

Hamdiya Muhammad Shahwani, Wissal Abdullah Hussein, Alaa Nabeel Al-Heali. (2020). A Study of the Health and Nutritional Status of Slums in the City of Baghdad Case Study in a Random Area. *International Journal of Early Childhood Special Education (INT-JECSE)*, 12(2): 59-67.
DOI: 10.9756/INT-JECSE/V12I2.201056

Received: 10.07.2020 Accepted: 30.08.2020

Hamdiya Muhammad Shahwani¹
Wissal Abdullah Hussein^{2*}
Alaa Nabeel Al-Heali³

A Study of the Health and Nutritional Status of Slums in the City of Baghdad Case Study in a Random Area

Abstract

In this research we shed light on the nature of the relationship between the random housing areas and the health and nutritional reality of the residents of those areas, taking one of the random areas in the outskirts of Baghdad city as a field of research, specifically in the Al-Rashid area / as random housing (outside the law) was established behind each of the Al-Rashid clinic Model and High School Protectors. The research team prepared a questionnaire that included a set of questions, which were sent to a random sample of residents of that region, to seek their views on the health and nutritional conditions in which they live, as this research is concerned with the health and nutritional aspects of the residents of slums. Simple statistical programs were used to calculate percentages and prepare graphs. The research reached a set of conclusions, the most important of which is that the phenomenon of slums has started in Iraq several decades ago, in a limited manner, but it rose after 2003 as a result of high population growth rates in general, and its rise in urban areas in particular, as well as multiple causes, including economic, cultural and religious And security instability, contributed to the polarization of the population towards specific cities, and the city of Baghdad is the highest in terms of the presence of random areas, as it reached about 1022 gatherings, which accounted for 27.7% of the total total of random settlements in Iraq, with a number of housing units of 136689. This research reached a set of recommendations that would address this phenomenon.

Keywords: Slums- forced Migration- IDPs, Ration Cards- food Consumption- healthy Housing Requirements- shantytowns.

Introduction

The slums are one of the challenges facing the developing countries, including Iraq, where it increased its severity in Iraq after 2003 due to the intertwining of a group of political, security, economic and social factors, which led to its spread over large areas of Iraq, and became residential areas by themselves. The idea of the

research revolves around the effect of housing in random areas on the health and nutrition of individuals living in those areas, by eating four axes, the first axis focused on the research methodology, and the second axis presented the reasons for the emergence of those areas, while the third axis addressed the applied side, and in

Hamdiya Muhammad Shahwani¹, Market Research and Consumer Protection Center, University of Baghdad, Iraq.

Wissal Abdullah Hussein^{2*}, Market Research and Consumer Protection Center, University of Baghdad, Iraq. Email: wissalabdullah@yahoo.com

Alaa Nabeel Al-Heali³, Market Research and Consumer Protection Center, University of Baghdad, Iraq.

the fourth axis we presented the most important Conclusions and recommendations.

The First Axis: Research Methodology

First: The Research Problem

The informal areas extended within large areas in most of the cities of Iraq, including Baghdad, where many factors contributed to its extension, including those related to the political and security aspect, displacement and the social and economic aspect, in addition to these reasons that some individuals put their hands on some areas and build housing in them, taking advantage of the absence of government control and accountability. Whatever the case, the issue of informal housing, of course, leads to distortions in the urban planning of cities, and this problem is exacerbated with the absence of the government role and its inability to develop appropriate strategies to address it.

Second: The Importance of Research

The importance of the research stems from the following:-

1. The research derives its importance from the importance of research on the reasons for the emergence of these areas.
2. Providing an intellectual framework for research variables that will contribute to providing the library with some aspects of theoretical and applied enrichment with regard to such a topic.
3. It can contribute to building a starting base to find appropriate solutions to the phenomenon that led to the spread of visual pollution, as well as pressure on services.

Third: Research Objectives

The research aims to:

- 1- Shedding light on the health and nutritional reality of slum residents.
- 2- Disclosure of the variables that contributed to individuals living in these areas.

Fourth: The Research Hypothesis

The research is based on the following hypothesis: Random housing affects the health and nutritional status of the population towards its reduction.

Fifth: Research Methodology

In our research, we relied on the descriptive analytical approach, which combines the theoretical and applied aspects in the interpretation of the results of the phenomenon of random housing.

Sixth: Research Limits

1. Spatial boundaries: a random area located in Yusifiyah.
2. Temporal border: The search included nine months of 2019, starting from January until the month of September.

Eighth: Statistical Methods Used

We relied on simple statistical programs to calculate percentages.

The Second Axis: Slums. Concept, Characteristics and Reasons

First: The Concept of Slums

The historical roots of the emergence of informal settlements date back to the nineteenth century during the Industrial Revolution, as they spread to various parts of the world, and the names given to them were numerous. Cancer housing, shanty towns, dwarf housing, by passers, illegal housing and shanty towns.

Many of the literature on urban planning, sociology, and economics dealt with the concept of slums, each from the angle that it specializes in. It came in the definition of the Arab Institute for Urban Development of slums as being places on which housing was built without a legal basis (building permit) and in most cases these housing is constructed outside the framework. Governmental services include wastewater, potable water and electricity, as well as health and educational services. (Lina Abdul-Amir Fakher, 2008, 10) She also knew that it was any house built in violation of the laws of urban, health and public safety, a threat to society in the context of harming the public interest (Mulla Hawwish. 2005. 248), accordingly it can be said that informal housing is a residential gathering that often arises on the outskirts of cities inhabited by dense groups of the population, in a context outside of the basic design of urban planning for cities, where these population groups take over the lands of the state, and without a permit to adopt housing houses. Of course, these housing will be deprived of all types of basic services such as water, sewage and electricity, as well as the lack of health and educational services, and of course this will have serious repercussions, including the spread of diseases and the deprivation of education with the spread of illiteracy. Rather, these cities will be hotbeds for illegal activities Oftentimes.

Second: Reasons for the Emergence of Slums

The history of the emergence of the problem of informal housing complexes in Iraq dates back to the thirties of the twentieth century, and that problem worsened and intensified after 2003, where the report issued by the executive management of the poverty alleviation strategy, issued in 2017 and titled "Stabilizing the sites of informal housing gatherings" indicated that the city of Baghdad is the highest in terms of the presence of random population centers, as it amounted to about 1022 communities, which constituted about 27.7% of the total number of informal settlements in Iraq, with a number of 136689 housing units, which constituted about 26.2% of the total number of informal settlements. (Ministry of Planning and Development Cooperation, 2018, 175) These reasons can be divided into the following:

- **High population growth rates:** High population growth rates can be discussed from two sides: - (United Nations Development Fund, National Population Policy Committee. 2012, p. 33. P. 41).

- **High population growth rates:** Iraq is among the countries that are characterized by high population growth rates, as those rates during the period from 1947 to 1957 reached about 3.4%, and during the following years until the present time, those rates remained at their level of 3% and within this The framework The United Nations estimates that the population growth rates will range between 3% - 2.7%, to reach during the year 2025 about 48.9 million people.

- **High population growth rates in some urban areas:** Associated with the high population growth rates (mentioned above), the phenomenon of population growth in urban areas, which is characterized by being attractive areas for the population for economic, cultural and religious reasons, and the associated provision of appropriate employment opportunities for the population, therefore Some urban areas attract individuals significantly, outside the framework of assimilating those areas, which leads individuals to set up informal areas to confront the housing problem and the inability of many of them to obtain suitable housing, and here random neighborhoods began to expand, especially in developing countries because of their inability to meet the needs of their residents Urban housing.

1. Challenges facing the residents of rural areas: The rural areas suffer from multiple problems, including what are related to the arable areas that are exposed to the problems of desertification, soil salinity, rainfall fluctuation and government lack of interest in farmers in terms of not supporting and protecting their

agricultural products and facilitating their marketing, as well as problems of lack of availability Its infrastructure, including the impact of a continuous migration of people from the countryside to the city centers to obtain appropriate employment opportunities, therefore reducing the development gap between rural and urban areas is enough to address this problem (Ministry of Planning, 2012: p. 37).

2. Forced migration: It can be said that the deteriorating security conditions in some Iraqi cities, which embodied the control of some terrorist groups in those cities, led to the emigration of hundreds or even thousands of residents to relatively safe cities, which witnessed security stability, and Baghdad Governorate was among The Iraqi provinces that witnessed a large influx in the numbers of the displaced to it, where one of the surveys indicated for one of the areas of the city of Baghdad, that the forced displacement occupied the first rank with the reasons for migration, with an estimated rate of about 60.3% (Raad Mufid Ahmed Al-Khazraji, Ibrahim Abdul Allawi Mohsen, 2015: P. 407).

3. Inaction by the government with regard to the violations on the lands belonging to the state: This naturally led to the construction of housing units in contravention of the basic designs of the city, which led to the continuation of the excess by the individuals, and with the removal of some of the violations, it is that it is very limited. This led to the emergence of random housing complexes.

4. Failure to keep pace with the population growth of the basic designs and plans of the city: Not taking into account the establishment of suitable housing complexes to accommodate the natural population increase, because the population growth is not compatible with the growth in housing construction, so there will be an increasing gap, in favor of the population at the expense of housing, leading to the establishment of Individuals construct housing on the outskirts of cities in search of stability for their families, and at prices appropriate to their standard of living, in other words, the emergence of the housing deficit problem.

The third axis: the practical side In this research, we used a field survey of a random housing complex located in the outskirts of Baghdad Governorate, specifically in the Rashid district in the area behind the model Rashid clinic, with the aim of studying the health and nutritional status of a random sample of static families in that area. 120 questionnaires were distributed according to one questionnaire for each family, 12 of which were neglected due to their invalidity, which means that the research included 108 families living in that area along

with the applied side. The results of the analysis were as follows:

The Vocabulary of Table-1 Indicates the Demographic Data of the Surveyed Sample, as Follows

First: Demographic Data

Table 1.

Demographic information of the research sample

Detail	number	%	
Sex	Male	85	78.7
	Female	23	21.3
Social status	Unmarried	5	4.6
	Married	10	92.6
	divorced	1	0.9
	Widower	2	1.9
Age / year	6-12	10	9.3
	13-19	9	8.3
	20 and over	89	82.4
Academic achievement	Reads and writes	30	27.7
	Primary	29	26.8
	Middle stage	25	23.1
	High school	12	11.1
	Bachelor and above	12	11.1
Standard of living	Weak	84	77.8
	Average(Medium)	21	19.4
	Good	3	2.8
Number of family members	1-5	69	63.8
	6-10	31	28.8
	More than 10	8	7.4
Housing area / meter ²	50	46	42.5
	100	21	19.5
	150	20	18.5
	200	21	19.5
Number of rooms / house	1	51	47.2
	2	32	29.6
	3	25	23.2
work nature	government employee	18	16.7
	Earner	42	38.9
	Out of work	44	40.7
	retired	4	3.7
Total		108	100%

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

1. The percentage of males and females in the research sample constituted 78.7% and 21.3%, respectively.

2. The percentage of married couples in the research sample was 92.6%, compared to 4.6% for non-married couples and 2.8% for a widow.

3. The percentage of those without a primary certificate in the research sample exceeded a quarter, reaching 27.77, while the percentage of those holding a primary certificate was about 26.31%, and the percentage of those holding an intermediate certificate reached 23.7%, and the proportion of those with a preparatory and bachelors degree was equal, as The percentage of each of them was about 11.11%.

4. The standard of living: about three quarters of the study sample answered that their standard of living is weak, they constituted about 77.8%, while about 19.4% of them had an average standard of living, while about 2.8% of the sample formed that their standard of living is good. 5. Number of family members: The results of the survey on the question about the number of family members show that about 63.8% of them do not exceed six members, while the percentage of those who numbered between six to ten individuals amounted to 28.8%, and the families whose number exceeds ten individuals formed about 7.4%.

5. Number of family members: The results of the survey on the question about the number of family members show that about 63.8% of them do not exceed six members, while the percentage of those who numbered between six to ten individuals amounted to 28.8%, and the families whose number exceeds ten individuals formed about 7.4%.

6. The area of the dwelling: The number of those who live in a house with an area of fifty square meters reached about 46 individuals, of the sample included in the survey, they made up about 42.5%, while the percentage of those who lived in an area of one hundred square meters amounted to about 19.5%, and one hundred and fifty square meters about 18.5% And two hundred square meters, about 19.5%. This matter refers to the randomness of the division of residential lands. Usually, the residential areas that are subject to the basic plans and designs until the areas are equal, while the randomness of the areas in the different areas clearly indicates the absence of a law to which those lands are subjected and the lack of a basic design for the region.

7. Number of rooms in the dwelling: The responses of the surveyed group indicated that the percentage of those who own one room has

reached about 47.2%, while the remaining percentage has been shared between those who own two and three rooms, 29.6% and 23.2%, respectively. As it turns out, about half of the sample possesses only one room, which is compared to the number of members of the same family, which is below six individuals, is a negative indication, due to the lack of a healthy place suitable for normal life.

8. The nature of the work: The results indicated that about 40.7% of the sample of the research are unemployed, and the percentage of winners reached about 38.9%. The percentage of those who receive a pension is about 3.7%.

Second: Choosing Random Housing

Table 2.
Conditions for choosing housing in slums

The details		Numbers	%
Reasons for housing in residential complexes in slums	Political	16	14.8
	Economical	0	0
	Social	0	0
	The severity of poverty	92	85.2

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

The vocabulary of Table-2 indicates the opinions of the polled sample about the conditions for choosing housing in slums, that.

1. Reasons for choosing housing in the slum: The results of the questionnaire show that the severity of poverty is a basic reason for choosing individuals to live in random housing complexes, as they formed about 85.2% of the total sample, in accordance with the results of the surveys issued by the Ministry of Planning and Development Cooperation, which indicated during 2007 40% of the poor of Iraq are concentrated in five governorates of Baghdad, Basra, Nineveh, Babylon, and De-Qar, as some of those governorates have suffered from an imbalance in development that has led to high poverty rates, then the search for job opportunities in other places, and that displacement Forced (as a result of security instability) Led to people being deprived of their jobs and thus not receiving an income to meet the needs of their dependents, in order to exacerbate the problem of poverty. In their governorates, the poverty rate has doubled, to about 41.2%. (Ministry of Planning, 2018: p. 40) This result shows that poverty is a basic determinant of housing in slums, and this of course corresponds to the data obtained that about half of the sample does not have

permanent work and it depends on work with daily wages, while about 14.8% indicated that the political reasons caused them to live in these areas.

Third: Public Health Data

The health data obtained from the questions were divided on two sides, the first concerned the health requirements of the home, while the second included the health requirements of individuals, as shown in the data of tables -3-and- 4.

1. Health Requirements of the Home

Table 3.
Health requirements available in informal settlements

The details	The answer	Numbers	%
Are there ventilation outlets to get sunlight into the house?	Yes	88	81.5
	No	20	18.5
Are there sanitation channels in the house?	Yes	55	50.9
	No	53	49.1
Is waste disposal services available in the area?	Yes	73	67.6
	No	35	32.4
Are cleaning powders and sterilizers used in the home cleaning process?	Yes	78	72.2
	No	30	27.8

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

a. The results of the availability of ventilation and access to sunlight indicate that.

- 81.5% of the sample confirmed availability of ventilation and sunlight entry
- 18.5% of the sample confirmed the opposite, meaning that the necessary ventilation ports are not available.

B. The results of the sanitation channels in the residence indicate that...

- 50.9% of the survey sample possesses sanitation channels in the housing units.
- 49.1% of the sample does not have sanitation channels in these housing units.

C. The results of the availability of waste disposal services in the residential area indicate that.

- 67.6% support the availability of these services in the residential area.
- 32.4% confirmed the lack of waste disposal services.

D. The results of using household cleaning products and disinfectants show that..

72.2% use these powders and sterilizers.

27.8% do not use powders and sterilizers.

We note with these results a disparity with regard to the requirements of healthy housing, as the majority of the sample confirmed the availability of ventilation outlets, and this is a relatively good indicator, as about half of the sample confirmed that there are sanitation channels in the housing in which they live, and the other half denied that, that is, of course It is one of the negative indicators, because the lack of these channels will have serious health implications for the individuals who live in these dwellings. As for the availability of waste disposal services, more than two-thirds of the sample confirmed the existence of that service, while about a third of them confirmed their unavailability, and for powders Cleaning and detergents are relatively average results, that is about 72.2% use it, while about 27.8% confirm that they do not use it. All of these results indicate that the health requirements are not completely available in these housing units, where randomness is almost prevalent in the construction of these housing in the absence of planning and without obtaining official building permits, and this of course warns of serious health implications, because there is almost certainty that this region It is among the areas that are not eligible for housing, but are agricultural areas.

2. Health Requirements for Individuals

Table 4.

Health requirements for individuals residing in the slums

The details	The answer	Numbers	%
Do children get the necessary vaccines?	Yes	97	89.8
	No	11	10.2
Is the health center reviewed when symptoms of infectious diseases appear?	Yes	94	87.04
	No	14	12.96
Is there an interest by the health center in treating diseases that people suffer from?	Yes	82	75.9
	No	26	24.1
Have you noticed one of your children being infected with intestinal worms?	Yes	40	37.04
	No	68	62.96

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

a. The results of individuals obtaining the necessary vaccines show that...

- 89.8% of the sample confirmed that their children are receiving the necessary vaccinations.

- 10.2% of the sample confirmed that they do not get these vaccines.

B. The results with respect to the health center review when symptoms appear...

87.04% of the sample visit the health center.

- 12.96% of the sample do not review the health center.

C. The results of the health center's interest in treating diseases indicate that. C

- 75.9% of the sample confirmed the interest of the health center.

- 24.1% of the sample responded that they were not interested in the health center.

D. The results of intestinal worm infestation show that:

- 37.4% of the sample agreed that their children suffer from an intestinal worm infection.

62.96% of the sample confirmed that their children do not have these worms.

These answers indicate that the health requirements of the residents of that slum, which is located behind the typical Rashid clinic, enjoy health services that are relatively good, because these services are provided by health centers available in the region, and thus they are a source of pressure on these centers, because The urban planning of the area did not take into account the population density that would inhabit that area, and the health center is obliged to provide health services to its auditors from that region.

Fourth: Nutritional Data for the Surveyed Group

The issue of food was discussed from several aspects, including those related to the ration card distributed by the Ministry of Trade through its agents, and the aspect of diversifying the food necessary to enjoy a healthy life, and the requirements for preserving food, and we also note the details in tables -5, -6, and -7- and - 8.

1. Data Ration Card

Table 5.

Ration card information

The details	The answer	Numbers	%
Do you get the food card vocabulary from the government?	Yes	102	94.4
	No	6	5.6
Does the family consume all the supplies distributed in the ration?	Yes	108	100
	No	0	0
Is food vocabulary distributed ration enough?	Yes	5	4.6
	No	103	95.4

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

- a. The results of the ration card for the sample revealed that...
 - 94.4% of the sample receive the ration card items.
 - 5.6% of the sample do not obtain the ration card items.
- b. The results of the family's consumption of the ration card items indicate that.
 - 100% of the sample consumes ration card items.
- c. The results of food sufficiency on the ration card show that.
 - 4.6% of the sample confirmed that the ration card items are sufficient as a food ration.
 - 95.4% of the sample answered that the food items distributed with the ration card are not sufficient.

It can be said that the summary of the responses of the surveyed sample, with regard to the ration card, that the majority of the sample receives a food ration, which is of course a good indicator, and that those who do not receive those items, and who made up about 5.6% of the sample, may be due to the lack of the necessary identification documents. To receive them, or transactions to receive them are still in progress. The consumption of the sample for all vocabulary can be due to the relatively few distributed foodstuffs, and this is what actually appeared with the question of the adequacy of the foodstuff distributed or not enough, where about 95.4% of the sample answered that it is not sufficient, and here the seriousness of the problem lies because most of them suffer from Poverty, and insufficient food distributed, will lead to people suffering from food shortages that affect their health and their dependents.

2. Meat, Eggs, Vegetables and Fruits

Table 6.

Consumption of meat, eggs, vegetables and fruits

The details	The answer	Numbers	%
Do you eat meat of all kinds?	Yes	73	66.7
	No	35	33.3
Does the family eat vegetables and fruits?	Yes	90	83.3
	No	18	16.7
Does the family eat eggs?	Yes	85	78.7
	No	23	21.3

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

a. The results of meat consumption of all kinds show that

- 66.7% of the sample consumes meat of all kinds, in connection with that, about 53.7% of

them answered consuming it monthly, while about 33% of them confirmed that they consume meat every week, while about 15.7% said that they consume meat daily.

- 33.3% of the sample do not consume meat of all kinds.

b. Results of Eggs Consumption are shown

- 78.7% of the sample consumes eggs, and it is associated with that answer that about 45.4% consume eggs per week, while about 41.7% confirmed that they consume them daily, and 12.9% per month.
- 21.3% of the sample do not consume eggs. T.

The Results of the Family's Consumption of Fruits and Vegetables show that

- 83.3% of the sample consumed fruits and vegetables, and that percentage was divided into 28.7% of them consuming it monthly, 54% weekly, and 21.3% daily.
- 16.7% of the sample do not consume fruits and vegetables.

Accordingly, we note that a third of the surveyed sample does not eat meat permanently, and this is a dangerous indication that meat is a basic foodstuff, providing the body with the proteins necessary for growth and cell construction, and even for the two-thirds who confirmed that they were consuming it, the proportion of those consuming it monthly exceeded half. As for eating eggs, most of the sample that confirmed that they eat eggs, we note that a large percentage of them do not eat it only once a month, 68%, and this of course is a dangerous sign, because this will lead to a shortage of some of the nutrients that the body needs.

3. Legumes, Vitamins and Minerals

Table 7.

Consumption of legumes, vitamins, and salt fortified with iodine

The details	The answer	Numbers	%
Does the family eat legumes?	Yes	85	78.7
	No	23	21.3
Does the family eat nutritional supplements (vitamins of all kinds)?	Yes	24	22.2
	No	84	77.8
Is iodine-fortified salt used?	Yes	70	64.8
	No	38	35.2

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

a. The results of legumes consumption show that.

- 78.7% of the sample consumes legumes.

- 21.3% of the sample does not consume legumes.
- B. Vitamin consumption results show that.
22.2% of the sample consumed vitamins and some nutritional supplements.
- 77.8% of the sample does not consume vitamins and some nutritional supplements.
- C. The results of the family's consumption of iodized salt show that.
- 64.8% of the sample consumes this type of salt.
 - 35.2% of the sample did not consume iodized salt.

Therefore, as we note from the results of the survey, the surveyed families confirmed that they were eating legumes by more than three quarters of the sample, and that the reason could be due to the cheap price of these materials compared to meat, and that it is as a foodstuff that compensates them for the relative deficiency of proteins. As for vitamins, we notice that more than three quarters of the individuals in the sample do not consume vitamins, as they account for about 77.8%, compared to 22.2% for them. As for their use of iodized salt, it was found that about 35.2% are using it, while there are about 64.8% not they use it.

4. Quality of Food and Preservatives

Table 8.
Food Quality and Accessories for Preservation

The details	The answer	Numbers	%
Do you have to buy food that is damaged or invalid for its cheap price?	Yes	83	76.8
	No	25	23.2
Is food stored in the refrigerator?	Yes	74	68.5
	No	34	31.5
Do you have to eat old meals (more than a day has passed)?	Yes	51	47.2
	No	57	52.8
Do you have to buy expired food cans (for cheaper prices)?	Yes	38	35
	No	70	65

Source: The table was prepared based on the data obtained after the distribution of distributed questionnaires.

- a. The results of purchasing damaged or expired food items show that.
- 76.8% of the sample consumes food that is spoiled for its cheap price. 23.2% of the sample does not consume such materials.

- b. The results regarding the consumption of old foodstuffs show that.
- 47.2% of the sample consumes old food items.
 - 52.8% of the sample does not consume old food items.
- c. The results of purchasing expired cans show that.
- 35% of the sample consumed expired tins.
 - 65% of the sample does not consume expired tins.
- d. The results of food preservation supplies show that.
- 68.5% of the sample keeps food in the refrigerator.
 - 31.5% of the sample does not store foodstuffs in the refrigerator because they are not available.
- Accordingly, we note that the consumption of damaged and expired food items is relatively large, as well as not keeping foodstuffs in the refrigerator because they are not available for about a third of the sample, which is one of the dangerous indicators that will show its future repercussions on the health of individuals.

The Fourth Axis: Conclusions and Recommendations

1: Conclusions

The research reached a set of conclusions as follows:-

1. The unstable political situation after 2003 contributed to the exacerbation of the problem of informal housing in the city of Baghdad, which is the highest in terms of the presence of random population areas compared to the rest of the Iraqi cities, as it reached about 1022 communities, which constituted about 27.7% of the total number of random settlements. With the number of housing, 136689, it constituted about 26.2% of the total number of informal housing.

2. A group of factors contributed to the problem of establishing informal areas in the city of Baghdad, including those related to high population growth rates, economic, social and cultural conditions, as well as government inaction in finding solutions to this problem.

3. The results of the survey showed that poverty is a basic determinant of housing in informal settlements, as it came first in terms of individuals choosing to live in these areas, followed by political causes of security instability and the associated forced displacement and displacement of residents of cities that have witnessed the spread of terrorist groups in them.

4. Health requirements are not fully available in informal settlements of the area whose conditions have been studied, where randomness is almost prevalent in housing construction in the absence of planning and without obtaining official building permits, as the region is not prepared for housing in terms of

providing sanitation and other services that linked to the infrastructure of residential areas.

5. Most of the residents of the slum area enjoyed relatively good health services, as indicated by the results of the survey, and the reason may be due to the region behind the Al-Rashid health clinic, and for this the residents of that area obtained these services, and they formed a source of pressure on the providers of that health service.

6. The majority of the population of the slum area that has been studied receives the ration card items. As for meat, a large percentage of the sample consumes it once a month, as well as for eggs, most of the sample consumes eggs once a month, an indication of serious health consequences.

7. Three-quarters of the sample consumes legumes, but vitamins, most of them do not take them. Also, most of the sample consumes damaged and expired materials, which is of course a dangerous indicator of health.

2: Recommendations

The most important findings of the research include the following:

1. Adopting the establishment of a housing project that provides basic services such as sanitation, water and electricity, to find solutions for the residents of slums by obtaining adequate housing that meets the health conditions.

2. Tightening government control over abuses that occur in areas not designated for housing, and that are owned by the state, and to take deterrent measures against people who contribute to the construction of random housing.

3. Giving the issue of random housing the utmost importance through conducting studies and research to diagnose the reasons that led to a rise in the number of people who live in those housing, because there is exploitation for some weak souls, even though they do not need to live in such areas, but they take advantage of the lack of legal accountability to turn to such things. In order to obtain the money by renting these houses or selling them to other people.

4. Developing rural areas by providing basic services, in addition to tackling the problems that those regions suffer from the phenomena of desertification and salinization of the soil, and finding solutions to support farmers with both production requirements, as well as not to import agricultural crops that can be produced locally, to protect farmers, and motivate them to continue production. Agricultural to achieve the requirements of economic development.

5. Intensifying health and social committees to investigate the health and nutritional conditions of slum residents, with the aim of raising the level of population awareness.

References

- Raad, M.A.A., & Ibrahim, A.A.M. (2017). Geographical Analysis of Immigration to Baghdad Governorate for the year 2005. *Journal of the College of Education, Fourth Issue, Al-Mustansiriya University.*
- Shlash. (2012). Iraq Population Situation Analysis- PSA2012 The Second National Report on the State of Iraq Population in the Context of the ICPD and MDGs / supported, 43. <https://iraq.unfpa.org/sites/default/files/pub-pdf/PSA%20English%202012.pdf>
- Lina, A.A.F. (2008). *Random housing, the study area or the rose in Al-Jadiriya. Higher diploma research submitted to the Higher Institute of Urban and Regional Planning.* Baghdad University.
- Mulla, H., & Louay, T. (2005). *Random housing between the right to adequate housing and the reality of the case study field analysis, socio-planning.* Fourth conference. Urban and Regional Planning Institute. Baghdad University.
- Ministry of Planning and Development Cooperation. (2018). National Development Plan 2018-2022.
- Ministry of Planning. (2012). Spatial development 2013-2017.
- Ministry of Planning, Higher Committee for Poverty Reduction Strategy, World Bank, United Nations. (2018). Poverty Reduction Strategy in Iraq 2018-2022.