

To contribute in handling the housing crisis in the city of Baghdad A study for the decision of the Mayoralty of Baghdad to allow adding a third floor for the residential units.

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Abstract:

We need to know the basic facts concerning planning top and bottom limits including any critical levels or the threshold over which the cost would be much higher for land development. Therefore this paper concerned with Baghdad Municipality decision No.2/1004 dated 7/12/2004. The reason behind this decision is the hope to face up at least in the severe housing crisis in the city of Baghdad. This paper attempts to know the attitude of the local community in the general through a field study of people living near such dwelling where third floors are added of. This might indicate any positive or negative effects whether on short or long-term including its effect on the theoretical side including the population growth of Baghdad, the urban land, the housing needs, population density, estimation of the land assigned for housing in the current Master plan in addition to housing finance and infrastructure and how this is related to allowing on additional third floors. The results of the study included some positive points in the eyes of the local community but with some reservation concerning the neighboring dwelling and the future of the urban fabric particularly the traditional neighborhoods. Therefore thus is a need to review the concerned B.M. decision especially in the traditional neighborhoods of the city as well as in the areas of high living densities, There is also a need to increase the Estate Bank housing loach as it is an important factor in housing production.

Introduction:

The notion of man's right of proper residence has aroused a great deal of international concern and local argument, and the United Nations placed things in order in the second conference when it confirmed the legal status of man's right of proper residence, which was confirmed by international unanimity.

The residence problem in Iraq occupies an advanced rank in the list of problems faced by the people of Iraq in general and the capital Baghdad in particular, where this problem is placing it's burden's on the social, economic and psychological aspect of the society and is placing additional burdens on the society.

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This problem (despite it's aggravation through time) did not receive sufficient study, research and treatment till 1955, where a course for housing was entered within the five year courses with the construction projects to build (200) thousand residential units in all parts of Iraq, with the assistance of (Doksyadis company), in order to eliminate the aggravating housing crisis, only 25% of which was carried out.

The most recent studies estimated the residential need in Iraq till the year (2014) by (4,462,-) thousand residential units (four million four hundred and sixty two thousand residential units). And in this large deficit there must be placed competent housing policies to cover the housing deficiency, also, this untraditional problem should be faced with untraditional methods and solutions too, which fit with the nature and size of this problem.

This research was related to the city of Baghdad which form the heaviest residential weight in Iraq which reach more than 23% of Iraq's population. The residential problem in it form approximately 25% of the total residential need in the country, added to it the limitedness of the urban land in the city of Baghdad, where there is only 720 Hectares of free land devoted for residence according to the main design of the city, and using most of these lands refer to the private sector. The actual need for the lands required for this usage reaches approximately (10840) Hectares.

According to the aforementioned, the decision of the Mayoralty of Baghdad was issued to add a third floor to the residential units, provided that the height of the building will not exceed 9m.

Through the general problem which includes facing the residential deficiency, residential need and the rarity of the urban land, the research problem was formed which includes studying the positive and negative effects of the aforementioned decision of the Mayoralty of Baghdad.

The research aims to shed light upon the extent of contribution of this decision in solving the residence problem in the city of Baghdad from one side, and knowing the positive and negative aspects resulting from this decision, through a field study, which depend upon the results of the field survey by sample, by two stages, the first stage represents a sample of the population of one of Baghdad's sectors which is Almansoor sector, and the second stage relates to the units adjacent to units which the third floor of which has been built.

In facing this subject, the research is based upon a fundamental theory which says (Any contribution in increasing the residential number without prejudice to the limited urban land is a positive contribution in facing the residential problem in the city of Baghdad).



The populational increase of the city of Baghdad:

The population of the city of Baghdad according to the census of 1977 reached (2.7) million people, and it increased to (3.8) million people in 1987, where the average yearly growth was (3.2%).⁽¹⁾ Then it increased in 1997, to reach (4.4) million people, despite the decrease of the yearly growth average according to the mentioned census (1997) which reached (1.36%), whose decrease reasons relate to the abnormal conditions which Iraq encountered in that period (the Iraqi Iranian war and the Gulf war). If we presume that the average residential growth of the city of Baghdad is about (2%) yearly, then the residents of Baghdad will reach approximately (9) million people by the year (2030) unless limited procedures are taken to reduce this volume.⁽²⁾

The urban land of Baghdad city:

Baghdad city (the round Islamic city) was founded in the year 145 A.H. / 762 A.D. with an area not exceeding (5.32) sq. Km. and with a circle whose diameter is almost (2.6) Km. $^{(3)}$

Many designs were prepared for Baghdad city in it's modern era, starting from the year 1936, then the year 1956 and after which in 1958, then in 1967, 1973, 1989, and finally the study of reconsidering the basic plan in 1993.

Currently, the area of Baghdad city within it's basic design reaches (900) sq. km.

The urban land in the concept of geographers (the land which the settlements arise in and it's construction constituents are the center of attraction in using it).

In the field of economy, the urban land is considered one of the natural resources and enters the economic life as a commodity depended upon by the investor to determine the production costs of the goods and services prepared for consumption.

Regardless of the different specializations, the concept of urban land should be related to three main aspects, which are:

- That it possesses a permanent monopoly character which relates to the effects of the location factor.
- The anticipated change in using it is considered one of the most important factors in increasing it's price.
- It is greatly effected in the decisions and policies adopted by the local administrations in determining the land market.

Also, there are factors which work in a linked and non-separated manner with who deals with the urban land, including the property of the land, it's possession, market of the urban land, value of the land and it's price, depositing the land and also administrating the urban land, this latter



factor represents a group of mechanisms and programs which aim to prepare the land for urban uses at need and according to time programs which are consistent with the civilized development of the city. Therefore, it is part and parcel of the political, economic and social development program of the city.

These mechanisms aim to reach a maximum balance between fundamental forces which effect in the urban land, which are the market, the regulations of using the land and the nature of the property. ⁽⁴⁾

In this regard, the study of the urban development for Baghdad (2015) pointed out that the total of the empty lands which are devoted for residence according to the basic design is about (720) Hectares, most of which are land owned by the private sector.

The area required to cover the residential need till the year (2015) is estimated to be (10840) Hectares. This illustrates the large gap between what is available of areas prepared for residence and the need for it. Through the aforementioned, we can see that the decision of the Mayoralty of Baghdad has a logical base, which includes adding a third floor to the existing residential units, which can contribute in some way or another to cover part of the need for the urban land for residence, especially if we knew that 50-60% of the urban land in the basic design is occupied by the residential usage.

But, such a decision must take into consideration many aspects, most important of which are the heritage, religious and traditional parts of the city, also, the current and future possibilities for the superstructure, the infrastructure and the environmental aspects especially the local climate, and other considerations related with the nature of the current urban texture of the city and the future texture for it, with other considerations related with the ancientness or modernity of the current residential units and their constructional and building capabilities ... etc. ⁽⁵⁾

The residential need in Baghdad city and some housing indicators:

Depending on the census of 1997 and on the basis of the size of the family for the mentioned census which is 6.7 people/family. ⁽⁶⁾ What is required of units to cover the actual residential need is (686,567) thousand residential units (six hundred eighty six thousand five hundred and sixty seven), while it turned out that the number of the residential units actually occupied is (522,727) thousand residential units (five hundred twenty two thousand seven hundred and twenty seven) residential units which include the residential units below the adopted standards. This means that (163,840) residential units is the result of the shortage in the residential units, which results that the average of occupation rises to 8.8 people/residential unit, added to this shortage



(11734) (eleven thousand seven hundred and thirty four) temporal residential units (huts and palmtree leaves houses), thereby, the shortage in the units for covering the deficiency in the residential units becomes (175,577) (one hundred and seventy five thousand five hundred and seventy seven) residential units.

Also, added to this number is the number of units which are considered obsolete which age is more than 70 years which are (25,750) twenty five thousand seven hundred and fifty residential units in Alkarkh and Alrisafah of Baghdad city. Thereby, the number of the deficiency in the residential units is (201,327) two hundred and one thousand three hundred and twenty seven residential units. Added to this deficiency is the average of the annual extinction of the residential units which is in average 2.5%, which will in turn will lead to the increase of the actual deficiency of the residential units based on adopting the lower limits of the availability of housing standards in the existing units. And if we adopt these numbers, then the deficit in the housing credit &&&& will rise to (365,164) three hundred sixty five thousand one hundred and sixty four residential units.

In calculating the future residential need till the year 2015 and on the basis of the family size in 1997 which is 6.7 people/family, the residential need will reach (970,149) nine hundred and seventy thousand one hundred and forty nine) residential units, but if it is required to calculate the residential need to (2030) then what is required is that the housing number will be in it's lower limits (1343,283) one million three hundred and forty three thousand two hundred and eighty three residential units. ⁽⁷⁾ This means that there is an increasing and continuous need to cover the shortage in the residential units in the mean time and in the future under the rarity of the urban land of the city of Baghdad.

Regarding the residential densities in Baghdad city, Alkarkh side which is resided by 39% of the total of the people has density of 160/people/Hectar, while in Alrisafah side which is resided by 61% of the population of Baghdad city the density is 237/people/Hectars, and there is a non proportionate distribution of the residential densities in the whole of Baghdad city. (See table (1) and also map no. (1)).



Tuble no. (1) which must utes the residential densities in the sectors		
of Baghdad city		
Mayoralty unit	Residential density person / Km2	
Alrisafah	7841	
Alkarrada	2481	
Baghdad Aljadeeda	6081	
Aladhamiya	4185	
Alkarkh	4083	
Almansoor	1918 (Area of the study)	
Alrasheed	3330	
Alkadhmiya	3614	
The source / Alsa'dy, Sa'eed Jasim, previous source, PP5-15		

Table no. (1) which illustrates the residential densities in the sectors

The support-structures services in the city of Baghdad:

The support-structures services (water, sewage, electricity, phones .. etc) and the social services (education and health) are considered one of the important indicators for the efficiency of the city's performance and life level in it. They are effected negatively by the increase of the residential density and thereby reducing the prosperity of the city's society, and through knowing these services which exist in the field study area and knowing their capacities and efficiency it was found that they work with less than half their designed capacity because of the oldness of the networks and the damages which occurred to them due to the wars which happened to the city (especially the Iraqi Iranian war and the Gulf war) which resulted of shakings due to the different bombings of the city which led to the large destruction of the infrastructures, which requires a basic reconsideration of them and changing them, in addition to the superstructures which led to the destruction of many transportation, health and social utilities in the city.⁽⁸⁾

Displaying the results of the field study:

First: The general point of view of the residents of Almansoor sector:

The opinion of the residents regarding the possibility of the contribution of Baghdad's Mayoralty decision of adding a third floor to the existing residential units to solve the residence crisis in the city of Baghdad was reflected by the table (1-1) which points out that 20% of the residents find a large contribution of this decision in solving the residence crisis, while over 36% of the residence stress on the medium contribution of this contract in solving the residence crisis in the city, while 13% only consider the contribution in solving the crisis to be weak.



Regarding the services, their competence and the extent of the decision's impact on them, more than 60% stress on the weakness of this effect, while only 10% stress that it's negative effect is large on the area as illustrated in table (1-2).

Regarding the negative effect on the relations in the sector due to the increase of the housing density, more than 86% stress on the weakness of the negative impact, 3.2% only consider the negative effect to be large on the sector's residence, as reflected by table (1-3).

Regarding the change that will happen in the urban texture of the city in the future, table (1-4) points out to the possibility of changing the city's texture largely (30%), while 40% stress that the change will be medium, while 30% see that the change in the urban texture of the city will be simple.

Regarding the effect of the possibility of adding a third floor to the existing units in regards to the local climate, more than 73% stress on the weakness of this effect, while 20% stress that it will make a medium effect to the local climate, while 6.7% only stress that this effect is large, this is illustrated by table (5-1).

Regarding the effect on the city's appearance and the sky's line, more than 46% stress that there is a medium effect of this, while 30% stress on the large effect on the city's appearance and the sky's line in it.

As for table (1-7), it implies that there is a large negative effect on the city if the addition decision is applied on all sectors of the city, where 80% stress on that by thinking of the large and medium effects in case it is applied to the city.

Regarding table (1-8), it stresses the need that the decision should be limited with limited areas or sectors, where more than 83% of the specimen's people support it's application to some of the city's sectors and not on all of them.

Second: The viewpoint of the residents of the houses adjacent to the units which a third floor has been added to it's units.

Table (2-1) illustrates that constructing a third floor on the adjacent unit has effected the privacy of the residents in the neighboring house, where the percentage of 75% indicates this, while 16.7% only stress that there is an overlooking to some extent over their houses. As for permitting or not permitting opening a window on the next houses, more than 90% do not agree to this, as clarified by the table of (2-2).

In table (2-3), more than 58% say there are no social problems if a third floor was added to the adjacent unit, while 25% say that these problems do occur.



As for the question whether adding a floor to the residential unit will make an incentive for similar additions in case the material capabilities exist, table (4-2) reveals that more than 40% of those adjacent said that this could pose an incentive for them, and more than 30% responded (maybe) which are optimistic percentages in case the natural conditions in the city exist, especially that more than 40% stress on the contribution of adding a third floor to solving the residence crisis, as revealed from table (5-2), while we do not find who supports adding a third floor will contribute in adding an extra income to the family (only a percentage of 16%) (as in table 6-2). While we see that this percentage tends for a relative solution for providing a residence space for the family which wishes to marry one of it's sons, where table (7-2) points out that this is approved by a percentage of 25% through answering (yes) and to more than 33% by answering (to some extent).

Regarding the negative effect for the value of the residential unit adjacent to the unit which a third floor has been carried out in, the owners of these houses stress that there is a negative effect, this is reflected by the percentage of table (2-8), where more than 66% confirm that a damage occurs due to this. While the percentage of table (2-9) stress on the weakness of the effect on the services due to adding the third floor, despite the high percentage of those who answered (to some extent) which exceeds 58%. Which are in both cases and for the two previous tables are a negative indication for the adjacent houses from the point of view of those who are adjacent.

Conclusions:

- 1- There is a clear confirmation that adding a third floor to the residential unit will participate in solving the residence crisis one way or another.
- 2- Adding a third floor to the existing units is considered a good contribution to compensate for the large shortage in the urban land which is devoted for residence purposes.
- 3- There is a small impact from the social aspect regarding adding a third floor to the existing units.
- 4- Adding a third floor to the existing units poses a partial solution in case of the family's sons is married, while it does not represent an suitable additional income for the family due to this addition.
- 5- In the mean time, adding a third floor for the residential units poses a negative aspect regarding the effect on the general value of the adjacent house, despite that future horizons point otherwise.
- 6- The lack of privacy and the overlooking on the adjacent houses represent a negative aspect, while it reflects in the desire of addition to avoid this overlooking.



- 7- There is a percentage of consensus that the services of the infrastructure and superstructure will not be effected in case a third floor is added, not because the nature and type of the negative effect to the services, but because the services anyhow need changing because they are destroyed and do not work with their designed capacities.
- 8- The city's texture can change due to the addition decision, despite that this will take a relatively long time.

Recommendations:

- 1- Despite stressing on the contribution of the addition decision in solving the housing crisis, but the execution of this decision must take into consideration the historical, traditional and religious areas.
- 2- It could be worked towards closing the gaps among the residential and housing densities in the sectors and limiting or forbidding the application of the decision in some of the sectors, especially the sectors of high density.
- 3- Working to provide building materials, and providing the necessary loans to apply this decision, because the families' savings appear to be not encouraging on their own to activate this decision, which requires finding a material and moral incentive in this regard.
- 4- A mechanism must be found to allow determine the general safety in order to avoid any problem that may arise of executing the third floor.

References according to how they were in the research:

- 1) Mayoralty of Baghdad / Department of Designs (Project of the urban development for the city of Baghdad 2015), first stage, the final report, 1998.
- 2) Mayoralty of Baghdad, ((The comprehensive developmental plan for the city of Baghdad 2030)), 2005.
- Alsa'di, Sa'eed Jasim Mohsin Hasan (Administrating the urban land in the city of Baghdad), Ph.D. thesis, unpublished research, the Higher Institute for Urban and Regional Planning, University of Baghdad, 2003.
- 4) Alsa'di, Sa'eed Jasim, previous reference,
- 5) Mayoralty of Baghdad / Department of Designs, previous reference.
- 6) Ministry of Planning and Developmental Cooperation, The Central Body of Statistics and Information Technology ((Estimations of Iraq's population for the year 2006)), November 2005.
- 7) Mayoralty of Baghdad / The comprehensive developmental plan for the city of Baghdad, previous reference.



8) An interview with the General manager of Almansoor Mayoralty – Dr. Muhannad Manwel Yousif, 20/6/2006.

Annexes:

- 1- Questionnaire form no. (1).
- 2- Questionnaire form no. (2).
- 3- Tables of the Questionnaire form no. (1).
- 4- Tables of the Questionnaire form no. (2).
- 5- Design of the Mayoralty of Baghdad in 7/12/2004 with a plan for a construction sector.
- 6- Plan of the current housing densities in the city of Baghdad.

Table (1-1) Type of participation in solving the housing crisis

Type of participation	No.	Percentage %	
Large participation	6	20	
Medium participation	11	36.7	
Weak participation	13	43.3	
Total	30	100%	

Table (1-2) Effect on the efficiency of the services

Tuble (1 2) Effect on the effective of the set vices		
Type of effect	No.	Percentage %
Effects in a large extent	3	10
Effects in a medium extent	9	30
Effects in a weak extent	18	60
Total	30	100%

Table (1-3) Effect on the social relations due to the increase of the housing density

Type of effect	No.	Percentage %
Effects in a large extent	1	3.3
Effects in a medium extent	3	10
Effects in a weak extent	26	86.7
Total	30	100%

Table (1-4) The change in the urban texture

Type of change	No.	Percentage %
changes in a large extent	9	30
Changes in a medium extent	12	40
Changes in a weak extent	9	30
Total	30	100%

Table (1-5) The effect on the local climate

Type of effect	No.	Percentage %
Large change	2	6.7
Medium change	6	20



Small change	22	73.3
Total	30	100%
Table (1-6) The effect on the city's appearance and the sky line		
Type of effect	No.	Percentage %
Large effect	9	30
Medium effect	14	46.7
Weak effect	7	23.3
Total	30	100%

Table (1-7) The negative effect on the city in case of adding a thirdfloor to all the sectors

Type of effect	No.	Percentage
Effects in a large extent	11	36.7
Effects in a medium extent	13	43.3
Effects in a simple extent	6	20
Total	30	100%

Table (1-8) Support of limiting the application of the addition

	· upp==ouor	
Type of support	No.	Percentage
I support this to a large extent	16	53.3
I support this to a medium extent	9	30
I support this to a weak extent	5	16.7
Total	30	100%

Table (2-1) The effect on the privacy of the adjacent house

Response	No.	Percentage %
Yes	9	75
No	1	8.3
To some extent	2	16.7
Total	12	100%

Table (2-2) The objection to opening a window overlooking the house

Type of Response	No.	Percentage
Yes	11	91.7
No	Zero	Zero
Maybe	1	8.3
Total		100%

Table (2-2) The objection to opening a window overlooking the house

Type of Response	No.	Percentage
Yes	11	91.7
No	Zero	Zero
Maybe	1	8.3
Total		100%



Table (2-4) The existence of an incentive for the addition		
Type of Response	No.	Percentage
Yes	5	41.7
No	3	25
To some extent	4	33.3
Total	12	100%

Table (2-4) The existence of an incentive for the addition

Table (2-5) The contribution in solving the residence crisis

Type of Response	No.	Percentage
Yes	5	41.7
No	3	25
To some extent	4	33.3
Total	12	100%

Table (2-6) The addition helps the family financially

Type of Response	No.	Percentage
Yes	2	16.7
No	8	66.6
To some extent	12	16.7
Total	12	100%

Table (2-7) The addition solves the problem of the marriage of one of
the children

Type of Response	No.	Percentage
Yes	3	25
No	5	41.7
To some extent	4	33.3
Total	12	100%

Table (2-8) The negative effect of the value of the residential unit

Type of Response	No.	Percentage
Yes	8	66.6
No	1	8.4
To some extent	3	25
Total	12	100%

Table (2-9) The negative effect on the services

Tuble (2)) The negative effect on the set vices		
Type of effect	No.	Percentage
Yes	2	16.7
No	3	25
To some extent	7	58.3
Total	12	100%



Questionnaire form no. (1) regarding the residents of the study area

Note: Put a "right" sign in front of the appropriate phrase.

Q1) Do you think that adding a third floor to the residential unit contributes in solving the residence crisis in the city of Baghdad.



Q2) Do you think that adding a third floor to the residential unit will effect the efficiency of the services (the superstructures and the intrastructures).



Q3) Do you think that the possible residential densities will effect negatively on the social relations among the area's residents.



Q4) Do you think that adding a third floor to the residential units will change the nature of the urban texture of the area on the future range.





Q5) Do you think that the local climate in the area will change negatively due to adding a third floor to the residential units on the future range.



Q6) Do you think that adding a third floor will effect negatively on the general appearance of the area and on the sky line.



Q7) Do you think that adding a third floor to the residential units in an unlimited manner for all the city's sectors will effect negatively on the city, including the traditional part of the city.

_		
Will	Will effect	Will effect
effect in a	in a	in a small
large	medium	extent
extent	extent	

Q8) Do you support determining certain parts within the city for which the addition decision of a third floor will be practiced upon.

I support	I support	I support
to a large	to a	to a weak
extent	medium extent	extent

<u>Questionnaire form no. (2) regarding the residents of</u> <u>the houses adjacent to the addition units</u>

Q1) Do you think that building a third floor to the residential unit adjacent to your unit will result of an overlooking on your house's roof or garden or part of your residential unit in a direct or indirect manner.





المساهمة في معالجة أزمة السكن في مدينة بغداد دراسة لقرار أمانة بغداد بالسماح لإضافة طابق ثالث للوحدات السكنية ا.م.د. لؤي طه محمد المعهد العالي للتخطيط الحضري والإقليمي

مستخلص البحث: نحتاج ان نتعرف على حقائق أساسية فيما يخص التخطيط بحدوده العليا او الدنيا والمستويات الحرجة الني يصبح ما فوقها أكثر كلفة في تطوير الأرض. وعليه يناقش هذا البحث قرار أمانة بغداد ذي العدد 2/1004 في 3004/12/7 للتعرف على الاعتبارات والمرتكزات التي كانت وراء إصدار قرار السماح بإضافة طابق ثالث للوحدات السكنية العالية والمستقبلية والذي من المؤمل ان يساهم في معالجة أزمة السكن الحادة في مدينة بغداد، يحاول البحث من خلال دراسة ميدانية للتعرف على رأي المجتمع المحلي بشكل عام (ضمن تالث عليها والتعرف على آراءهم بايجابيات هذا القرار وسلبياته على المدى القريب والبعيد . ومستقبل النسيج الحضري التقليدي في مدينة بغداد يتطرق البحث في جانبه النظري الق ومستقبل النسيج الحضري التقليدي في مدينة بغداد يتطرق البحث في جانبه النظري الى النمو السكاني لمدينة بغداد، والأرض الحضرية، والكثافات السكانية،وتقديرات الأرض المخصصة للسكان بموجب التصميم الأساسي للمدينة والتغير وعلاقته بقرار الإضافة وخدمات البنى الاسكاني في المدينة.

توصلت الدراسة الى نتائج منها :ايجابية القرار من وجهة نظر المجتمع المحلي مع وجود تحفظ على جوانب من القرار وعلى بغض الأمور التي تتعلق بالوحدات المجاورة والخدمات ، وعلى مستقبل النسيج الحشري في المدينة وخاصة الجزء التقليدي منه. وأوصت الدراسة إعادة النظر في بعض وحدات القرار بحيث يأخذ بنظر الاعتبار المناطق التقليدية في المدينة وعدم تطبيق هذا القرار فيها. وكذلك عدم تطبيق القرار في المناطق ذات الكثافات العالية (السكانية والإسكانية) وضرورة زيادة مبلغ القرض العقاري للتمويل بكونه عامل أساس في الإسراع في إنتاج المساكن.