

## **Feasibility of managing and organizing the problem of informal settlements a field study on informal areas in Najaf Governorate**

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**Abstract:** The research aims to study the problem of informal housing in Najaf Governorate, present strategic scenarios to solve the problem, as well as choosing the low-cost construction strategy as an approved strategy in the research. The study included (9) areas in which informal housing units spread, namely (Al-Radhwiya, Al-Rahma neighborhood, Al-Najaf Sea depression, Al-Shawafi area, behind Al-Quds neighborhood, Al-Jadidah II slums, Al-Jadidah III slums, Tabuk neighborhood, Al-Barakiyah), affiliated to the Najaf Governorate Municipality Directorate. The researchers used the descriptive analysis method based on structured personal interviews in informal areas to identify the problem, in addition to using financial tools by calculating costs (fixed capital, working capital) and revenues to solve the problem by submitting a proposal to establish a low-cost residential complex. The study reached several conclusions, the most important of which is that efforts and procedures can be organized to reach a radical solution by choosing the optimal and fastest scenario, which is building low-cost housing units, and benefiting from the areas on which slums were built. The study recommended a set of recommendations, the most important of which is forming a government working group from the departments concerned with urban planning, the municipality, the Investment Authority, and departments related to infrastructure, to prepare a technical study and an action plan to establish a package of projects distributed across the governorate's areas. These projects are granted to the best investors in establishing low-cost housing units, and forming a subcommittee to evaluate the lands and re-use them in an optimal manner. In a way that achieves benefit for the city, whether by converting them into green spaces, parks, or investment projects that enhance commercial activity in the city.

**Keywords:** *Feasibility studies, Organizing slums, Project evaluation.*

### **1. Introduction**

The research aims to study the problem of informal housing in Najaf Governorate, present strategic scenarios to solve the problem, as well as choosing the low-cost construction strategy as an approved strategy in the research. The study included (9) areas in which informal housing units spread, namely (Al-Radhwiya, Al-Rahma neighborhood, Al-Najaf Sea depression, Al-Shawafi area, behind Al-Quds neighborhood, Al-Jadidah II slums, Al-Jadidah III slums, Tabuk neighborhood, Al-Barakiyah), affiliated to the Najaf Governorate Municipality Directorate. The researchers used the descriptive analysis method based on structured personal interviews in informal areas to identify the problem, in addition to using financial tools by calculating costs (fixed capital, working capital) and revenues to solve the problem by submitting a proposal to establish a low-cost residential complex. The study reached several conclusions, the most important of which is that efforts and procedures can be organized to reach a

radical solution by choosing the optimal and fastest scenario, which is building low-cost housing units, and benefiting from the areas on which slums were built. The study recommended a set of recommendations, the most important of which is forming a government working group from the departments concerned with urban planning, the municipality, the Investment Authority, and departments related to infrastructure, to prepare a technical study and an action plan to establish a package of projects distributed across the governorate's areas. These projects are granted to the best investors in establishing low-cost housing units, and forming a subcommittee to evaluate the lands and re-use them in an optimal manner. In a way that achieves benefit for the city, whether by converting them into green spaces, parks, or investment projects that enhance commercial activity in the city.

The problem of informal housing is one of the major contemporary challenges faced by many developing countries, as well as some advanced nations. Given its significant growth in Iraq, especially after the events of 2003, it has become crucial to comprehensively study and address this issue, mitigating its negative effects and eventually eliminating it altogether [1].

The idea of casual lodging, otherwise called present day ghettos, can be followed back to the Modern Upheaval. London in the nineteenth hundred years and New York in the mid twentieth century saw a shift from provincial to metropolitan living, with a solid pattern toward bigger urban communities around the world [1]. Casual settlements have multiplied in different areas all around the world. Because of relative varieties in the meaning of casual lodging starting with one region then onto the next, it very well may be depicted in more ways than one. Some allude to it as devastated and packed regions, paying little heed to consistence with state regulations [2]. It has been marked as informal settlements, unlawful settlements, non-arranged urban areas, and that's only the tip of the iceberg. Different terms incorporate secret lodging, weakened lodging, unapproved endlessly lodging infringement, frequently connected with devastated or underestimated populaces [3].

## 2. Scientific Methodology

### 2.1. Problem Statement

The research problem is complex and consists of several branches that can be summarized as follows:

- Axis and the problem of random spread: This problem has become a threat to cities because they have become a place for crime to spread, and they pose a threat to city organization, which is not controlled by the government.
- Challenges related to encroachment on infrastructure services: Random settlements disrupt infrastructure services in planned residential areas, especially power transmission lines, which already suffer from inadequate maintenance and insufficient energy production relative to consumption. Additionally, there are issues with sewage networks, regular streets, and clean water networks.
- Can the problems of random settlements be managed and radical solutions found?

### 2.2. Hypotheses

There are many practical and quick solutions for managing the problems of the spread of informal settlements in Iraq, especially in the city of Najaf. Efforts and measures can be organized to reach a radical solution through proposing alternative and highly feasible projects, involving both the private and public sectors.

### 2.3. Objectives

The examination plans to set up a logical report that will be submitted to the Directorate of Najaf Region and the Speculation Expert in the territory, to resolve a genuine issue looked by Najaf. A progression of ideas and a possibility study will be created, giving choices and answers for this issue. The examination will contribute successfully to dealing with the issue of casual settlements in the city, guaranteeing the advantage from the areas presently utilized for casual settlements, and setting out open doors to move occupants to additional coordinated and privately represented regions.

### 3. Theoretical Framework

#### 3.1. The Concept of Informal Settlements

Nations all over the planet, particularly emerging nations, deal with the issue of casual settlements. This issue is in a general sense a consequence of a few elements, including political, monetary, social, arranging, and legitimate variables, among others. Besides [5], it is viewed as a metropolitan issue by its overall nature, coming about because of the irregularity between populace development and metropolitan extension. Sentiments contrast in giving a brought together idea to casual settlements, however in spite of these distinctions, casual settlements share normal qualities. These incorporate the making of urban communities [6], regions, and structures that don't line up with the metropolitan texture of the networks inside which they create, and they go against the normal bearings of solid development and extension. Casual settlements are known as private bunches that arose in regions not initially ready for development, through violating the law and infringing on state property and farming area, without any metropolitan and legislative preparation, and have turned into a reality [3].

#### 3.2. Reasons for the Spread of Informal Settlements in Najaf Province

The reasons for the spread of informal settlements can be divided into two categories [4]:

##### 1. Explicit Reasons Connected with Najaf Territory

Najaf territory is recognized by certain variables that have expanded the spread of casual settlements. The most significant of these variables and reasons are:

a. Religious Reasons: Najaf is a huge strict and logical focus, facilitating the hallowed place of Imam Ali (harmony arrive), the Incomparable Mosque of Kufa, and the sanctums of prophets, imams, and respected colleagues. It is the principal place for the strict theological school, home to noticeable strict researchers. These reasons have made the region a center point for drawing in understudies of strict examinations and their families from inside and outside the country. These understudies are frequently from unfortunate foundations and can't stand to purchase houses, driving them to turn to casual settlements for lodging.

b. Economic Reasons: Najaf is an economic and commercial center due to its religious significance and sustained tourism attraction. The province offers significant employment opportunities compared to other provinces, making it a longstanding center for attracting labor from within and outside the country, which has impacted the housing crisis and increased the spread of informal settlements.

c. Security Reasons: Najaf has encountered security dependability for quite a long time, making it a middle for drawing in dislodged populaces from different territories. During the Iran-Iraq War, the southern areas impacted by the conflict started relocating to Najaf, and many settled there after the conflict finished. In 2005, a large number of families moved to Najaf because of constrained removal and settled there after security was reestablished. During the ISIS battle in 2014, a great many families relocated to the region because of the steady security circumstance. The security dependability, alongside business and financial action, has prompted the settlement of dislodged families, influencing the lodging issue and expanding the spread of casual settlements.

##### 2. General Reasons Related to the Whole Country

a. High Housing Prices: The housing market in Iraq has seen a huge ascent in house costs beginning around 2003, with costs expanding more than twentyfold because of the absence of a methodical vision from the state to tackle the lodging issue, depending rather on brief arrangements. This has driven a portion of the populace to fall back on casual settlements.

b. Weak Law Enforcement: After 2003, Iraq experienced the dissolution and disintegration of all state and authority institutions, allowing some unscrupulous individuals and outlaws to seize vast areas of land and sell them to ordinary citizens for construction and residence. The situation was further complicated by the political parties' control over informal settlements, using them as a tool for political bargaining and election campaigns, hindering municipal efforts to address this phenomenon.

c. Population Growth: The high value of houses, weak government solutions to the housing problem, weak law enforcement against trespassers, and the significant increase in population growth

rates have driven citizens to seek housing in informal settlements. The average population growth rate in Iraq over the last ten years is approximately 2.6% annually.

d. High Unemployment and Poverty Rates: Over (25%) of the Iraqi populace lives beneath the neediness line, and joblessness is boundless because of poor financial administration and dependence on a solitary sided economy. This has diverted Iraq from a modern and horticultural country into a customer country.

### 3.3. The Current State of Informal Settlements in Najaf Province

The informal settlements in Najaf province are categorized based on the period of their establishment into those created before and after 2003. Table (1) illustrates the informal settlements, their areas, and the number of housing units based on data from the Najaf Municipality. According to the field visits conducted by the researcher, there is a significant and ongoing expansion in the construction of housing units in these areas, with existing homes being subdivided into multiple residences and the establishment of new areas within the province. The researcher has identified that the number of housing units exceeds the figures reported in municipal statistics, attributed to the continuous expansion of housing units. The researcher also found that there are systematic transactions of buying, selling, renting, and mortgaging occurring in the informal settlements, facilitated by brokerage offices.

**Table 1.**

Illustrates the information on informal settlements spread across Najaf province.

<b>The commonly known names of the areas:</b>	<b>km<sup>2</sup></b>	<b>Land use according to the approved master plan (before encroachment):</b>	<b>Number of complexes on them:</b>	<b>Number of housing units:</b>
Al-Radhawiya area	3.7325	Vertical housing	1	4776
Al-Rahma neighborhood	1.86	Vertical housing	1	5575
Najaf Sea depression	4,605	Commercial areas	1	550
Al-Shawafi area	1,0875	Urban renewal	5 (Scattered)	3950
Behind Al-Quds neighborhood	1,0425	Commercial Areas	1	361
Informal settlements in third Al-Jadida	6,7	Residential	3 (Scattered)	33
Informal settlements in third Al-Jadida	12,5	Mixed-use area (Public and commercial Buildings)	2 (Scattered)	98
Tabuk neighborhood	60	Residential	(scattered)	120
Al-Baraqiya	No statistics available	Residential	Scattered	No statistics available

Source: Data from Najaf Municipality Directorate/Planning Dep. [5], [6]

### 3.4. Characteristics of Informal Settlements in Najaf Province

Informal settlements in Najaf province are characterized by several features, which can be summarized as follows:

### 1. Deterioration of Urban and Environmental Conditions in Informal Settlements [7]

This characteristic is reflected in two main aspects:

- a. Poor Housing Conditions: This is evident from the lack of basic services such as water, sewage, electricity, green spaces, schools, health centers, and kindergartens, among others.
- b. Disorganized Streets: The irregularity in street sizes and extensions is due to the lack of municipal planning for neighborhoods and informal areas. Additionally, some shop owners have encroached upon public streets.

### 2. Low Economic and Social Status of Residents in Informal Settlements

- a. Difficulty in Obtaining Basic Needs: A common feature among most residents in informal settlements is the deterioration of their economic conditions, which leads to poor health, lack of education, low income, and high unemployment.
- b. Informal Settlements as Centers of Social, Tribal, and Clan Conflicts: These areas often become hubs for social and tribal tensions that threaten community and provincial security.

### 3. Deterioration of Security in Informal Settlements

Informal settlements in Najaf represent areas that are difficult for security forces to control. Research conducted in Arab countries has shown that most informal settlements are linked to increased crime rates due to their suitability as environments for criminal activity and centers for various types of crime. Additionally, extremist groups and gangs are active in these areas.

### 3.5. Negative Impacts of Informal Settlements in Najaf Province

Casual settlements in Najaf territory are situated in empty regions under the locale of the Najaf District, as well as on agrarian grounds. These regions come up short on foundation administrations as they were not initially planned for private use by encroachers, being for the most part green spaces, horticultural regions, or terrains under the Service of Climate. The improvement of these casual settlements has adversely affected administrations in nearby regions and neighborhoods, as these settlements fall outside the locale of Najaf District and don't get metropolitan and common administrations like water, sewage, and power. The following are a portion of the vital adverse consequences on adjoining regions [5]:

#### 1. Drinking Water Service

Safe drinking water is fundamental forever and the groundwork of neighborhoods. The foundation of casual settlements has adversely impacted drinking water administrations by infringing on principal supply pipelines to coordinated areas, prompting water deficiencies and interferences. This issue deteriorates throughout the mid-year because of expanded water utilization and low stream levels.

#### 2. Sewage Service

Sewage administrations are critical for human wellbeing as they forestall ecological contamination that undermines lives. Field visits have shown that casual settlements need appropriate sewage administrations, with open seepage channels and outer weighty sewage stockpiling causing direct wellbeing risks and undesirable smells influencing adjoining regions. In winter, the issue is exacerbated by downpour blending in with sewage and water pipelines, transforming the region into a pool of wastewater.

#### 3. Electricity Service

Field visits uncovered that power administration in casual settlements includes unapproved associations with the power network serving adjoining regions. This influences the productivity of power supply to these region, as extra loads on electrical transformers because of direct associations from neighboring power posts diminish power supply hours, especially in summer, and corrupt power quality, causing voltage drops, transformer wear, and expanded blackouts [8].

#### 4. Waste Management Issues

Garbage removal and treatment in casual settlements are serious issues. Numerous casual settlements experience the ill effects of huge amounts of gathered squander because of frail metropolitan endeavors

here. This adversely influences the climate of adjoining regions (and coordinated areas), as occupants discard squander either by unloading it close to adjoining regions or copying it, prompting air contamination and an unattractive climate in Najaf.

#### 5. Education Problems

Casual settlements in Najaf experience the ill effects of an absence of essential, center, and secondary schools, compelling occupants to send their youngsters to schools in adjoining regions. This has expanded understudy numbers in these schools, for certain homerooms surpassing (70) understudies, adversely affecting the nature of training and its results [13].

### 4. Feasibility Study

#### 4.1. Proposed Solutions for Informal Settlements in Najaf Province

In light of an evaluation of the flow circumstance and assessment of adjoining nations' encounters, the scientist has distinguished a bunch of methodologies and situations that ought to be executed by important specialists and leaders to resolve the issue of casual settlements. These systems are portrayed by the accompanying:

1. Scientific Approach: Utilizing data collection and establishing a database of encroachers.
2. **Public Interest:** Ensuring that all proposed strategies address the value of the encroached land.
3. Humanitarian Consideration: Providing effective solutions that ensure human rights and dignity, with options for medium- and long-term repayment.
4. Distinction: Differentiating between impoverished individuals lacking housing and those who have exploited the country's conditions for personal gain.

#### Strategy One: Removal and Cash Compensation

This system includes eliminating the infringed structures and remunerating the residents with cash. Regulatory councils from important bodies, specialized boards of trustees for inspecting cases, and monetary panels for dispensing pay will be shaped. Remuneration will be founded on specialized standards, including the sort of development (e.g., blocks utilized, nature of work, windows, entryways), the region of the built structure, and any trees or natural product plants.

#### Strategy Two: Removal and Compensation with Housing Units

This system gives elective lodging units to the encroachers by getting the development of minimal expense private edifices, with funding from business banks. The interaction includes:

1. Creating a Database: Including ownership of a residential unit, family size, living conditions, occupation, and salary status.
2. Classification: Dividing encroachers into two categories based on the database—those with existing housing and those without.
3. Compensation: Cash compensation for those with housing units; provision of new housing units for those without, with repayment through long-term loans from commercial banks with applicable interest rates.

#### Strategy Three: Removal and Distribution of Land Parcels

This strategy involves distributing residential land parcels to encroachers without existing housing based on the database. The process includes:

1. Land Distribution: Allocating land parcels to eligible encroachers.
2. Housing Loans: Providing housing loans to encroachers according to housing bank regulations, enabling them to build residential units and repay the loan to the housing bank.

#### Strategy Four: Contracting for Rent

Under this strategy, state establishments would rent the infringed properties from the encroachers, with the state getting rent installments. This approach expects to keep up with the ongoing circumstance while assessing the lease per square meter and ascertaining the month-to-month lease. Contracts between pertinent specialists and encroachers would indicate lease in view of the property size.

### Strategy Five: Organization, Sale, and Ownership

This strategy focuses on urban organization of informal settlements followed by sale and ownership. The solution involves [14]:

1. **Urban Planning:** Organizing encroached areas with appropriate street dimensions and allocating sufficient space for schools and kindergartens.
2. **Price Estimation:** Estimating the price per square meter and, consequently, the price of the homes based on the organized layout and available infrastructure.

#### 4.2. Feasibility of Strategy Two: The Strategy of Removal and Compensation with Low-Cost Housing Units

##### First: Definition of the Proposed Project

The proposed project involves the construction of a low-cost housing complex to address the problem of informal settlements in Najaf Governorate. The project will be in a strip format with dimensions of 780 x 250 meters, covering a total area of 195,000 square meters (equivalent to 78 dunums). The complex will contain 500 housing units, each with an area of 150 square meters, designed as horizontal detached housing. The project will accommodate approximately 2,500 to 3,500 residents (based on an average of 6 people per family). This project will form a "zone" or sector that can be replicated according to available space. The complex will include religious, educational, commercial, health, and recreational facilities (which will be handed over to the relevant authorities upon completion of the construction). It will be built using modern construction methods with good technical specifications and contemporary architectural designs, without conflicting with other residential areas. Low-cost housing does not imply reduced quality or standards of stable living; rather, it means reduced costs through optimal use of space and construction methods.

##### Second: Duration of the Proposed Project

According to the project schedule, the time frame for completing the housing units, along with all buildings and infrastructure, is 36 months (3 years). This will be followed by an additional period of 8-12 months to complete the issuance of property deeds for the housing units and to finalize contracts with banks for providing loans to the beneficiaries of the housing units [9].

##### Section Two: Cost and Revenue Study

The monetary review includes arranging, coordinating, sorting out, getting project needs, and putting subsidizes in project tasks to accomplish the most elevated level of advantages and incomes under various circumstances and the general climate. In light of this, the underlying venture expenses of the proposed task can be assessed [10], and incomes (inflows and surges) and business productivity not entirely settled. The monetary review is partitioned into three areas: deciding speculation costs, deciding yearly functional expenses, and deciding incomes:

##### First: Investment Costs

These consist of fixed capital and working capital [11], The total initial investment costs for the project are estimated to be 18,612,394,000 Iraqi Dinars, which include:

**Table 2.**

Investment costs.

Details	Total cost (IQD)	Notes
<b>First: fixed capital</b>		
Establishment expenses	115,000,000	
Project land costs	117,000,000	
Residential units	15,000,000,000	
Buildings and structures	1,813,784,000	
Infrastructure	1,084,020,000	
Costs for offices, employees, workers, and warehouses	51,000,000	
Equipment and machinery	228,000,000	

Details	Total cost (IQD)	Notes
Furnishings and fixtures	24,850,000	
Total fixed costs (Fixed Capital)	18,433,654,000	
<b>Second: Working capital</b>		
Total Working capital costs (25% of annual operating cash costs)	178,740,000	Total working capital costs (25% of annual operating cash costs, which is 714,960,000 iraqi dinars from table 20)
Total aggregate investment costs	18,612,394,000	Total investment costs (Combination of fixed capital costs and working capital)

Source: Prepared by the Researchers, [12]

### Second: Annual Operating Costs

These are the annual costs incurred by the project and are divided into two parts: non-cash operating costs (depreciation) and cash operating costs. They include:

**Table 3.**

Total operating costs.

Details	Total Cost (IQD)	Notes
<b>First: Non-cash operational costs</b>		
Depreciation	101,619,000	Total extinction over a period of (3 years)
Total non-cash operating costs	101,619,000	
<b>Second: Cash operational costs</b>		
Salaries and wages	621,000,000	Total costs of salaries and wages during the implementation period (3 years)
Annual utilities and energy	73,800,000	Total utility and energy costs during the implementation period (3 years)
Administrative expenses	20,160,000	Total costs of administrative expenses during the implementation period (3 years)
Total cash operating costs	714,960,000	
Total operating costs	816,579,000	Total cash and non-cash operating costs

Source: Prepared by the researchers, [13].

### Third: Expected Revenues

**Table 4.**

Expected revenues from the sale of residential units.

<b>Residential unit revenues</b>		
Details	Total Cost (IQD)	Notes
Sale price of one housing unit	47,750,000	The total cost to construct one housing unit, including site requirements and buildings, amounts to 37,224,788 Iraqi Dinars. This is calculated by dividing the total costs by the number of housing units from Table (15), plus the investor's profit margin.
Number of housing units in the complex	500	
Revenue from selling housing units (without deducting loan interest)	23,875,000,000	
Total revenue (after deducting the loan interest value from investor 1%)	23,755,550,000	

The total selling price of the housing unit is 47,750,000 Iraqi Dinars. The owner of the housing unit will pay 23,860,000 Iraqi Dinars during the construction period and until the completion of the unit and

issuance of the property deed. The investor will then contract with a bank to obtain a loan for the remaining amount of the housing unit's price. The bank will charge a 1% interest rate to the investor and provide the remaining amount in cash. The owner will pay the remaining part of the housing unit's price, which amounts to 23,890,000 Iraqi Dinars, in monthly installments over 10 years at an 8% interest rate, with the housing unit deed being held by the bank until the loan is fully repaid. Details of the loan installment repayment are provided in Annex (10). The choice of the bank is the investor's responsibility, and it should be done in agreement with a bank whose loan terms are suitable for the project beneficiaries, such as the Real Estate Bank or the Housing Fund, given that the project has a social and humanitarian aspect.

**Table 5.**  
Marketing plan for selling the residential unit.

<b>Marketing plan for selling the residential unit</b>			
<b>Details</b>	<b>Total (IQD)</b>	<b>Received payments (IQD)</b>	<b>Notes</b>
Residential unit	47,750,000	5,000,000	Advance payment upon signing the contract
		13,860,000	Monthly payments of 385,000 iraqi dinars for a duration of 36 months (Construction Period)
		5,000,000	Payment upon delivery of the residential unit
The amount received from the sale price of each residential unit during a 3-year period		23,860,000	49.9% of the price of the residential unit
Revenue received from residential units (until key handover) during a 3-year period		11,930,000,000	Multiply the amount received per residential unit by the number of residential units (23,860,000 x 500)
The remaining amount of the residential unit price		23,890,000	Paid as a bank loan for 10 years according to the agreement with the bank the investor contracts with the bank to provide the loan (23,890,000 x 500)
Expected revenue to be received from the bank after contracting for a bank loan for the residential units loan interest rate: 1%		11,945,000,000	49.9% of the price of the residential unit
Revenue to be received from the bank after contracting for a bank loan for the residential units after deducting the bank interest (1%)		119,450,000	The investor pays an interest of 1% to the bank on the remaining loan amount for the residential units (11,945,000,000 - 119,450,000)
Total revenue after deducting the loan interest from the investor		11,825,550,000	Total revenues received during the construction period and revenues received from the bank after deducting interest (11,930,000,000 + 11,825,550,000)
Profit from the sale of residential units (500 Units)		23,755,550,000	The investor pays an interest of 1% to the bank on the remaining loan amount for the residential units (11,945,000,000 - 119,450,000)
Expected revenue to be received from the bank after contracting for a bank loan for the residential units loan interest rate: 1%		5,143,156,000	The amount is the result of subtracting the initial investment costs from the total revenues of selling the residential units: (23,755,550,000 - 18,618,394,000)

**Source:** The table was prepared by researchers based on loan data at the Islamic Chancellor Bank, [14], [15].

**Table 6.**  
Cash flow statement and net profit.

<b>Statement of cash inflows and outflows and net profit</b>		
<b>Details</b>		<b>Total (IQD)</b>
Cash inflows (Revenues)	Profit from selling residential units	5,143,156,000
<b>Total cash inflows</b>		5,143,156,000
Subtract from it the total cash outflows	Total cash operating costs	714,960,000
	Total non-cash operating costs	101,619,000
Net accounting profit		4,326,577,000
Add to it the net book value of assets		202,231,000
<b>Net cash flow</b>		<b>4,528,808,000</b>

Second requirement: Report on commercial profitability standards for residential units

**Table 7.**  
Report of the results of commercial profitability criteria for residential units.

<b>Decision:</b>	<b>Criteria:</b>	<b>Criteria:</b>
<ul style="list-style-type: none"> <li>Project acceptance: The payback period is considered appropriate, and the investor can recover the investment costs within an acceptable and relatively short time frame from the beginning of the investment.</li> </ul>	4.1 years	<ul style="list-style-type: none"> <li>Payback period</li> </ul>
<ul style="list-style-type: none"> <li>Project acceptance: The accounting rate of return is greater than the interest rate for depositing funds in banks, which is (12%).</li> </ul>	% 23	<ul style="list-style-type: none"> <li>Accounting rate of return</li> </ul>
<ul style="list-style-type: none"> <li>Project acceptance: The profitability index is greater than one.</li> </ul>	1.27	<ul style="list-style-type: none"> <li>Undiscounted profitability index</li> </ul>
<ul style="list-style-type: none"> <li>Project acceptance: The net present value is positive.</li> </ul>	2,405,803,928 (IQD)	<ul style="list-style-type: none"> <li>Net present value at 10% discount rate</li> </ul>
<ul style="list-style-type: none"> <li>Project acceptance: The profitability index is greater than one.</li> </ul>	1.12	<ul style="list-style-type: none"> <li>Profitability index</li> </ul>
<ul style="list-style-type: none"> <li>Project acceptance: The internal rate of return is greater than the interest rate.</li> </ul>	% 20.7	<ul style="list-style-type: none"> <li>Internal rate of return</li> </ul>

Source: Prepared by the researchers, [16].

The results showed that the project is economically feasible and profitable.

## 5. Conclusions and Recommendations

### 5.1. Conclusions

1-There are a few down to earth and quick situations for dealing with the issue of casual settlements in Iraq, especially in Najaf. Endeavors and strategies can be coordinated to arrive at a conclusive arrangement by choosing the most ideal and quick situation, which is the development of minimal expense lodging units, using the regions where casual settlements right now exist.

2-The area of Najaf is deficient in monetary lodging projects that satisfy the need and line up with the monetary limit of the occupants. A large portion of the private venture projects that have been executed or are under development are business lodging projects, and the costs of these lodging units

are high, not matching the monetary limit of specific fragments of the local area who don't claim their own homes.

3-The task contributes generally to tending to the genuine lodging need, particularly for low-pay occupants of the region, assisting those in casual settlements with progressing from their unregulated lodging, and helping the neighborhood government in dealing with the casual settlements issue.

4-The proposed project offers great productivity for financial backers inside an OK time span in view of the determined models, giving a valuable chance to low-pay people and a genuine answer for killing casual settlements.

5-The proposed project gives social advantages as it focuses on a particular section of the local area, to be specific low-pay people and casual settlement occupants. It helps in arranging the city and lessening waste and strain on framework.

6-All benefit models for the practicality investigation of lodging units and income units demonstrate that the undertaking is feasible, empowering venture and making it the ideal situation among all other options.

## 6. Recommendations

1-Structure a legislative team made out of pertinent divisions in metropolitan preparation, city issues, venture authority, and related framework organizations. This group ought to set up a specialized report and activity plan for making an arrangement of undertakings disseminated across the region. These ventures will be granted to the best financial backers for the development of minimal expense lodging units.

2-Lay out a subcommittee from the above group entrusted with assessing and ideally reusing terrains to help the city. This might incorporate changing over lands into green spaces, parks, and speculation projects that support business movement in the city, as opposed to leaving them in their casual state.

3-Escalate government endeavors to enact financial lodging projects by laying out thorough minimal expense lodging buildings with full administrations, guaranteeing moderateness for low-pay gatherings, especially casual settlement occupants, in accordance with their numbers in the city.

4-Give worked with credits ostensible loan fees from both government and confidential banks to help low-pay bunches in buying lodging units.

5-Work with the cycle for financial backers to get advances from saves money with smoothed out techniques and short handling times.

6-Prescribe to administrative organizations and supervise venture offices to decrease the all-out cost of lodging units and regularly scheduled payment adds up to line up with the pay level of recipients.

7-Create and energize substantial block (block) creation plants as a huge minimal expense building elective with high specialized particulars. This ought to likewise incorporate practical development materials.

8-Urge financial backers to involve manageable natural practices in the development of minimal expense lodging buildings, like introducing sunlight-based chargers for power, using artesian well water, and laying out harmless to the ecosystem wastewater treatment plants and green spaces.

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