research Aim, Research Hypothesis

• Research problem: The lack of a clear perception of the role of urban land management programs and strategies in solving and addressing the problem of the Informal Settlements.
• Research Aim: Build a comprehensive theoretical framework for solving and addressing the problem of Informal settlements through the Programs and strategies of urban land management system.
• Research Hypothesis: That Solving and addressing the problem of Informal Settlements is through the programs and strategies of the urban land management system, which is represented by the formal urban land management programs for informal settlements, a sustainable urban land management system and urban land management development in varying degrees.

15. Theoretical Framework Vocabulary

The theoretical framework for solving and addressing the problem of informal settlements through the programs and strategies of the urban land management system was extracted from the previous literature in Table (1), indicating the main vocabulary, the secondary vocabulary and the possible values.
Table 1. The theoretical framework Vocabulary was extracted from the previous literature for solving and addressing the problem of informal settlements through the programs and strategies of the urban land management system. (Researchers)

| Main Vocabulary                                    | Secondary Vocabulary          | Possible Values                                      |
|-----------------------------------------------------|-------------------------------|------------------------------------------------------|
| Formal Urban Land Management Approach               | Programs and Strategies       | The Public Housing Program                           |
|                                                     |                               | Sites and Services Program                           |
|                                                     |                               | The Informal Settlements Upgrading Program            |
|                                                     |                               | Empowerment strategy                                 |
|                                                     |                               | A comprehensive Reform of the Urban Land Management  |
|                                                     | Planning Programs             | Systems                                              |
|                                                     |                               | Land Development and Setting Policies for its         |
|                                                     |                               | Management                                           |
|                                                     | Planning Programs             | Formalizing Informal Settlements areas and allowing   |
|                                                     |                               | them to Integrate into the Urban Fabric of the City   |
|                                                     |                               | Planning and Management to Prevent Urban Sprawl      |
|                                                     |                               | Preventing the Division of Agricultural Lands        |
|                                                     |                               | Classification of Agricultural Lands According to    |
|                                                     |                               | their Economic and Environmental Potential           |
| Sustainable Urban Land Management System            | Organization Programs         | Participatory approach between the public and private |
|                                                     |                               | sectors                                              |
|                                                     |                               | Integrated the Formal System of Urban Land Management |
|                                                     |                               | and Informal Actors                                  |
|                                                     |                               | A Comprehensive Perspective on Land Examination      |
|                                                     |                               | Forcing a local authority consultation               |
|                                                     | Management Programs           | Flexibility and innovation in management and planning |
|                                                     |                               | Management within the principles of sustainable      |
|                                                     |                               | development                                           |
|                                                     |                               | Inventory of lands according to the infrastructure    |
|                                                     |                               | Human resources training                             |
| Environmental Program                               |     | Environmental plan to guide land policy              |
| Urban Land Management Programs for Informal Settlements |     | Rehabilitation of Informal Settlement Areas          |
|                                                     | Urban and Housing Programs    | Secure tenure for informal settlement dwellers and    |
|                                                     | Planning Programs             | urban poor                                            |
|                                                     |                               | Appropriate Procedures for Registering Land          |
|                                                     |                               | Ownership.                                            |
|                                                     |                               | Providing adequate shelter for informal settlement    |
|                                                     |                               | dwellers with legal tenure and services               |
|                                                     |                               | The gradual disappearance of informal settlements    |
|                                                     |                               | coinciding with economic growth                      |
|                                                     |                               | Illegal forced evictions and the promotion of         |
Decentralized Urban Land Management System

Strategies
- Monolithic tenure
- Compatibility and combining informal settlement areas development, job creation and local economic development
- Developing informal settlements and providing basic infrastructure services
- Reforming policies and making institutional changes
- New urban strategy is directed towards correcting the path of failure in the urban economy and the failure of governments in planning urban land use and urban transport management.
- Developing participatory approaches to organizing informal settlements
- Securing land property rights
- Security of tenure for all
- Create sustainable cities
- Establishing regulations and laws to curb speculation in the land market
- Reducing the gap between rural and urban areas
- Enhancing the adaptive and preventive strategy in increasing access to land
- The strategic expansion of basic infrastructure to increase housing production and upgrading neighborhoods
- Recognition of the right to adequate housing in international legislation and laws
- Ending abuses
- Promoting Community Participation
- Developing flexible procedures and standards that are compatible with local requirements

Planning Program

Urban Land Management Development

A framework for Enabling Urban Land Management

16. Practical Study

The research conducted a practical study on two models of informal settlements, the first model is for informal settlement (Klong-Toei) / Thailand. As for the second model for the informal settlement area (Ayazma-Küçükçekmece) in (Tukey), the criteria for selecting the two models were related to the programs and strategies of urban land management in solving and addressing the informal settlement problem, which was presented in the theoretical framework.

A - The first model / informal settlements of (Klong-Toei) - (Bangkok) - (Thailand)

(Bangkok) adopted security of tenure as one of the urban land management programs to address the problem of informal settlements, which was confirmed by Habitat II of the United Nations in (1996) in (Istanbul) by securing land tenure for informal settlement areas and issuing title deeds in order to regulate the lives of their inhabitants as the Thai government launched in (2003) The Baan Mankong Program for Cities Without Informal Settlements, which in English means (safe housing), is a national program that aims to: [26]

- Securing tenure for informal settlement areas.
Prospects of Sustainability and Planning of Cities (SPSC 2020)

Figure 9. Informal Settlements(Klong-Toei) In (2001) [30]

- Developing informal settlement areas.
- Encouraging the participation of the informal settlement poor and working with city authorities and other local actors in urban development programs.

The main institution accredited to implement the (Baan Mankong) Program is the 1 (CODI) Community Organization Development Corporation. The (Baan Mankong) Program targets and works on:

- Informal settlement dwellings lacking secure tenure.
- Establishing easy savings ways for informal settlement communities to enable them to develop their homes through borrowing and repayment for a period of (15) years.
- The community is considered one of the important elements for implementing the program and working on forming an elected team of residents for administrative participation with the cooperative committees. The savings group was merged with the Rural Development Fund to form (CODI), which works on managing the small loans granted to informal settlement dwellers to contribute to the development of their homes.

The program also aims at the community participation of the residents, as the program has achieved the following achievements:

- Overcoming institutional and economic restrictions to providing main services that include (securing tenure, services, creating cooperation opportunities between informal settlements, government authorities and Limiting speculation in the land market).
- The insistence on achieving their aim, which made it possible in terms of secure tenure and development of their area.

Helping residents to each other on the one hand and cooperating between slum communities, government authorities, architects, urbanites and Non-governmental organizations on the other. 1(CODI) Community Organizations Development Institute

- A reflection of the self-help aspect after securing tenure through disbursing personal savings for the development and construction of new housing. Figures (10) and (11) illustrate the participation
of (Klong-Toei) residents in rebuilding their homes and volunteer work in preserving the aesthetic of their area.

![Figures 10. volunteer work in preserving](image1)

![Figures 11. participation residents in rebuilding](image2)

The process of developing informal settlement areas based on community participation has pushed the communities to develop their areas themselves through ¹(NULICO) and ²(CDFs) in addition to (CODI) which played an important role in the special financial initiative for borrowing affairs, and when the development movement exceeded the capabilities of (CODI) CDFs were introduced as an alternative and through the contribution of (CODI) and (CDFs) and the participation of other informal settlement dwellers, security of tenure for the (Baan Mankong) program is vital and important from the residents' point of view, not only in terms of protection from forced evictions. Rather, they were accepted as legal citizens of the city and that access to infrastructure services was done legally, which helped informal settlement dwellers integrate into society as a whole. [27]. As for Figure (12), it shows what the (Klong-Toei) region came down to.

![Figure 12. shows what the (Klong-Toei) region came down to in (2015)](image3)

¹(NULICO) National Union of Low Income Community Organizations
²(CDFs) City Development Funds
Turkey has adopted policies and strategies for decentralizing urban land management, which recognize the multiplicity of parties concerned with developing informal settlements in urban areas and adopting systems and laws that are different from the previous ones to secure tenure for the poor in informal settlement areas and adoption of an information system for the lands [28]. In (2004) detailed surveys were made about the household's living and social situation, relations between neighbors and patterns of tenure, as the results indicated that (46.6%) of the families are interested in the issue of security of tenure and (90%) emphasized basic services (electricity, water, sewage networks, the health) and land surveys have been conducted in accordance with the infrastructure, and the fact that the tenure patterns were between families that owned title and others that did not own titles and families that were rented, yet the whole group considered illegal informal settlements as they were housing built without legal permits. [29]

The fact that the (Ayazma) area is unplanned, unsafe for tenure, unhealthy, and illegal were considered as arguments for securing tenure and the first project to implement the strategy of urban transformation from informal settlements to collective housing and the most important thing is to get rid of informal settlements (Ayazma). (Ayazma) was declared an urban transformation area in July (2005) and it is the first project of its kind in (Istanbul). The protocol was signed between the implementing company (TOKI) and the Istanbul Urban Municipality and the municipality of Chikmega, and the responsibilities were divided as follows:

- TOKI implementing company (financing, construction of residential buildings, resettlement of (Ayazma) residents, development of the original site).
- Istanbul Urban Municipality (management obligations).
- Chikmega municipality (The process of demolishing informal settlements, supervising the implementation).

The new residential buildings built by TOKI Company consist of (55) buildings, each building consists of (11) floors with (49) apartments per floor and an apartment area (272 m²). Emphasis has been placed on the success of the urban transformation strategy by adhering to and implementing legal regulations. And the creation of a healthy and modern area that takes into account the housing needs of the residents, as the illegal structures have been reconfigured to regulate tenure and move from a strategy of non-compliance to a strategy of formal convergence in accordance with the amnesty law for informal settlements, which is a clear indication of securing tenure, and with the convergence of formal and informal institutions within a legal framework it has become it is possible to provide basic services and demonstrate compliance with the official conditions, representing a means and a positive development towards (institutional legalization of tenure). The economic impacts of the relocation process and the challenges inherent in the population were addressed through pricing the new official housing unit by paying its value in affordable monthly installments for a period of (15) years after deducting the value of the land (for those who owned title deeds) and the demolition value of their homes. Each family is entitled to own one apartment provided they do not own them another official

Figure 13. Informal Settlements (Ayazma-Küçükçekmece) in (2002) [31]
residence, and the percentage of families that benefited from this approach was (63%) of the informal settlement dwellers themselves. The local authorities considered it an opportunity for informal settlement dwellers to obtain secure tenure of the housing and a legal official title deed. Figure (14) shows what the (Ayazma) region has fallen into after implementation.

Figure 14. shows what the (Ayazma) region has fallen into after implementation. [31]

17. Measurement method
The research adopted the method of qualitative measurement of the selected research sample using two values (0, 1), so the verified singular takes the value (1) and the unrealized singular takes its value (zero).

18. Results of Practical Study

Table 2. Shows the results of the practical study.

| Main Vocabulary | Secondary Vocabulary | Possible Values                                      | Model A | Model B |
|-----------------|-----------------------|-----------------------------------------------------|---------|---------|
| Formal Urban    | Programs and          | The Public Housing Program                           | 1       | 1       |
| Land Management | Strategies            | Programs and Services Program                       | 1       | 1       |
|                 |                       | The Informal Settlements Upgrading Program           | 0       | 0       |
|                 |                       | Empowerment strategy                                | 1       | 1       |
|                 |                       | The rate of the formal urban land management approach| 75%     | 75%     |
| Planning Programs                                                                 |   |   |
|----------------------------------------------------------------------------------|---|---|
| A comprehensive Reform of the Urban Land Management System                        | 0 | 0 |
| Land Development and Setting Policies for its Management                          | 0 | 0 |
| Formalizing Informal Settlement areas and allowing them to Integrate into the Urban Fabric of the City | 1 | 1 |
| Planning and Management to Prevent Urban Sprawl                                   | 0 | 0 |
| Preventing the Division of Agricultural Lands                                     | 0 | 0 |
| Classification of Agricultural Lands According to their Economic and Environmental Potential | 0 | 0 |
| Introducing an information system for land use                                    | 0 | 1 |
| Participatory approach between the public and private sectors                      | 1 | 1 |
| Integrated the Formal System of Urban Land Management and Informal Actors         | 1 | 1 |
| A Comprehensive Perspective on Land Examination                                  | 0 | 0 |
| Forcing a local authority consultation                                            | 1 | 1 |
| Flexibility and innovation in management and planning                             | 1 | 1 |
| Management within the principles of sustainable development                        | 1 | 1 |
| Inventory of lands according to the infrastructure                                | 0 | 1 |
| Human resources training                                                          | 1 | 1 |
| Environmental program                                                             |   | 1 |
| Environmental plan to guide land policy                                             | 1 | 1 |

| The rate of Sustainable Urban Land Management System | 50% | 62% |
|------------------------------------------------------|-----|-----|

| Sustainable Urban Land Management System Management Programs |   |   |
|-------------------------------------------------------------|---|---|
| Rehabilitation of Informal Settlement Areas                  | 1 | 1 |
| Secure tenure for informal settlement dwellers and urban poor | 1 | 1 |
| Appropriate Procedures for Registering Land Ownership        | 1 | 1 |
| Providing adequate shelter for informal settlement dwellers with legal tenure and services | 1 | 1 |
| The gradual disappearance of informal settlements coinciding with economic growth | 1 | 1 |
| Illegal forced evictions and the promotion of monolithic tenure | 1 | 1 |
Compatibility and combining informal settlement areas development, job creation and local economic development  

The rate of Urban Land Management Programs for Informal Settlements  
Developing informal settlements and providing basic infrastructure services 1 1 1 1
Reforming policies and making institutional changes 1 0
New urban strategy is directed towards correcting the path of failure in the urban economy and the failure of governments in planning urban land use and urban transport management. 1 1
Developing participatory approaches to organizing informal settlements 1 1

The rate of Decentralized Urban Land Management System  
Securing land property rights 1 1
Security of tenure for all 1 1
Create sustainable cities 1 1
Establishing regulations and laws to curb speculation in the land market 1 0
Reducing the gap between rural and urban areas 0 0
Enhancing the adaptive and preventive strategy in increasing access to land 1 1
the strategic expansion of basic infrastructure to increase housing production and upgrading neighborhoods 1 1
Recognition of the right to adequate housing in international legislation and laws 1 1
Ending abuses 1 1
Promoting Community Participation 1 1
Developing flexible procedures and standards that are compatible with local requirements 1 1

The rate of Urban Land Management Development 90% 81%

18.1 Formal Urban Land Management Approach
A - The two models achieved the objectives of the general housing program, since housing construction was directed at low-income people.
B - The two models achieved the objectives of the sites and services program, which is based on constructing a new building mainly and not providing the informal settlements with basic services.
C - The two models did not achieve the aims of the urban upgrading program for informal settlements, as housing was not developed while its residents continued to live in them during the development period. In both models, housing was completely removed and new housing built on the same site.

D - Empowerment strategy emerged as one of the official urban land management strategies. Both models achieved this strategy through the actual voluntary participation of residents in building their new homes in addition to self-help in the maintenance and preservation of their areas.

According to the results of the practical study, the two models achieved the formal urban land management approach by (75%) for each.

18.2 Sustainable Urban Land Management System
A - The two models achieved the objectives of the planning programs of the sustainable urban land management system represented in formalization, as the next step is after securing the tenure of land for the residents and thus integrating into the urban fabric of the city, while the prevention of the division and classification of agricultural lands and the introduction of an information system were not addressed in both models for land use.

B - The two models achieved the objectives of the regulatory programs of the sustainable urban land management system represented by a participatory public-private approach, the integration of the formal system of urban land management and the informal actors represented by committees consisting of informal settlement dwellers and the imposition of the consultation of the local authority in both models, model (B) addressed the introduction of an information system for the use of land while model (A) did not address this paragraph, both paragraph sought comprehensive land examination.

C - The two models achieved the objectives of the administrative programs of the sustainable urban land management system, which is flexible and innovative in management and planning, management in light of the principles of sustainable economic, social and environmental development, training human resources represented by the community development of the residents and urging them to build their houses and addressed model (B) the inventory of land according to infrastructure while model (A) did not address this paragraph.

D - An environmental plan for land policies was adopted in both models, through the optimal use of lands by constructing new housing after removing informal settlements.

According to the results of the practical study, model (A) achieved (50%) From the sustainable urban land management system, model (B) achieved a percentage of (62%) of this system. 18-3 Urban Land Management Programs for Informal Settlements
A - The two models achieved the objectives of urban and housing programs for urban land management by rehabilitating informal settlements, securing tenure for their residents, taking appropriate measures to register land ownership and providing adequate housing for informal settlement dwellers with legal possession and services.

B - The two models achieved the objectives of the planning programs for urban land management represented in the gradual disappearance of informal settlements, as the same programs were adopted in dealing with other areas of informal settlements with economic growth, the illegality of forced eviction, the promotion of single tenure, and the combination of informal settlement development and job creation.

According to the results of the practical study, the two models achieved urban land management programs for informal settlements by (100%) for each of them.

18.4 Decentralized Urban Land Management System
The two models achieved the decentralized urban land management system, which is the strategy of developing informal settlements, providing basic infrastructure services and developing participatory approaches to the organization of informal settlements, as well as following a new urban strategy to correct the failure of the urban economy by granting concessional loans to residents and creating jobs for them by participating in the construction of their homes.

According to the results of the practical study, model (A) achieved (100%) From the decentralized urban land management system, model B achieved a percentage (75%) of this system.
18.5 Urban Land Management Development

A - The two models achieved the objectives of the planning programs for the development of urban land management, which is to secure land rights, security of ownership for all, the establishment of economically, environmentally and socially sustainable cities, and addressed the legal frameworks and regulations in both models to secure the ownership of the land and regulate the property bonds and strengthen the adaptive and preventive strategy in addition to the gradual expansion of basic infrastructure, which helped to increase housing production through the application of urban land management programs to informal settlements to be cities without informal settlements, addressed the model (A) laws to reduce speculation in the land market, while form (B) did not address this paragraph and neither model addressed a program to reduce the gap between rural and urban areas.

B - The objectives of enabling urban land management, which is considered one of the aspects of urban land management development, have been achieved by recognizing the right to adequate housing in both models and ending abuses by transforming informal settlement areas into formal areas of secure tenure and decent housing. Community participation in both models has been enhanced through the participation of Residents and community development, in addition to setting flexible procedures and standards, represented by simple, long-term loans, procedures for securing tenure with legal frameworks, and the delivery of property titles to residents.

According to the results of the practical study, model (A) achieved (90%) Model (B) achieved (81%) from her.

19. Conclusions

19.1 Theoretical Framework Conclusions

A - The importance of urban land management system programs and strategies in achieving sustainable urban development aims for cities without informal settlements.

B - Securing land tenure for informal settlement dwellers is a very important matter that encourages them to build their new houses after enjoying the legal rights of possession and allowing them to integrate into the urban fabric of the city.

C - The integration of the formal system of urban land management with informal actors contributes significantly to the elimination of slums by following urban land management programs and strategies.

D - Achieving the success of urban land management system programs and strategies in getting rid of informal settlements for a given area encouraged the application of these programs to other informal settlement areas, which helped to gradually get rid of informal settlements.

19.2 Practical Study Conclusions

A- Formal Urban Land Management approach

The formal urban land management approach includes programs and strategies that address informal settlements by moving towards low-income housing projects that limit resorting to informal settlements and thus gradually disappear.

B- Sustainable Urban Land Management System

The sustainable urban land management system, planning, organizational, management, and environmental programs focus on addressing the existing informal settlements in addition to addressing the causes of their emergence to achieve the aims of sustainable urban development for cities without informal settlements.

C- Urban Land Management Programs for Informal Settlements

Urban, housing, and planning programs for the urban land management of informal settlements focused on securing land tenure first for informal settlement dwellers through legal frameworks and appropriate procedures to hand over title deeds to them later, which is followed by actual steps in developing informal settlement areas and turning them into formal areas.

D- Decentralized Urban Land Management System

Emphasizing on a decentralized urban land management system that includes strategies for developing informal settlements, providing services, developing participatory approaches between the public and private sectors and enhancing community participation for residents, as the central management has not achieved success in addressing urban housing problems, especially the problem of informal settlements.

E- Urban Land Management Development
Planning programs for the development of urban land management are important in addressing informal settlements, as well as setting a framework for enabling urban land management, which aims to achieve decent housing for all and end informal settlement abuses.

20. Recommendations
- The research recommends the necessity of implementing the urban land management system programs and strategies for dealing with the problem of informal settlements.
- The research recommends the application of planning programs for a sustainable urban land management system that work to prevent urban sprawl, prevent the division of agricultural lands, develop lands, and set policies to manage them in a way that encourages investments in housing, especially housing projects for low-income people.
- The research recommends the application of urban and housing programs directed towards rehabilitating informal settlement areas and securing land tenure for their residents, which encourages residents to develop their areas and houses, make them livable, and the possibility of their future integration within the urban fabric of the city.
- The research recommends the need to pay attention to laying out plans for economic development, providing formal job opportunities and correcting the path of failure in the urban economy as a result of the central administration.
- The research recommends the importance of developing participatory approaches between the public and private sectors and involving residents in the decision-making process through community development for them, which works to address informal settlements by taking roles in planning, management and implementation, which leads to the gradual elimination of informal settlements.
- The research recommends the necessity of creating appropriate legal frameworks and procedures to secure land tenure for informal settlement dwellers, as well as flexible standards and procedures for granting them easy, simple and long-term loans.
- The research recommends addressing the reasons of the emergence of informal settlements or trying to limit their spread by providing adequate housing for all groups, especially those with low incomes, and ending abuses, which prevent or may reduce the emergence of informal settlements.

References
[1] Turner, J., (1968), “Uncontrolling Urban Settlements Problem and Policies”, Urbanization Development Policies Planning International Social Development Review, No (1), New York & United Nations. (pp:110-113, p109).
[2] UN-Habitat,(2003),“The Challenges of Slums”,U.K.&U.S.A.:Global of Human Settlements.(p196, p143, p144,p142).
[3] Logr,N.,(2013), “The Phenomenon of Spontaneity in Urban City Realm”, Development of Arch.& Planning, Milano, (pp12-13).
[4] Bello, M., Michael, Hassan, (2018), “Examining the Prevalence of Contradictory Tendencies and Prognosis for the Problem of Slums in Nigeria”, IJARD, Vol. (4), No.(1).(p13).
[5] Willis, K., (2009), “Squatter Settlements”, Elsevier ltd., University of London, Egham, UK, (p368).
[6] Ekandem, Daudu, Lamicili, (2014), “Spontaneous Settlements Rules and Challenges to Urban Planning, Journal of Sustainable Development Studies, Vol.(2), No.(2), Nigeria, (p362).
[7] Maiada, L., (2008), “The Squatter Settlements Spatial Behavior Master Thesis, Department of Architecture, University of Technology, Iraq, (p25, p28, p30, p18).
[8] Bahram, (2017), “Land in New Urban Agenda Opportunities Challenges and Way Forward”, Worled Bank Conference on Land and Poverty,Washington (p20, p3, p2, p15, p18).
[9] Eman, M., (2017), “History of Slums in Baghdad, 1921-1958”, College of Literature, University of Baghdad, Journal of Literature, No. (121), (pp250-253, p252).
[10] Alsadi, J., (2002), “Urban Land Management in Baghdad City”, Thesis of Doctor of philosophy in Urban and Regional planning Urban and Regional planning center, University of Baghdad, Iraq (p50, p49).
[11] Wahda, S., Safaa Aldeen, Anwar, (2012), “The Designed Housing Projects as An alternative for the Informal Building and their Impact in Addressing the Heterogeneity of the Urban Escape in the
Built Residential Areas”, Department of Architecture, University of Technology, Journal of Engineering, Vol. (18), No. (9), Iraq (p171, p170, p167).

[12] Jamal B. Motlak & Haidar Razak Mohammed,(2016), “Determine Suggestions to solve Informal Housing problems Case study: Baghdad city”, Urban and Regional planning Urban and Regional planning center, University of Baghdad, Journal of Planning and Sustainability, No.(33), Iraq (p89).

[13] Ahmed, M. & Rida, M.,(2017), "Mechanisms for the Development of Informal Settlements in Accordance with the Principles of Sustainable Development", college of engineering, university of Al Azhar, Journal of Al Azhar University Engineering Sector Vol. (12), No. (45), Egypt (p3, p4).

[14] Ojewale, I. (2014), "Effect of Informal Settlement on Land Use". ESM/12/2131.(p13).

[15] Janus, M., (2014), "Tenure Security in Informal Settlements in Istanbul: Institutional Development and Legalisation”, SPRING. (p58, p59, p62, p58, p69, p60).

[30] https://en.wikipedia.org.
[31] https://ar.wikipedia.org.
[32] https://www.google.com/urlsa.
[33] www.almasdar.com.