

National Center for Social
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Ministry of Housing and Reconstruction
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Development

ARAB ZEIN

**A case study of an urban settlement
in greater Cairo**

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by

Table of Contents

I	Case study of the settlement.	5
	1. Geographical setting.	6
	2. Population.	6
	3. The physical aspect.	7
	4. Urban contact.	8
	5. Settlement economy.	9
	6. Services available.	10
	7. Urgent needs and demands.	11
II	Description of the sample.	12
	1. Householders socio-economic characteristics.	13
	2. Occupation background of householders.	15
	3. Children characteristics.	16
	4. Families characteristics.	41
III	Housing.	42
	1. Housing conditions of the buildings or houses.	48
	2. The dwelling unit or apartment.	53
	3. Dwelling facilities.	57
	4. Satisfaction from housing conditions.	73
IV	Social Relations values and aspirations.	74
	1. Spatial use and social relationship.	74
	a. Internal use of space.	78
	b. Social relationship.	80
	2. Values and aspirations.	96
V	Upgrading program.	97
	1. Utility and facility needs.	98
	2. Means of participation in upgrading program.	100
VI	Summary of statistical data.	115

I Case study.

1. Geographical setting.
2. population.
3. The physical aspect.
4. Urban contact.
5. Settlement economy.
6. Services available.
7. Urgent needs and demands.

Ezbet Zein.

1- Geographical setting of the settlement.

Ezbet Zein is an uncontrolled settlement situated in the Northern part of the city of Helwan. It is bordered from its western side by Helwan electrical railways line, from its eastern side by Helwan backroad which separates the city from the limestone quarries of the Mokattam hill and from its Northern side by the arming factory.

The settlement is situated at only 300 meters from Helwan and at 7 km far from the Nile river. The name of "Arab Zein" derived from the name of its first settler Zein Ahmed Abdel Mawla who, 20 years ago, encouraged the migrants from the canal cities during the 1956 war to fill up the swamp which was in this area and to settle in its place.

The first migrant families were "Ahmad Mahmoud Hamed", "Mohamed Mahmoud Omar", and "Metawea Tamam". They were followed by other migrants from Guizeh governorate on the other side of the River Nile.

In 1957, the housing committee in Helwan municipality provided the settlement with water and electricity and the settlement took the name of its founder who actually works as a messenger in the social security sector in the Ministry of Social Affairs.

There is one popular association formed by the settlers: The association of "the sons of El Barnabeel" which offers help and aid to settlers coming from Markez El Saf, one of the biggest Markez of Guizeh governorate.

2- Population.

We can roughly estimate the population of "Zein" to be between 8 and 10,000 inhabitants. It has the shape of a rectangular with 2.4 miles long and 0.8 miles wide. It covers 0.75 square kilometers of land. Population density can be roughly estimated to be almost 60 persons per feddan or 133 persons per hectare.

3- The physical aspect.

The physical aspect of the settlement is one of an urban poor neighborhood where almost all the buildings have between two to three floors with very few exceptions of four stories. There are almost 350 houses aligned around long narrow irregular unpaved streets of between 5 to 7 meters large. The two main streets are the railway street "Sharea El Mahata", the Mosque street "Sharea El Gamea, and "Sharea El Souk". There are three types of circulatory space:

1. The main road linking the settlement to Helwan.
2. The three main roads which serves as the central social and commercial area and provide access to narrow lanes which

connect one housing group to another.

3. The small cul-de-sac.

Relatively the modern type of dwelling is predominant. Walls are mainly constructed of red brick with or without stone. Roofs are made in concrete and floors are made of tiles. All houses are electrically lighted and a big majority has indoor water tap. Few of them have a kitchen and a bathroom. Arab Zein contains two public taps, one at the entrance and the other at the end of the settlement.

In spite of the fact that the big majority of settlers are owners, some of them rent parts of their houses to new comers or to new married couples as a mean of investment. The monthly rent for the housing unit ranges between 2 and 6 L.E. depending if it is a room or an apartment with private or shared facilities.

4- Urban contact.

"Zein" is at 300 meters from Helwan; it could be considered as one of its neighborhood. The settlement is connected to Cairo and Meadi by the railway of Helwan (300 m) and a regular bus line starting down town the capital and ending in Helwan, passing by other squatter settlements spread around the city.

"Zein" is under the direct jurisdiction of the subadministrative district (Kism) of Helwan, which is in charge of the

southern part of Cairo governorate.

Settlers of Arab Zein are in daily contact with the city life; they work mainly in the city. They buy many of their daily needs from Helwan and conduct most of their affairs and business in Helwan.

Security is maintained by the police of Helwan because of its nearness.

5- Settlement economy.

The people of Arab Zein are largely dependant upon the industrial work for their livelihood. 90% of working people are engaged in the industrial sector. They commute every day to the surrounding factories: Iron and steel factory (20 km), the number 9 and 99 factories for arming (4Km), and the silk factory (6 Km). Traders work on their own account, and depend for their livelihood on attracting a group of regular customers who live and work nearby, and to whom they are available. A narrow fraction of the population is engaged in the service sector.

Settlement economy stands on three principal activities; industrial, building sector and electricity (90%) trade (8%), and services (2%). Trade is performed through many shops especially private groceries (27), a cooperative grocery and a cooperative butcher. But settlers are relying upon Helwan for buying their every day needs.

6- Services available.

Arab Zein is provided by water and electricity but sewage is not available, and garbage system collection is missing. Youth sometimes clean the streets and throw the garbage in the nearby surrounding but usually ^{settlers} get released from their garbage by throwing it outside the settlement.

There is no schools in the settlement. The nearest one is a primary school in down town of Helwan (600 m.) and a preparatory one for boys (2 km). There are no public medical services and the nearest ~~services~~ is in the public Hospital of Helwan (3 Km), and the public clinic (15 Km). Registration of birth and death and vaccination are done in Helwan. The nearest pharmacy is at 500 meters far.

Entertainments are missing. There is neither coffee shop, nor a youth club, nor an open public space. There is neither a public telephone nor a mail service, but the founder of the settlement collects the mail and distributes it on a voluntary basis.

There is one mosque in the village built by the settlers themselves.

There are neither a cimetry nor a slaughter house. The nearest ones are in Helwan.

As we can see, many services are lacking in Arab Zein, but the settlement relies upon the city of Helwan which is very near. (300 meters).

But settlers were able four years ago to erect by their mutual participation a voluntary association which aids students and illiterate through informal classes, and offers medical services through a private clinic where a general practitioner works every day in the afternoon.

7- Urgent needs and demands.

The most important needs of settlers are the connection of their settlement to a sewage system, the paving of the streets and the erection of a consumer cooperative and a youth club. Where their children can spend leisure time.

The informal leaders certify that settlers are ready to contribute in any upgrading programme aiming to ameliorate the socio-economic situation of the settlement by offering essentially their work and occasionally their money.

II Description of the sample.

- 1 - Householders socio-economic characteristics.
- 2 - Occupation background of householders.
- 3 - Children characteristics.
- 4 - Families characteristics.

1- Householders socio-economic characteristics:

Families or households chosen in Ezbet Zein (100) are headed by 99 householders male (99%); and 1 householders female (1%).

The mean age of the householders is 43.1 year with a standard deviation of 8.404 while the mean age of their wives is 35.5 year with a standard deviation of 9.1 while (23%) of householders are below thirty five years, (14%) of them are over fifty five.

The majority of householders are married (96%), 2% of which have two wives, (2%) are divorced or widowers, and only (2%) are single. The mean years of marriage is 19.5 years with a standard deviation of 8.355. Only (6%) of married householders are newly married couples.

Illiteracy spreads between householders and their wives, (83%) of householders and (98%) of their wives have not even a primary certificate. Although, (36%) of householders and (7.2%) of their wives can read and write.

Householders who hold a public certificate reach no more than (27%), 12 of them hold a primary certificate, 2 a preparatory certificate and 3 a secondary certificate.

If education is to be divided into three stages: primary certificate or less, preparatory and secondary certificate, university degree or equivalent, we shall find that (95%) of householders fall in the first one, and that (5%) fall in the second one, none of them fall in the third stage.

In term of education we have an homogenous group householders are mainly from rural origin, (89.5%). The remainders are native born in urban cities of the delta or upper Egypt or in Cairo.

The non-native householders originally settled in Esbet Zein near the emerged city of Helwan, hoping to find work in the surrounding areas (57(60%)), or settled there because they already worked in the area and wanted to move near their work (31(32.6%)), or because of the housing crisis which induced them to live in the periphery of the capital (5(5.3%)), or because of other reasons like migration with the family (2(2.1%))^x.

2- Occupation background of householders:

"Occupation" is considered by sociologists as an important variable in the differentiation of rural family from other types of families in urban areas. Occupation in the secondary sector influences the status of the family in the

x For more details see table 1 and 2.

social structure it creates a sort of sub-culture in the society with specific values and traditions.

Ezbet Zein is an urban settlement. Its inhabitants are engaged in the secondary and tertiary sectors.

The proportion of householders engaged in the industrial sector reaches (66%). 53% (35) of them are skilled workers, while the remainders are unskilled workers. (6%) of householders are employees in the government, (4%) are in the service, and only (3%) are in business or trade, (3%), are artisans, (4%) are self-employed in private shops, (8%) are daily labourers without permanent job, (1%) work in the army, and (5%) are retired. It was noticed that 65% of tenants versus 50% of owners are skilled workers.

The data indicates a very broad working-class composition ranging from skilled workers to the non-working (retired) and temporary working members of the working class. Their working years average 14 year with a standard deviation of 7.865. Householder female (one), is working as employee.

(66%) of householders work actually in nearby factories and companies at less than 10 miles from the settlement -6%) work for the government either in Cairo or in Helwan. The remainders work in Helwan or in the settlement in private shop

or as labourers in shops or in workshops, while (20%) of householders go to work on foot, (36%) depend in going to work upon factory and company bus. (3%) rely upon public transportation. The remainders rely on bicycles and taxis, etc.*

3- Children characteristics:

The children characteristics of our sample reveal the very young population of Ezbet Zein as many of our rural villages or even urban towns and cities. The percentage of children below the school age (6 years) reaches 29.2% (104) of the children in families interviewed. 27.2% (97) of children are aged between 6 and 12 years, 29.8% (106) between 12 and 18 years and 13.8% (45) have more than 18 years old averaging a mean age of 10.8 year.

If we compare the education of children to their father education, we shall find that parents attach more importance to day to the education of their children boys as well as girls.

If 17.1% (42) of children in the age of schooling are illiterate (20 boys for 22 girls), the remainders have obtained an education certificate or are still in school (82.9%) (157) 20.8% (51) of children hold a primary certificate or less (30 boys for 21 girls). 13.5% (33) hold a preparatory or secondary certificate (24 boys for 9 girls), and 3.6% (9) hold a university degree or an equivalent certificate (8 boys for one girl).

* For more details see table 3.

As we see, 8 boys and one girl have obtained a university degree and a substantial percentage of children (64.1%) are still attending schools and faculties.

Only 26 boys were working at the time of the study. They are mainly engaged in industrial work as skilled labourers (8), unskilled labourers (4), in private shops as self employed (2), in the government as employee (5), in the army (6), and in the settlement as labourers in minor jobs. Sons go to their work mainly on foot (8). The remainders rely upon public transportation, (8) train (4) or taxis (4) or on factory bus(1).[‡]

4- Families characteristics:

a. Despite the fact that the original settlers of Ezbet Zein were from rural areas, they were from the very beginning engaged in industrial work.

Their occupation in the secondary sector has affected the social structure of their families: only (6%) of the families interviewed can be classified as extended; they are constituted by husband and/or wife, their married and unmarried children, or by a widow or divorced (man or woman) with their married and unmarried children and relatives.

‡ For more details see table 4.

(3%) of the families can be classified as joint families. They are formed by brothers or cousins living together and sharing only the food and housing expenses.

The predominant type of family is the nuclear one (91%), who acts as socio-economic independent unit, and is constituted by one generation: householder and spouse, single householder with friends; or by two generations: householders and spouse with unmarried children and relatives.

b- Despite the fact that the nuclear family is predominant, the number of persons per family is high: (26%) of families count more than 6 persons each, (33%) count between 3 and 6 persons each, and only (20%) of families count less than 3 persons each; averaging 5.8 persons per family with a standard deviation of 2.264.

It was found that there is a significant relationship between the tenure status and number of persons per family ($\chi^2 = 14.086$ significant beyond 0.05 and 0.01) as it is shown in the following table:

Relationship between the tenure status
of Householders (A) and the number of persons
per family (B).

A	B	3	3-	6-	+9	Total
Owner		7	13	42	10	72
Tenant		8	11	8	1	28
Total		15	24	50	11	100

c- The mean monthly income of householders was found to be in the order of 38.8 with a standard deviation of 18.513. When we add to householders income, the income of the other members of the family (wife, sons, etc ...) the mean total family income was found to be in the order of 42.1/month with a standard deviation of 21.085. While (13%) of families have a total monthly family income of more than 70 L.E., (53%) have a total family income of more than 70 L.E., (53%) have a total a total family income between 30 and 70 L.E. and the remainders (34%) have a total family income between 10 and 30 L.E./month.

The per capita monthly income was found to be in the order of 9.6 with a standard deviation of 7.588.

d- The ownership of certain consumers durable (as a television set, a washing machine, or a refrigerator) can be also a good indicator of the economic standards of the families.

Almost all families have a transistor radio, (31%) have a television set which had been sold on a credit basis and usually families invite their neighbors to follow certain programmes; some of householders wives (13%) have adopted the new ways of cooking by purchasing a range butagaz, and 2% of families have a refrigerator.

Some few families own a radio, a television set and a recorder at the same time (10%). Others have a washing machine, a range butagaz, and a refrigerator (1%).

e- The examination of households expenditure on variables related to housing could give valuable informations about the current pattern of settlers expenditure:

1. The average monthly rent paid by families is 3.3 L.E. with a standard deviation of 1.661. Only 6.7% of renters pay more than 30% of their income as rent; 63.3% pay between 10 and 30% and 30% pay less than 10% of their income as rent.

There is a reverse relationship between the total family income and the percentage of income spent on rent. The more the total family income, the less the percentage of income spent on rent as it is shown in the following table:

Relationship between the total family income (A) and the percentage of family income spent on rent (B)

B (P.E.)	-10%	10%-	20%-	+30%	N/A	Total
	1	6	6	2	19	34
	7	6	1		39	53
	1				12	13
Total.	9	12	7	2	70	100

$r = -0.575$

The average monthly expenditure paid by families on electricity is 186.1 piastres with a standard deviation of 10.5. Only 8.3% of the householders pay more than 9% of their income on electricity; 76.4% of the householders pay from 3% to 9% and 15.3% pay less than 3% of their income on electricity.

There is a reverse relationship between the total family income and the percentage of income spent on electricity. The more the total family income, the less the percentage of income spent on electricity as it is shown in the following table.

Relationship between the total family income (A) and the percentage of family income Spent on electricitu (B).

A (L.E.)	1 %-	3% -	5% -	7% -	+9%	Nothing	Total
- 30	2	5	4	5	4	14	43
30 -	6	19	5	9	2	12	53
+ 70	3	7	1			2	13
Total.	11	31	10	14	6	28	100

$r = - 0 . 415$

On the other hand the data showed that there is no relationship between the number of persons per family and the monthly expenditure peid on electricity: ($X^2 = 3.12$), it is shown in the following table .

Relationship between the number of persons per family (A) and the monthly expenditure of family on electricity (B).

A	-50 piastren	50-	100-	150-	200-	+250	None	Total
1			1				1	2
2	1		2	1		3	6	13
3			1	1			3	5
4	1	2	2		1	3	3	12
5	1		1	1		2	2	7
6		2	3	2	6	1	6	20

A \ B	-50 piastres	50-	100-	150-	200-	+250	None	Total
7		1	6	2	4	3	2	18
8			3	1	2	4	2	12
+9			1	1	2	4	3	11
Total	3	5	20	9	15	20	28	100

3. The average monthly expenditure paid by families on water is 132.1 piastres with a standard deviation of 62.360, 28.5% of the householders pay more than 3% of their income on water and 71.5% pay less than 3% of their income on water.

4. The average monthly expenditure paid by families for flushing is 98.4 piasters with a standard deviation of 72.228

Only 4.7% of the householders pay more than 9% of their income on flushing. 30.7% pay between 3 and 9% and 64.6% pay less than 3% of their income on flushing.

There is no relationship between the number of person per family and the monthly expenditure on flushing; ($\chi^2 = 4.99$) as it is shown in the following table.

22

Relationship between the number of person per family (A) and the monthly family expenditure on flushing (B).

A \ B	-50 pt.	50-	100-	150-	200-	+250	N/A.	Total
1							2	2
2	3	1	1	1			7	13
3		1					4	5
4	4	1		1			6	12
5		1	2				4	7
6	4	5	4				7	20
7	5	6	2			3	2	18
8	1	1	6				4	12
9	1	2	2	1		3	2	11
Total	18	18	17	3		6	38	100

5. The average monthly expenditure paid by families on transportation is 3 L.E. with a standard deviation of 15.9

Only 2% of the householders pay more than 40% of their income on transportation; 38% pay between 10 and 40% and 60% pay less than 10% of their income on transportation.

6. The average monthly expenditure paid by families on food is 32.6 with a standard deviation of 15.9 . There is no relationship between the number of persons per family and the monthly expenditure of families on food ; ($\chi^2 = 4.99$).

Relationship between the number of person/
family (A) and the monthly family expenditure on food (B)

A \ B	-10	10-	20-	30-	40-	50-	60-	70-	+80	Total
1		2								2
2	2	6		3	1		1			13
3	1	3	1							5
4		3	3	5			1			12
5		3	2	1	1					7
6		3	3	11	2		1			20
7		2	5	5	2	1	3			18
8			1	8	1	1	1			12
9		1		4	3	1		1	1	11
Total	3	23	15	37	10	3	7	1	1	100

While only 1% of families pay less than 30 L.E. of their income on food, 37% pay more than 80% of their income on food. 48% pay between 50 and 80%, and 14% pay between 30 and 50% .

There is a reversed relationship between the total family income and the percentage of income spent on food; The more the total family income, the less the percentage of income spent on food as it is shown in the following table.

Relationship between the total family income (A) and the percentage of family income spent on food(B).

A \ B	-30%	30-	40-	50-	60-	70-	+80	Total
- 30		1	1	2	6	5	19	34
30 -		6	1	7	13	10	16	53
+ 70	1	3	2	2	1	2	2	13
Total	1	10	4	11	20	17	37	100

$r = - 0.38$ significant beyond 0.01.

The following patterns of households average expenditures emerged from the above analysis:

- 15.7% of income on rent.
- 5.2% of income on electricity.
- 2.6% of income on water.
- 3.3% of income on flushing.

10.8% of income on transportation.

62.4% of income on food.

By local standards, "Ezbet Zein" families interviewed are not particularly poor. Families have more or less a steady income. They are poor but they represent the average wage - earning sector. The utilization of modern domestic means, by some families, like butagaz, refrigerators, washing-machines, etc... The purchase of television sets, recorders by others, and the rate of physical improvement in the houses, indicate that they have maintained an appreciable rate of upward mobility. 54.3% of owners have done housing improvements such as add rooms or stores, repair ceiling or floor, and instal a cesspool.*

* For more details see table 5.

Table 1

Householders Socio-Economic Characteristics.

	N.	%
1 Sex		
male	99	99
female	1	1
2 Age		
< 25 years	2	2
25 -	21	21.
35 -	34	34.
45 -	29	29.
+ 55 years	14	14.
3 Marital status		
never married	2	2.
married (one wife)	94	94.
married (two wives)	2	2.
divorced/widower	2	2.
4 Number of years being married		
< 5 years	6	6.25
5 -	23	23.96
15-	37	38.54
+25	30	31.25
N./A.	4	

	N.	%
5 Education		
Illiterate	47	47.
Read and write	36	36.
Primary certificate	12	12.
Preparatory certificate	2	2.
Secondary certificate	3	3.
6 Origin		
City residents	10	10.5
village residents	85	89.5
N./A/ (born in Cairo)	5	
7 Reasons for moving to the settlement		
Near work	31	32.6
Migration to find work	57	60
Housing crisis	5	5.3
Migration with the family	2	2.1
Marriage and independence		
N./A. (birth place).	5	

Table 2
Wives characteristics.

	N.	%
1 Age		
< 20 years	2	2
20 -	25	25.5
30 -	42	43
40 -	23	23.4
+ 50	6	6.1
2 Education		
Illiterate	89	90.8
Read and write	7	7.2
Primary certificate	1	1
Preparatory certificate		
Secondary certificate	1	1
N. / A.		
3 Occupation		
House wife	97	99
Skilled labourer		
Employee	1	1

Table 3

Occupation background of householders.

	N.	%
1 Previous job (if any)		
Agricultural labourer	1	7.1
Unskilled labourer	5	35.7
Skilled labourer	2	14.3
Artisan		
Self-employed	2	14.3
Employee		
Tradesman		
Service labourer	3	21.5
Military	1	7.1
N./A. (no previous work)	86	
2 Reason for living previous job		
Present job best	10	69.6
quarrel with director	2	15.2
Illness or retirement		
Specialization in present job	1	7.6
Left government to be self employed	1	7.6
N./A.	86	
3 Present occupation		
Skilled labourer	35	35.
Unskilled labourer	31	31.

	N.	%
Agriculture labourer		
Service labourer	4	4.
Employee	6	6.
Artisan	3	3.
Self employed	4	4.
Tradesman	3	3.
Military	1	1.
Daily work	8	8.
Retired	5	5.
4 Place of present work		
Factory	29	33.33
Private workshop	4	4.60
Workshop labourer	3	3.45
Private shop	5	5.75
Shop labourer	2	2.30
Government	6	6.90
Army or police	1	1.15
Company	37	42.52
Agriculture land		
N./A. (retired and daily worker)	13	
5 Number of working years		
< 5 years	15	17.24
5 -	18	20.68

	N.	%
10 -	6	6.9
15 -	32	36.8
+ 20	16	18.49
N./A.	13	45.9
6 Distance Home/work		
< 5 km	34	16.2
5 -	12	16.2
10 -	12	8.2
15 -	6	13.5
+ 20 km	10	
N./A. (working in the settlement)	26	
7 Means of transportation to work		
On foot	20	23.2
Factory / company bus	36	41.8
Public transportation	3	3.4
Bicycle	1	1.6
Train	14	16.2
Taxi	2	2.3
Two means	10	11.5
More than two means		
N. / A.	14	

	N.	%
8 Time spent to go to work		
< ½ hour	47	63.5
½ -	20	27
1 -	5	6.8
+ 1 ½	2	2.7
N. / A.	26	
9 Monthly income		
< 20 L.E.	14	14.
20 -	47	47.
40 -	26	26.
+ 60 L.E.	13	13.

Table 4

Children characteristics.

		N.	%		
1	Sex				
	Male	184	51.6		
	Female	172	49.4		
	Total	356	100		
2	Age	Male	Femal	Total	%
	< 6 years	47	57	104	29.2
	6 -	43	54	97	27.2
	12 -	58	48	106	29.8
	+ 18	36	13	49	13.8
3	Education	Male	Female	Total	%
	Illiterate	20	22	42	17.1
	Read and write	48	62	110	44.9
	Primary certificate	30	21	51	20.8
	Preparatory certificate	18 18	6	24	9.8
	Secondary certificate	6	3	9	3.7
	University certificate/equivalent	8	1	9	3.7
	N./A. (younger than school/age)	54	57	111	
4	Occupation		N.	%	
	Unemployed				
	Student		157	47.6	
	Dont work		52	15.8	

	N.	%
Under the work age	113	34.2
Girls at home	8	2.4
Employed		300
<i>Total</i>		
Government employee	5	19.2
Skilled labourer	8	30.8
Military	6	23.1
Unskilled	4	15.4
Selfemployed	2	7.7
Artisan	1	3.8
Other		
Total	26	30.8
Total		356

6 Distance Home/work

< 5 km	8	19.2
5 -	5	15.5
10 -	4	11.5
15 -	3	11.5
+ 20 km	3	11.5
Work in the settlement	3	11.5
N. / A.	330	

7 Means of transportation to work

On foot	8	30.8
Factory bus	1	3.7

	N.	%
Public transportation	8	30.8
Bicycle	1	3.7
Train	4	15.5
Taxi	4	15.5
N./A.	330	

8 Monthly income

< 10 L.E.	12	46.2
10 -	8	30.8
+ 20	6	23
N./A.	330	

Table 5

Families characteristics.

	N.	%
1 Type of family		
nuclear	91	91.
extended	6	6.
joint - family	3	3.
2 Constitution of families		
householder, spouse, children	67	67.
householder, spouse, children, relatives	11	11.
householder, spouse	9	9.
Widower householder, children	2	2.
single householders, friens/relatives	2	2.
householder, spouse, married and unmarried children	6	6.
widower householder, married and unmarried children, relatives.		
two families	3	3.
3 Number of children/household		
None	11	11.
3 children	20	20.
3 -	33	33.
6 -	25	25.
+ 9	1	1.

	N.	%
4 Number of persons/family		
< 3 persons	15	
3 -	24	
6 -	50	
+ 9	11	
5 Total family income		
10 - L.E.	34	
30 -	36	
50 -	17	
70 -	8	
+ 90	5	
6 Per capita monthly income		
< 5 L.E.	22	
5 -	64	
15 -	7	
+ 25	7	
7 Ownership consumer durables		
Radio	43	
Television	1	
Radio, television	21	
Radio, television, recorder	10	
Butagaz	12	
Butagaz, refrigerator	1	

	N.	%
Washing machine		
Washing machine, butagaz, refrigerator	1	
Bicycle.	11	
8 Monthly expenses of families on some variants relevant to housing.		
a. <u>Rent</u>		
<1 L.E.	3	10
1 -	13	43.3
3 -	8	26.7
5 -	6	20
N./A.	70	
b. <u>Electricity</u>		
<1 L.E.	8	11.1
1 -	29	40.3
+ 2	17	48.6
N./A.	28	
c. <u>Water</u>		
<1 L.E.	2	28.6
1 -	4	57.1
+ 2	1	14.3
N./A.	93	

	N.	%
d. <u>Flushing</u>		
< 1 L.E.	36	58
1 -	20	32.2
3 -	6	9.8
N./A.	38	
e. <u>Transportation</u>		
1 L.E.	8	15.7
1 -	25	49.
3 -	10	19.6
+ 5	8	15.7
N./A.	49	
f. <u>Food</u>		
10	3	3.
10 -	23	23.
20 -	15	15.
30 -	37	37.
40 -	10	10.
50 -	3	3.
60 -	7	7.
+ 70	2	2.

III Housing:

- 1- Housing conditions of the buildings or houses.
- 2- The dwelling unit or apartment.
- 3- Dwelling facilities.
- 4- Satisfaction from housing conditions.

III Housing

Housing is the planner's term for the dwellings that shelter families and individuals from the forces of both nature and other people. As a material element of culture, housing may be studied in architectural, engineering, and economic terms. The urban sociologist concentrates mainly upon the non-material elements; habits, values, satisfaction, social relationships attached to housing, as much as the effects of the material elements on the behaviour and attitudes of the individual sheltered in the dwellings.

From the family's perspective however, housing is not only "shelter" or "household facilities, but comprises a number of facilities, services and utilities which link the individual and his family to the local community, and the community to the region in which it grows and progresses.

Housing is unique among consumer goods in the degree to which its quality can fulfil or diminish the well-being of individuals and families.

Housing is very costly to-day. A built-house is the most expensive single item most individuals ever buy; and except for food, expenditures for a rented shelter to-day take the largest part of the budget of most families. Nevertheless, one's house is in itself a function of income, occupation, and educational attainment.

In this section, we shall examine the housing conditions of the households visited in "Ezbet Zein" which are the material elements of the dwellings, as much as the social habits, social values, and social relationships relevant to housing, which are the non-material elements of the dwellings.

1- Housing conditions of the building (houses):

To-day, most of the site is built up and accommodated approximately 12,000 inhabitants on an area of 0.75m²this high concentration is achieved using, mainly single storey dwellings (39%), or two stories buildings (41%), organised in such a way that no open spaces have been retained adjoining the housing areas. Only 20% of the houses studied are three floored. The saturation of available land by building, ensures that there is no extension of the building, and most building operations are limited to improvements or alterations.

A big majority, (72%), of houses are owner-occupied, while (28%) are renter occupied. All owners hold the plot on a formal hikr lease. While some householders claim to have paid for hikr title, the others claim to have purchased their plots from other residents without registration.

It was found that there is a significant relationship between the total family income and tenure status as it is shown in the following table.

Relationship between the total family
income (A) and the tenure status(B)

B				
A	Owner	Tenant	Total	
- 30	24	10	34	
30 -	38	15	53	
+ 70	10	3	13	
Total	72	28	100	

Owners are squatters in the sense that they erected dwellings on land not owned by them.

The plot sizes of the houses studied ranges between 60 and 80 square meters averaging 70 square meters.

Buildings or houses are divided into independant apartments or rooms. The former is predominant: (76%) of houses are divided into independant rooms, mainly occupied by sons or close relatives, 43.4% (33) of which are rented. Households are sheltered together but are acting as independant economic units, the average number of independant rooms in the houses visited is 3.9 rooms.

The data shows that there is a significant relationship between the number of families in the building and the inclination of owners to divide the building into private independant rooms. ($\chi^2 = 11.42$ significant beyond 0.05).

Relationship between the number of families/building (A) and the internal subdivision of the building (B) .

A \ B	Rooms	Apartment	Room + apartment	Total
1	7	28		35
2	5	5	1	11
3	11		3	14
4	4	1	5	10
5	5		7	12
6	1		6	7
+ 7	5		6	11
Total	38	34	28	100

(53%) of houses are divided into apartments or dwellings, (15%) of which are rented to new comers; (35%) of houses are divided into dwellings exclusively occupied by the families which owned them; while (65%) are shared between members of the owing family and their tenants. The average number of apartments in houses is 2.009 apartments with a standard deviation of 0.860.

The monthly rent of the housing unit in general, either if it is a room or an apartment, ranges between 2 and 6 L.E, depending on the facilities available in each and if it is shared or private.

Some few owners (5) rent shops in the ground floor of their houses at an average monthly rent of 5 L.E.

While (35%) of houses are occupied by only one household (35%) are occupied by between 2 and 5 households, (19%) by between 5 and 7 and (11%) by more than 7 households .

The average number of household in the houses visited reaches 3.81 households with a standard deviation of 3.76.

- Building materials:

Two kinds of building materials prevailed: red brick (63%), red brick and stone (20%). The remainder houses (17%) represent a combination of different building materials.

Materials used for the roofs range from palm trunk and reed (7%), to concrete (49%). (36%) used a combination of joint and pertinand board, joint board and reed, joint board and asbestos.

Floors are mainly in tiles (42%) or in cement (28%), or a combination of both materials (11%). Floors of 19% of houses are in earth.

Only 18.6% (13) of houses had been bought by the present owner while 1.4% (1) had been inherited.

80% (58) of householders visited have built their houses. Only 3.5% (2) of them have built it in one stage, while the remainders 96.5% (56) have built their houses in several stages over a maximum period of 10 years. Each stage had added room to the house either Horizontally or vertically.

The different building operations was carried out by a local bricklayer (87.7%), or by the members of the family itself (3.8%). Only 3.5% of families have delegated a contractor to carry out all the building and construction procedures.

It was found that there is no relationship between the total family income and the decision of families to delegate to a bricklayer, or to a contractor, the responsibility of the building procedure; ($\chi^2 = 4.6$) as it is shown in the following table:

Relationship between the total family income (A), and the responsible of the building procedure (B) .

A \ B	Contractor	Bricklayer	Family members	N./A.	Total
30	1	12	1	20	34
30 -	1	34	2	16	53
+ 70		5	2	6	13
Total	2	51	5	42	100

54.4% (32) of families financed the different stages of the building works from the family's own savings. 31.6% (18) financed partly the building works, and borrowed the remain money needed mainly from relatives and friends (80%), or by entering into a gameya (12%). (14%) of householders with no savings at all have borrowed all the money needed for the building procedure. Only 8% (2) of owners who have built their houses relied upon a credit from their work (1), or a credit from the bank (1).

2- The dwelling unit:

The dwelling is defined as the independant room, or apartment, or house rented or owned by a socio-economic independant unit 28% of householders occupying the dwelling visited in the study, have been in their present dwellings for less than 5 years. (15%) have lived in their present dwellings for 15 years and more. The average years spent in the present dwellings is 10.25 years with a standard deviation of 6.533 .

We shall rely in the evaluation of the dwellings on two main variables: the crowding rate and the availability of facilities.

- Crowding rate:

Most research attention has been paid to the adequacy of internal space or its inadequacy which is crowding.

Crowding is the key housing factor affecting low income families, and in period of acute housing crisis, all families.

Space is as Rosow^x stated the dominant reason that families, when they can afford it, change one dwelling for another.

The effects of crowding have been more investigated than other housing shortages, because crowding is more easily measured.

However overcrowding of building must be distinguished from overcrowding of dwellings. If the first deprives the inhabitants of adequate supplies of air, sunlight and exposes them to many infectious diseases, the former deprives the dwellers from privacy, healthy sleeping arrangements, makes the development of a steady study habits for children extremely difficult, and influences family relationships that tend to spread out in the settlement rather than in the family unit.

Crowding has been measured in a variety of way:

- Room crowding (person/room).
- Room crowding (person/sleeping room).
- Area crowding (sleeping area per person).
- Area crowding (room sleeping area per person).

* Rosow, Irving: "The Social effects of the physical environment" journal of the American Institute of planners-Vol XXXII N = 2 May 1961 - P. 128.

The most easier standard to use counts the number of people per room in a dwelling unit: 1.5 or 2 persons per room is generally considered as adequate.

When we look to the crowding rate in the households visited, we shall find that the average number of rooms per household is 2.9 rooms with a standard deviation of 1.077 while (20%) of dwellings count one room, (38%) count three rooms and more. It was noticed that some dwellings (3 Owners) count more than 7 rooms each

The following patterns of internal densities emerged:

Number of rooms	Person/room (crowding rate)	Average number of person per household
1	3.1	3.1
2	3	6.1
3	2.1	6.2
4	1.3	5.4
5	0.9	4.3
6	0.5	3

Several conclusion could be deduced from the previous table:

- 1- The more rooms there are in the dwelling, the higher the number of persons inhabiting the dwelling.

2- The more numerous the rooms, the lower the rate of crowding. the data shows that there is no relationship between the total family income (A) and the number of person/room (crowding rate)

($r = 0.113$ significant beyond) as it is shown in the following table.

Relationship between the total family income (A) and the number of person/room in the family dwelling (B).

A \ B	-1	1-	3-	+5	Total
30 (L.E)	4	15	14	1	34
30-	2	30	17	4	53
+70		9	2	2	13
Total	6	54	33	7	100

If we consider that overcrowding exists when there is more than two persons/room, then 40% of dwellings are overcrowded; 21.2% (7) of which count more than 5 persons/room.

The average crowding rate in the dwellings visited is 2.85 persons/room, with a standard deviation of 1.424. The data shows that there is a significant relationship between the total income of families and the number of rooms owned or rented by households the more the total family income, the more

the number of room owned or rented, as indicated in the following table:

Relation between the total family income (A) and the number of rooms in the dwelling unit

A \ B	1	2	+3	Total
-30	10	18	6	34
30-	8	21	24	53
+70	2	3	8	13
Total	20	42	38	100

($r = 6.3$).

Since the internal density of dwellings had shown that the more numerous the rooms, the lower the crowding rate; and that the figures above had shown that the more the family income, the more numerous the rooms households can built or rent, it is only logic that the highest the family income, the lower the crowding rate.

On the other hand the data shows that there is a significant relationship between the tenure status and the number of rooms per dwelling ($\chi^2 = 37.5324$ significant beyond 0.05 and 0.01 as indicated in following table:

Relationship between the tenure status
(A) and the number of rooms in the dwelling
unit (B)

A \ B	1	2	3	4	+5	Total
Owner	4	30	20	14	4	72
Tenant	16	12				28
Total	20	42	20	14	4	100

3- Dwelling facilities:

The lack of public utilities has already been mentioned before. The settlement is deprived from major public utilities such as running water, sewage system and waste disposal.

A big majority of dwellings visited (87%) relies upon public taps, while the wealthier residents had find their ways to connect water to their houses. The average distance between households visited and public taps was found to be 178.735 meters, with a standard deviation of 158.953.

(84%) of dwellings have electricity. Dwelling facilities as a private toilet, bath, or a shower, or running water, are considered as an index for fair housing condition; their lack could be considered, among other deprivations, as an indicator of bad housing conditions. Facilities within the dwellings visited vary from having a private bathroom which

is rare (14%), through having a kitchen (34%), and having a private water-closet (67%) or a shared water closet (39%). The dwellings provided by all these facilities reach 14% of the dwellings visited.

When we look to the distribution of amenities between owners and tenants the following figures emerged.

		Owner	Tenant	Total
Kitchen	Yes	31	3	34
	No	40	24	64
	Shared	1	1	2
Bathroom	Yes	12	2	14
	No	59	25	84
	Shared	1	1	2
Water closet	Yes	59	8	67
	No	1		1
	Shared	12	20	32
Water	Running water	10	3	13
	Private or public tap.	6	25	87
Electricity	Yes	62	22	84
	No	10	6	16
Total		72	28	100

The data shows that owners are more fortunate than tenants in term of amenities which is normal and logic. It was found that there is a significant relationship between the availability of certain amenities (kitchen, water closet) and tenure status^{*}. Owners erect their houses with their own means and shared them with their children, when rooms exceed their family needs they rent it as a mean of investment. So it is only normal that utilities in the houses remain for their own private use.

91.2% of settlers who have a kitchen are owners.

85.7% of settlers who have a private bathroom are owners.

88.1% of settlers who have a water closet are owners.

76.9% of settlers who connected their house with running water are owners.

73.8% of settlers who introduce electricity are owners.

It was noticed that the water closet is the only amenity which owners provide in the rooms rented either as a private or shared accomodations.

When we look to the distribution of amenities between the different income groups the following figures emerged.

* Kitchen ($\chi^2 = 10.224$ significant beyond 0.05).

Water closet ($\chi^2 = 27.594$ significant beyond 0.05 and 0.01).

		30 L.E	30-	+70	Total
Kitchen	Yes	7	21	6	34
	No	27	30	6	64
	Shared		2		2
Bathroom	Yes	5	6	3	14
	No	29	45	10	84
	Shared		2		2
Water closet	Yes	22	35	10	67
	No		1		1
	Shared	12	17	3	32
Water	Connected		8	5	13
	Public or private tap	34	45	8	87
Electricity	Yes	26	46	12	84
	No	8	7	1	16
Total		34	53	13	100

It was found that there is a significant relationship between the availability of running water inside the house and the total family income ($\chi^2 = 10.016$ significant beyond 0.05). While there is no relationship between the availability of the other amenities and Income:

Kitchen	($\chi^2 = 5.886$ not significant)
Bathroom	($\chi^2 = 2.6428$ not significant)
Water closet	($\chi^2 = 0.495$ not significant)
Electricity	($\chi^2 = 3.9909$ not significant)

4- Satisfaction from housing conditions:

a. If we define general satisfaction from housing conditions as being the absence of complaints, and dissatisfaction as complaints from defects related to housing, we shall note that (85%) of householders in our sample are satisfied while only (15%) are not, in spite the fact that the general standard of housing in "Ezbet Zein" is low. Most houses have neither piped water nor a sewage system. Water has to be collected from water taps.

The study team thought that satisfaction or dissatisfaction from housing conditions may be related to some variables relevant to housing, as the total family income, the crowding rate or the education of householders, etc., but the data shows that there is no significant relation between the attitude of householders towards housing conditions, and households or householders characteristics except the tenure status as it could be seen is the following tables.

Relation between the total family income (A) and the satisfaction of householders from present housing conditions (B).

A \ B		Satisfied	Dissatisfied	Total
		-30 L.E	26	8
30-	46	7	53	
+70	13	-	13	
Total	85	15	100	

($\chi^2 = 2.94$ - not significant).

Relation between the crowding rate (A) and the satisfaction of householders from present housing conditions (B).

A \ B		Satisfied	Dissatisfied	Total
		- one	3	3
1 -	24		24	
2 -	25	5	30	
3 -	29	4	33	
+ 4	4	3	7	
Total	85	14	100	

$\chi^2 = 2.2$ not significant.

Relation between the education of
householder (A) and their satisfaction from present
housing condition (B).

A \ B	Satisfied	Dissatisfied	Total
Illiterate	41	6	47
Read and write	32	4	36
Primary certificate	9	3	12
Preparatory "		2	2
Secondary "	3		3
Total	85	15	100

($\chi^2 = 1.12$ not significant).

Relation between tenure status (A)
and satisfaction from present housing conditions (B).

A \ B	Satisfied	Dissatisfied	Total
Owner	70	2	72
Tenant	15	13	28
Total	85	15	100

($\chi^2 = 32.3165$ significant beyond 0.05 and 0.01).

As the table shows 46.4% of tenants are dissatisfied from their present housing conditions versus only 2.7% of owners.

When the field workers reasked the question of satisfaction in another way, by asking the householders about the main reasons of their satisfaction from their housing conditions, we found that in spite the fact that (15%) of householders had reported their feeling of dissatisfaction, 60% (9) of them had find a reason for being satisfied. On the other hand, when householders were asked about the reasons of their dissatisfaction from present housing conditions, we found that 24.7% (21) only of householders who reported to be satisfied did not complain and express once again their feeling of satisfaction.

We can conclude that general satisfaction or general dissatisfaction from housing conditions is misleading, and in spite of buing satisfied from their housing conditions, householders could see many disadvantages in their houses and vice - versa.

b. When we examined the sources of satisfaction of householders, we found that they are concentrated on ownership (54%).

The other sources of satisfaction are related to the location of the house which is near the work (17%), or being in a good social neighborhood (14%). The suitable rent of the dwelling unit has been reported by 5% of householders, while only 1% reported that living in the family house represents a main reason of their satisfaction from their housing conditions.

The largeness of the housing unit and its healthy condition were reported only by 3% of settlers.

c. Concerning the important sources of discontent from housing conditions, the data shows that there is two groups of reasons. The first one concentrated on the dwelling unit itself, such as the lack of facilities (45%), the smallness of the dwelling unit (16%), its bad building materials (8%), its unhealthy conditions (3%), the other group concentrated on the location of the dwelling which is far from the means of transportation (1%), its location in a bad neighbourhood (2%), only (4%) of renters complained about the rent of their dwelling which was considered high.

The major sources of dissatisfaction are concentrated on:

Lack of facilities.

Little space within the dwelling.

Poor building materials.

Poor health conditions.

Rent of the dwelling which is considered too high.

d. While ownership represents the major source of satisfaction from housing conditions, lack of facilities represents the main source of discontent; These reasons are followed by the location of housing as being near work from

one part, and the smallness of the dwelling unit from other part.

e. We think that satisfaction and dissatisfaction contain a subjective element varying from family to family and depending upon different combined variables, such as life cycle, level of education, income size of the family, previous housing, aspirations, goals, etc..

Several hypothesis can be tested in further studies, as the relation between satisfaction from housing conditions and family life cycle, with the assumption that one environment which is suited to the needs of the young couple, becomes perhaps inadequate when children reach school, or that a shift in job location, or the enlargement of family size can render a previous convenient dwelling quite unsuitable.

f. As for Ezbet Zein settlers, we think that factors are playing in favor of their general feeling of satisfaction from their present housing conditions previous housing experiences in Cairo or in other urban cities as migrants from rural areas, and ownership of the house which represents a social value and indicates an upward social mobility.*

* For more details see table 6 and 7.

62

Table 6

Housing Conditions

a) <u>The building</u>		N.	%
1	Number of floors		
	one	39	39.0
	2	41	41.0
	+3	20	20.0
2	Number of apartments		
	one	36	67.9
	2	10	18.9
	3	4	7.6
	4	3	5.6
	5		
	6 and more		
	N./A.	47	
3	Number of rooms		
	one	1	1.3
	2	8	10.5
	3	8	10.5
	4	21	27.6
	5	6	7.9
	6	16	21.1
	7	5	6.6

	N.	%
8	6	7.9
9 and more	5	6.6
N./A.	24	
4 Number of families		
one	35	35.0
2	11	11.0
3	14	14.0
4	10	10.0
5	12	12.0
6	7	7.0
7	3	3.0
8 and more	8	8.0
5 Building materials		
walls		
Red bricks	63	63.0
Stone	6	6.0
Red brick and stone	20	20.0
Mud bricks	2	2.0
Mud bricks, red bricks	6	6.0
Mud brick, stone	1	1.0
Red bricks, stone, Mudbricks	2	2.0
Red bricks, reinforcement concrete		

	N.	%
Roofs		
Tin		
Palm trunk and reed	7	7.0
Joint board, Asbestos	6	6.0
Joint board, reed	9	9.0
Joint, pertinent board	21	21.0
Concrete	49	49.0
Joint board, concrete	8	8.0
Floors		
Earth	19	19.0
cement	28	28.0
tiles	42	42.0
tiles, cement	11	11.0

b) Tenure

6	Type of tenure		
	owner	72	72.0
	joint property		
	hikr		
	renter	28	28.0
7	Number of rooms rented in the building		
	One room	3	9.1
	2-	12	36.3
	4-	14	42.4

	N.	%
6-	3	9.1
+8	1	3.1
Don't rent	39	
N./A.	28	
8 Number of appartments rented (to owners only)		
one	5	62.5
2	2	2.5
3	1	12.5
+4		
Don't rent	64	
N./A (renters)	28	
9 Average rent of the housing unit (to owners only)		
< 2 L.E		
2-	31	86.1
4-	3	8.3
+6	2	5.6
N./A.	64	
10 Other parts rented in the building (to owners only)		
None	67	93
Shop	5	7
N./A. (renters)	28	

	N.	%
11 Average rent of shops		
< 5 L.E.		
5 -	5	100
+ 9		
N./A. (renters)	95	
12 Ways of owning the building (to owners only)		
Built	58	80
Inherited	1	1.4
Bought	13	18.6
N./A. (renters)	28	
c) <u>Ways of building</u>		
13 Building procedure		
One stage	2	3.5
Several stages	56	96.5
N./A.	42	
14 Responsibility of the building procedure		
Bricklayer	51	87.7
Family	5	8.8
Contractor	2	3.5
N./A.	42	

	N.	%
15 Money needed for construction		
Had the money	32	54.4
Borrowed the money	8	14
Both	18	31.6
N./A.	42	
16 Sources of borrowing		
Friends or relatives	20	80
Gameya	3	12
Work	1	4
Bank	1	4
More than one source		
N./A.	75	
d) <u>The householder's dwelling</u>		
17 Number of years in present dwelling		
< 5 years	28	28.
5 -	57	57.
15 -	11	11.
+ 25 years	4	4.
N./K.		
18 Number of rooms		
one room	20	20.
2	42	42.
3	20	20.

	N.	%
4	14	14.
+5	4	4.
19 Number of persons /room (crowding rate)		
< 1 person	6	6.
1 -	54	54.
3 -	33	33.
5 -	2	2.
+ 7	5	5.
20 Rent		
< 1 L.E.	3	10
1 -	13	43.3
3 -	8	26.7
5 -	6	20
+7		
N./A. (owners)	70	
<u>Utilities</u>		
21 Kitchen		
Yes	34	34.
No	64	64.
Shared	2	2.
22 Bathroom		
Yes	14	14.
No	84	84.
Shared	2	2.

	N.	%
23 Water - closet		
Yes	67	67.
No	1	1.
Shared	32	32.
24 Type of flushing		
Cesspool	1	1
Trench	98	99
N./A.	1	
25 Number of flushing / year		
Don't flush (N/A)	1	
< 1	11	
1	29	
2	9	
3	9	
4	8	
+5	12	
Don't know	21	
26 Source of water		
Water connected	13	
Public taps	87	
27 Distance house / public tap.		
< 100 m	40	46
100-	17	19.5

	N.	%
200-	13	14.9
300-	7	8.1
400-	2	2.3
+500	8	9.2
28 Reasons of not connecting water		
No connection in the settlement	12	13.8
Very expensive	50	57.5
There are other priorities		
Owners responsibilities	25	28.7
N./A.	13	
29 Having electricity		
Yes	84	84.
No	16	16.
30 Reasons of not introducing electricity		
Very expensive	4	25
no means	6	37.5
use a gaz lamp		
owners responsibilities	5	31.2
Not necessary	1	6.3
N./A.	84	

Table 7

Satisfaction of housing conditions

	N.	%
1 General satisfaction from housing conditions		
Yes	85	85.
No	15	15.
2 Important reasons of satisfaction		
None	6	6.
ownership	54	54.
Near work	17	17.
Good neighborhood	14	14.
Cheap	5	5.
Family house	1	1.
Large	1	1.
Healthy	2	2.
3 Important reasons of dissatisfaction		
None	21	21.
Lack of facilities	45	45.
Small	16	16.
bad building materials	8	8.
Not healthy	3	3.
Expensive	4	4.
Far from transportation	1	1.
Bad neighborhood	2	2.
Likely to collapse		

IV Social Relations values and aspirations.

1- Spatial use and social relationship.

a. Internal use of space.

b. Social relationship.

2- Values and aspirations.

Relationships, Values and Aspirations

(1) Spatial use and social relations

We shall try, in this section to analyse the possible effects of the internal use of space in the dwelling, on the network of social relations among the households visited. We think that the understanding of internal spatial organization, as much as the significance of local social relations could give us a fair appreciation of the meaning that the settlement have for settlers.

a. The internal use of space:

The overcrowding of the dwellings visited make the internal arrangement of the space use difficult, and the multifunction of each room an obligation.

The current patterns of internal use of space suggest the following:

- 1- Rooms fulfill many functions as a place for sleeping, eating, cooking, washing and lengthen clothes, receiving visitors, and as a place where children use to study, and spend time. The data collected from the householders about their every day activities are fulfilled in one or two rooms in 62% of dwellings visited.

The following figures show the different activities of families fulfilled in any room available.

cooking	(48%).
receiving visitors	(72%).
washing clothes	(31%).
lengthen clothes	(9%).
breeding poultry	(3%).
studying	(77.3%).
playing	(9.9%).

2- The rural courtyard fulfills many functions too, as a place for cooking, washing and lengthen clothes, breeding poultry, as the figures show:

cooking	(2%).
washing clothes	(25%).
lengthen clothes	(21%).
breeding poultry	(14%).

3- The same activity is fulfilled in different spaces in the dwelling. Each activity follows a different continuum which varies from non-specialised area, to specialised one.

a. Cooking:

+	Kitchen	courtyard	Hall	passage	any room	-
	34%	2%	12%	4%	48%	

b. Washing clothes:

+	Bathroom	courtyard	kitchen	Hall	infront the house	any room	-
	11%	25%	5%	26%	2%	31%	

c. Lengthen clothes:

+ Balcony	Roof	Courtyard	Street	any room	-
21%	47%	21%	2%	9%	

d. Breeding poultry:

+ Courtyard	Roof	Kitchen	Any room	-
34.1%	44%	6%	7.3%	

e. Places assigned to the study of children:

+ Sitting room	Any room	-
22.7%	77.3%	

- 4- When kitchen is available, activities like cooking, washing clothes and breeding poultries, are conducted in the area assigned for this facility.
- 5- Every space available in the dwelling (the hall, the roof, the courtyard, the front of the house, the street) is fully utilized by households members in their every day activities, except the sleeping area reserved to beds.
- 6- Furniture too is multifunctional: beds (as a place to sit on), tables (as a mean to cook on, to get meals, to range books or radio, or television), wardrobe (for food storage).

- 7- The street is the space in which many activities and social networks are localized. Women (mothers, daughters, female relatives) are acting together the every day activities. They use the street to prepare food for cooking, to wash, and lengthen clothes, to breed poultries, to talk with friends and neighbors. Men go to their work and return back only to eat and sleep. They are either in their work, or with friends and neighbors in the coffee house, or sitting in street corner.
- 8- Children are deprived of any private internal use of space. There are no places assigned to children, neither for their sleeping, nor for their studying. They sleep and study anywhere. Some of 22.7% (11) of families reserved the sitting-room in period of exams to the study of their children. Children are sent into the street to play.
- 9- The physical space is structured around the residential unit. The settlers have experienced a certain usage of the local area as being an integral part of home. Streets, alleys, cul de sac; are structured on the basis of being integrated in the whole social organization of the settlement.
- 10- In spite of the fact that settlers are living in the surrounding area of the capital very near of Helwan and are engaged

mainly in secondary and tertiary sectors, they could not be classified in local standards as urban settlers; but in other hand, they are no longer villagers. Their way of life has changed: 25% of the dwellings visited has a rural courtyard; (86%) of families are getting their meals on a floor table; (79%) of families are using Primus, and (18%) are using a range butagaz for cooking, (41%) of families are breeding poultry. (87%) are relying for getting water on public taps. (84%) have electricity. (11%) have a television set, (20%) have a refrigerator, and (5%) have a washing machine.

b. Social relations:

The physical space provides a framework within which some of the most important social relations are achieved such as visiting, mutual help, resolving problems between settlers, borrowing money in case of necessity.

Space in the settlement is used in a non selective way. The settlers are at home in the street, outside their houses; They communicate easily. They see neighbors quite often; They don't need to visit their near neighbors, because they are together every one and then.

The current patterns of social relations suggest the following:

- 1- Kinship relations (relatives) is of considerable importance in term of visiting, mutual aid and borrowing money, but there are other alternatives which are quite evident in these terms: neighbours relations and friends relations.
- 2- Death and marriage are among the main events in which settlers must visit each other to present their condolence or congratulation.
- 3- Mutual aid occurs between settlers without any preference in (67%) of households visited.
- 4- Elder people resolve the problems of settlers. Neighbours and relatives interfere too, but at lesser extend.
- 5- Borrowing occurs more frequently between neighbours than between relatives which is understandable because of their every day contact.

We think that settlers thought about Ezbet Zein as their houses : they have lived together, reared their children together, confronted almost the same problems of survival; they constitute a big family tied together by similar problems and worries.*

* For more details see table 8 and 9.

2- Values and aspirations.

The research seeks to determine the social values of Ezbet Zein settlers who are no more villagers, but not either urban citizens in our local standards.

The study of social values and aspirations is very important for the understanding of human decisions and human behaviour. The prevailing values in a community provide many social indications which can explain social changes, priorities and decisions to make. The study used two techniques* to detect the values and aspirations of settlers:

- 1- Exposing the settlers to several variables and giving them the chance to choose the most important factors among them. The purpose of this question was to determine the values prevalent in the community and the importance of owning a decent dwelling in relation to the other proposed variables.
- 2- Asking projective questions.

* These techniques have been used before in a research project done by the center: "The study of housing conditions in rural Guizeh governorate" - Dr. Gamal Zaki and Noha Fahmy-in "National Review of Social Sciences" - Special issue - Vol. VII n = 3 Septmber 1965.

The ownership of the dwelling a social value:

The following variables were cited to settlers:

- To have money.
- To have a decent dwelling.
- To educate children.
- To be in good health.
- To live peacefully with wife and children.

The settlers then were asked to determine the most important among these variables in their opinion. The result was as follows:

Health	67%
Living peacefully with wife and children	8%
Education of children	20%
Owning a decent dwelling	5%

- 1- The above results show that health represents the most important variable for 67% of settlers; which could reflect their crucial needs of health care services, and their belief that illness is synonym of poverty, distress, and necessity which is understandable since the only guarantee for their survival is their work.
- 2- Since 72% of settlers are owners who erect their houses without any help from public authority, the owning of a decent dwelling didn't appear to have a primary importance.

5% only of settlers, mainly renters mentioned this variable as being the most important variable in their opinion.

But when the settlers were left to determine the variables themselves in a projective question which put the settlers in an assumed position thus:

"In case of obtaining money, what is the most important thing you choose to do or to buy." Building a new house emerged as indicated in the following figures.

Build a new house	32%
Educate children	31%
Make a pilgrimage to Mecke	11%
Buy furniture for the house	7%
Buy clothes for children	6%
Make a project	5%
Others.	8%

Build a new house and educate children represent the main important aspirations of 63% of settlers in our sample. Nevertheless, the above variables on aspirations were ordered in the the same way for literate as well as illiterate, as we can notice in the following table.

Relationship between things which can be done if having money (A) and education status of householders (B).

B A	Illiterate	Read and write	Certificate	Total
Build new house	13	9	10	32
Educate children	14	14	3	31
Make a pilgrimage	5	5	1	11
Make a project	4		1	5
Buy furniture	4	3		7
Buy clothes	3	3		6
Others	4	2	2	8
Total	47	36	17	100

the data shows that there is no relationship between the education status of Householders and their aspirations ($\chi^2 = 6.21$ not significant).

If we divide our sample in three income groups the poorest (less than 30 L.E./month), the middle income (from 30 to 70 L.E./month), the biggest income group (more than 70 L.E./month), we can notice once again that building a new house has the first priority among the three groups, as it is shown in the following table:

Relationship between things which can be done if having money (A) and total family income (B).

A \ B	B			Total
	-30 L.E	30-	+70	
Build new house	11	17	4	32
Educate children	10	17	4	31
Make a pilgrimage	3	7	1	11
Buy furniture	3	2	2	7
Make a project	1	4		5
Buy clothes	2	4		6
Others	4	2	2	8
Total	34	53	13	100

the data shows that there is no relationship between total family income of householders and their aspirations ($\chi^2 = 8.32$ not significant).

From the above results, we can note that:

- 1- When settlers had to choose between material and non-material objects, they are mostly inclined to choose non-material object as health, living peacefully with wife and children, which represents values of the individual settler.
- 2- When settlers were left to their proper initiative to decide what will be the most important thing to do if they obtain

- money, they are family oriented. The building of a new house, which is a symbol of prestige and achievement for the whole family, and the education of children, were cited as the two first priorities for 63% of our sample.
- 3- Make a pilgrimage to Mecca represents an individual aspiration of settlers. (11%) of the settlers, expressed their desire to make this sacred obligation if they obtain money. 3 of them are from the poorest group. 7 are from the middle income group and one from the upper income group.*
 - 4- Ezbet Zein settlers are opened to the urban city life, as 7% of settlers aspire to furnish their houses.

When asked a direct question about the nature of the furniture they aspire to if they have a surplus of money, it was not a surprise to note that 49% of settlers wish to buy extra beds, and that 18% wish to buy a decent sitting-room in which they could receive visitors.

Concerning the domestic needs which can be bought if having money, domestic apparatus which can help the house wife in her daily work seemed to have the priority, as a range butagaz 40% a refrigerator 20% a sewing-machine. A television set was quoted by 11% of settlers, and once again 14% of settlers expressed their desire to buy furniture.

* The pilgrimage cost has become very expensive to-day and in fact it is far beyond the means of a big majority of the whole population in Egypt.

Three domestic needs emerged in our sample: a range butagaz, refrigerator and furniture, and were quoted by literate as well as by illiterate settlers, as we can notice in the following table:

Relationship between the domestic priorities which can be bought if having money (A) and educational status of householders(B).

A \ B	illiterate	Read and write	Educated	Total
Butagaz	9	27	4	40
Refrigerator	5	8	7	20
Furniture	8	6		14
Television	5	6		11
Sewing - machine	3	3	1	7
Washing - machine	3	2		5
Recorder	1		1	2
Water - heater		1		1
Total	34	53	13	100

there is no significant relation between the family income of householders and their aspiration concerning furniture ($\chi^2 = 9.408$ significant beyond 0.05).

Nevertheless, the priorities quoted according to the different income groups, show a certain difference as we can

notice: The first group quoted their priorities as follows:

Butagaz	13
Furniture	7
Television	7
Refrigerator	1
Sewing - machine	4
Washing- machine	2
Total	34

The second group quoted their priorities as follows:

Butagaz	25
Refrigerator	11
Furniture	7
Sewing - machine	3
Washing- machine	3
Television	2
Recorder	1
Water heater	1
Total	53

The third group quoted their priorities as follows:

Refrigerator	8
Butagaz	2
Television	2
Recorder	1
Total	13

A range butagaz represents the urgent need of settlers in the two first income - groups, where 38 settlers express their desire to buy one. This item had been followed by furniture, then television, in the first group; and by a refrigerator then furniture in the second group; and a refrigerator, represent the main aspiration of settlers in the third group. ^x

^x For more details see table 10.

Table 8

Social habits related to housing

	N.	%
1 Means of cooking		
Primus	79	79.
Butagaz	18	18.
Gas lamp	3	3.
2 Place of cooking		
Any room	48	48.
The kitchen	34	34.
The hall	12	12.
The court-yard	2	2.
The passage	4	4.
3 Ways of getting meal		
On the floor	5	5.
On a floor table	86	86.
On a table	9	9.
4 Places assigned for visitors		
Any room	72	72.
Sitting room	22	22.
Living-room (hall)	6	6.
5 Places assigned for washing clothes		
The hall	26	26.
Any room	31	31.

	N.	%
Court-yard	25	25.
Bathroom	11	11.
Kitchen	5	5.
In front of the house	2	2.
On the roof		
6 Places assigned for lengthen clothes		
On the roof	47	47.
in the court yard	21	21.
inside the house	9	9.
outside the house	2	2.
in the balcony	21	21.
7 Places assigned for breeding poultry		
Don't breed	59	
Cage on the roof	18	44.0
Court yard	14	34.1
Cage in the kitchen	6	14.6
Cage in a room	3	7.3
8 Places assigned for throwing garbage		
Demolished area	56	56.
Street	26	26.
Canal	12	12.
in front of the door	5	5.
on the roof	1	1.

	N.	%
9 Places where children usually study		
Any room	55	77.3
Sitting room	11	22.7
N./A.	34	
10 Places where children usually play		
Indoor	7	9.9
In front of the house	10	14.1
In the street	53	74.6
In the main club	1	1.4
N./A.	29	

Table 9

Social relationship

	N.	%
1. Persons visited in the settlement		
Don't visit any one	17	
Relatives	15	
Neighbors	11	
Friends	6	
Relatives and neighbors	16	
Relatives and friends	3	
Friends and neighbors	13	
All	19	
2. Occasions of visiting people in the settlement:		
Death	79	
Marriage	50	
Feast	9	
Birth	--	
Sickness	29	
N./A.	17	
3. Mutual aid happened between		
Relatives	8	
Neighbors	2	
Friends	1	
Relatives and neighbors	4	

	N.	%
Relatives and friends	5	
Neighbors and friends	12	
All	67	
N./K.	1	
4. Persons resolving conflicts between neighbors in the settlement.		
Older people	28	
Nobody interfere	10	
Neighbors	16	
Relatives	4	
A friend to both sides	14	
Police	4	
No conflicts happen	24	
5. Sources of borrowing if money is needed.		
Don't like the idea of borrowing	8	
Neighbors	34	
Relatives	25	
From work	19	
Gameya	3	
Can always be in the safe side	11	

Table 10

Social values related to housing.

	N.	%
1. Factors which contribute to individual happiness		
Health	64	
Living peacefully with children	8	
Education of children	20	
Owning a decent dwelling	5	
Having money		
N./K.		
2. Things which can be done if having money		
Make a project	5	
Educate children	31	
Pilgrimage to Mecca	11	
Building a new house	32	
Buying clothes for children	6	
Buy furniture for the house	7	
Other	8	
3. Furniture which can be bought if having money		
Bed	49	
Sitting - room	18	
Wardrobe	15	
Table	2	

Sofa	
Two chairs	3
Wood sofa	4
Cupboord	
Others	9
4. Consumer durable which can be bought if having money	
Butagaz	40
Furniture	14
Refrigerator	20
Television	11
Recorder	2
Water - heater	1
Sewing - machine	7
Heater	
Ventilator	
Washing machine	5

V Upgrading program.

1- Utility and facility needs.

2- Means of participation in upgrading program.

Upgrading programme.

The major aim of the project is directed towards upgrading the basic deprivations of the settlement, and improving the living conditions of settlers in view to integrate them in the urban core of city life.

In a large social sense, beyond the political and economic issues, involved program for urban upgrading has important human objectives. It aims to make available to settlers in uncontrolled settlements, some of the advantages of modern urban facilities, ranging from running water and waste disposal, to improved houses, streets and settlement resources, to ensure training and employment for adults and education for the young.

With this human objectives in mind, the study team thought that the settlers participation in upgrading program will be the key factor for the success of the project as a whole; and a good deal of the enquiry was oriented towards determining their needs and in which priority, their acceptability, their willingness to cooperate and to participate in the program, as much as their perception about the terms of their participation.

Accordingly, the study aimed to gather informations about the available utilities and services in the settlement, as well as the voluntary associations which can help as vehicle for popular participation in the program. These kinds of informations were gathered from informal leaders and members of the voluntary associations.

Another kind of data was gathered from settlers themselves about the basic needs of the settlement and their opinion concerning their priorities, their own needs in term of improving their housing conditions and their means of participation in upgrading programme.

As we have seen in Ezbet Zein case study, the settlement is deprived from all kind of public services and utilities. Voluntary associations like "the sons El Saf" have a very narrow range of activity restricted to offering aid and help mainly in case of death, and illness and occasionally in case of marriage.

1- Utility and facility needs:

Informal leaders interviewed gave first priorities to sewage and domestic water connection, and ascertained the settlers contribution by money and labour, or by labour only (poor) in the provision of these utilities. The data gathered from the settlers themselves suggests the same results as followed:

1- The demand of a sewage system was asked by 87% of settlers as priority number one, and the most urgent needs of the settlement. It was followed by a piped water supply (12%) and by electricity (1%). The data shows that priorities in term of utilities are distributed between owners and tenants as follows:

Relationship between tenure status
(A) and priority of utilities to be done in the
settlement (B).

A \ B	Water	Sewage	Electricity	Total
Owner	5	66	1	72
Tenant	7	21		28
Total.	12	87	1	100

($\chi^2 = 9.0091$ significant beyond 0.05)

The majority of owners and tenants (66 versus 21) gave their priority to a sewage system. A piped water supply has been asked by both as priority $N^{\circ} = 2$ it was followed by electricity.

2- The demand for a primary school was asked by 33% of settlers as priority number one in term of their basic social facilities needs. It was followed by a health unit (31%), a consumer cooperative (22%), and^a preparatory school (9%) .

The two first demands are vital. Householders are keenly oriented to educate their children, as education has now become a possibility, a goal, and represents a social value. The settlement is deprived from a primary school. Children from the age of six are obliged to walk every day to go to school. The lack of primary school constitutes the major education problem confronted by the settlers in term of the education of their children.

Settlers suffer also from the lack of a health care center. In emergency cases only, they have to go to Helwan public hospital, or to private clinics in Helwan or Cairo. If the second alternative is beyond their means, the free prescription offered by public hospital is considered by settlers as unworthy. In term of health care, settlers demands seemed to be the establishment of a public clinic, or a public health care center in the settlement provided by a pharmacy.

II- Means of participation in upgrading program:

The informations gathered concerning the means of participation of settlers in the upgrading programme, were divided into the following subjects:

- Housing improvement.
- Settlement programme.
- Training opportunities for youth.

1- Housing improvement:

The importance of housing is well recognized to day as a main factor in the stability of the labor force and the growth of productivity. Housing plays a vital role in maintaining privacy, health and stability.

The upgrading programme represents in itself the main incentive for active participation of settlers who considere it as a guarantee of tenure security. By providing loans on

credit, for the connection of water or sewage, the improving of roof or floor system, installation of a water closet, ect., the local authorities ascertain indirectly the legacy of their wrights on the land, and on the houses they have erected.

Settlers are accordingly well motivated by the programme. All owners in our sample agreed to connect their houses with piped water as well as with a sewage system, and to pay for it on a credit basis. They are able to pay a monthly instalment ranging from one to 3 L.E. until they pay their due.

Concerning the house improvements, 91.7% (66) of owners express their needs in that term. Improvements needed vary from adding rooms and story, to repair the floor or the water closet, to paint the house, to demolish the house in view to rebuild it from the very beginning. But if settlers are willing to make reparations and to pay on credit for these reparations, they would prefer to rely on a private bricklayer (74.2%) or a private contractor (13.7%) to accomplish the improvements needed, rather to depend on government realization which is considered very slow.

Settlers who refused this opportunity gave the following reasons: - House doesn't need improvement.

- There are other priorities.

- Government realization is slow and bad.

The correlation between family income and the need of housing improvement is not significant ($\chi^2 = 1.52$), as it is shown in the following table:

Correlation between the family income and settlers need to make housing improvement (B).

A \ B	Yes	No	N./A.	Total
-30	20		14	34
30-	36	4	13	53
+70	10	2	1	13
Total	66	6	28	100

As for renters who can not by housing law make any reparations in their dwelling, 35.7% (10) are willing, to share with the owner the cost of the reparations needed by paying a monthly rent supplement averaging one and half L.E. Those who refuse this alternative, have either no surplus (50%) to be paid or considere housing improvements as the responsibility of the owner (27.5%) or didn't ask for any reparations.

2- Settlement facilities:

While housing improvements represent a household choice which reflect its need and its aspiration in term of its private living arrangement, settlement improvements and settlements facilities represent popular and communal aspirations in terms of

the whole living situation. The study team choosed to ask settlers about their agreement to participate in one main issue related to the welfare and the improving of living conditions of the settlement as a whole: - The pavement of the streets.

Settlers welcome any programme oriented to the improvement of their settlement problems, because it represents the only alternative to gain infrastructure services and security for the possible threat of violent eviction.

The data shows that (96%) of settlers are willing to cooperate for the pavement of the streets mainly on a voluntary basis (73), nevertheless 23 of the welcomed the idea of participating in the pavement works providing a salary.

3- Training oportunities:

The study team thought that services directed for a better assimilation into urban life are perhaps as important as physical facilities.

Opening classes for illiterate adults, and providing training oportunities for youth were condidered as important. Consequently, settlers were asked about their willingness to attend literacy classes in their free time. (90.9%) of illiterate settlers welcomed the idea and were ready to learn. Those who refused the idea, argued that education is efficient only in the

childhood, that they don't have any aptitude or that they don't have time.

When asked about the most important training opportunities needed by youth to realize a certain self sufficiency in the settlement, the following skills were mentioned by order of importance:

Wood work and carpentry	29%
Plumbing	18
Electricity	16
Building	14
Mechanics	12
Lathing and filing	8
Painting	2
Carpets weaving	1

81% of settlers affirmed the availability of local leaders or skilled workers who can in their opinion handle the mobilization of youth, their organization, and their guidance. The following names were cited by order of importance:

Names	Profession
Abdallah Ibrahim Khodeir	S.L. iron and steel company
Sharaf El Din Sadek	Employee
Zaree Mohamad Badawi	S.L. iron and steel company
Ibrahim Metawee	Matroukat Company

Names	Profession
Hag Ramadan Ibrahim	munation company
Ahmad Abdel Halim	Retired
Abou El Fadl Soliman	Retired
Salama Hosni	Teacher

Nevertheless, 19% of settlers were unable to name an unofficial leader and claimed that the settlement is deprived from persons who can take this responsibility.

If a big majority, 78% of settlers, agreed to organize a vocational training programme for girls, 22% of them refused such idea. The first group suggested the following items in order of importance:

Sewing	57%
Knitting	19
Embroidery	3
N./K.	21

25% of them affirmed the availability of women who can handle the organization of girls and their training. The remainders were unable to do so (11%), and a big majority 64% did not know any women in the settlement capable to undertake this responsibility. Only two names were cited:

Names	Profession
Sanaa Hamza	Employee in the Ministry of insurance.
Ehsan Sayed Thomas	Employee in the ministry of insurance.

As we can see from the above results, settlers could be stimulated for any kind of programme corresponding to their needs and demands which are multiple.

The priority of needs has been already assessed by this study; the willingness of settlers to cooperate and to participate in upgrading programme is apparently evident. The mobilization and direction of human resources towards a better use of latent skills are welcomed. They are hoping for a better life and they are ready to invest, to work, in order to achieve such a goal.

We hope that the upgrading programme will not deceive them and that settlers will gain by their active participation in it the resolution of their crucial problems, by improving their housing conditions as well as the entire conditions of their settlement.*

* For more details see table 11 - 12

Table 11

Availability of services

1	The most important utilities needed by the settlement		
	Water	N.	%
		12	12.
	sewage	87	87.
	electricity	1	1.
2	The most important services needed by the settlement		
	Primary school	33	33.
	Health units	31	31.
	Consumer cooperatives	22	22.
	Transportation	1	1.
	Trade shop	1	1.
	Preparatory school	9	9.
	Others	3	3.
3	Education problems confronted by the settlers		
	Lacking of schools	37	57.8
	Lacking of transportation to school	1	1.6
	Education opportunities very bad	15	23.4
	School masters' cupidity	11	17.2
	No children in school age (N/A)	36	
4	Places where settlers usually cure themselves		
	Hospital in Helwan	68	68.
	Private doctor in Helwan	30	30.

	N.	%
Public hospital in Cairo	1	1.
Traditional means	1	1.
5 Health problems confronted by settlers		
Hospital are far (no means of transportation).	11	11.
Free prescription is not efficient	24	24.
Costs of cure are are high	13	13.
Lacking of pharmacy	10	10.
Lack of doctors and doctors absences	6	6.
Others	12	12.
No problems	24	24.
6 Suggestions to confront health problem.		
Creation of governmental clinics in the settlement.	28	28.
Creation of health units in the settlement.	27	27.
Governmental control on hospitals	23	23.
Creation of pharmacies in the settlement.	5	5.
Don't know	13	13.
Others	4	4.

Table 12
Upgrading.

Owners.

1	Agreement to introduce utilities in the settlement and to share costs.	N.	%
	Yes	71	98.6
	No	1	1.4
	N./A.	28	
2	Monthly share of settlers.		
	one L.E.	37	51.4
	2	28	38.7
	+3	7	9.9
	N./A.	28	
3	Nature of housing improvements done by settlers		
	None	32	45.7
	Add rooms	19	27.1
	Add floor	10	14.3
	Ceiling reparation	3	4.4
	Floor reparation	1	1.4
	Installation of cesspool	1	1.4
	Other	4	5.7
	N./A.	30	

	N.	%
4 Need of housing improvement.		
Yes	66	91.7
No	6	8.3
N./A.	28	
5 Nature of housing improvements		
Add floor	21	31.8
Add room		
Repairing every thing	17	26.8
Repair the floor	2	3
Construct or repair water closet	8	12.1
New roofing system	13	19.7
Reconstruction of the house	3	4.6
Paint the house	2	2
N./A.	34	
6 Persons which could be responsible for doing the reparations needed.		
The settlers themselves	8	12.1
A bricklayer	49	74.2
A contractor	9	13.7
N./A.	34	
7 Costs of the reparations		
< 500 L.E.	27	42.4

	N.	%
500 -	15	22
1000 -	9	13.7
1500 -	4	6
+ 2000	11	15.9
N./A.	34	

8 Willingness to make reparations and to pay costs on credit.

Yes	63	87.5
No	3	4.2
Yes but under my control	6	8.3
N./A.	28	

9 Reasons for refusing such opportunity

House doesn't need improvement	1	33.3
Government realization slow and bad	2	66.7
N./A.	97	

Renters.

10 Willingness to share with the owner the costs of any reparations needed.

Yes	10	35.7
No	18	64.3
N./A.	72	

	N.	%
11 Monthly share of renters (supplement to the rent).		
One L.E.	7	70
2	3	30
+3		
N./A.	90	
12 Reasons for refusing such opportunity		
Have no surplus	9	50
This is the responsibility of the owner	5	27.5
Didn't ask for any reparations	4	22.5
N./A.	82	
13 Willingness to participate in classes for illiterate.		
Yes	60	90.9
No	6	9.1
N./A.	34	
14 Reasons of non - participation		
Education not efficient in old age	3	50
Don't have time	1	16.6
Don't have aptitude	2	33.4
N./K.	4	
N./A.	90	

	N.	%
15 Opinion concerning the most important training needed by youth.		
Wood work	22	22.
Plumbing	18	18.
Electricity	16	16.
Lathing and filing	8	8.
Building	14	14.
Carpentry	7	7.
Mechanics	12	12.
Carpets weaving	1	1.
Painting	2	2.
N./K.		
16 Availability of settlers which can be responsible of the training of youth.		
Yes	81	81.
No	18	18.
N./K.	1	1.
17 Agreement of settlers for girls vocational training		
Yes	78	78.
No	22	22.
18 Most important training needed for girls		
Sewing	57	57.
Knitting	19	19.

	N.	%
Embroidery	3	3.
Weaving		
Carpet weaving		
N./K.	21.	21.
19 Availability of women's settlers which can be responsible of girls training.		
Yes	25	25.
No	11	11.
Don't know	64	64.
20 Need for a nursery		
In need	91	91.
Not in need	9	9.
21 Willingness to cooperate in the reparation of settlement's streets.		
Will cooperate	73	73.
Will not cooperate	4	4.
Will cooperate with a salary	23	23.
N./K.		

Summary of Statistical Data

115

Summary of Statistical Data

I Socio Economic characteristics of Householders

Average age	43.1
Marital status	96% married
Mean years of marriage	19.5
Education status	47% Illiterate 36% Read and write
Origin	89.5% Rural
Occupation	Secondary 66% Tertiary 7% Primary
Average monthly income	38.8 L.E.

II Household characteristics

Household pattern	91% nuclear
Average number of Person/Household	5.8
Average number of children/Household	3.5
Average total Household Income	42.1 L.E.
Average per capita Income	9.6 L.E.
Average monthly expenditure on rent	3.3 L.E.
Average monthly expenditure on water	132.1 Pt
Average monthly expenditure on flushing	98.4 Pt
Average monthly expenditure on electricity	186.1 Pt
Average monthly expenditure on transportation	3 L.E.
Average monthly expenditure on food	32.6 L.E.

III Housing Conditions

1. The building

Tenure 72% owner

Type of building 39% single storey

room 38%

2. Division of building

apart. 34%

room+Ap. 28%

Average number of apartment 2.009

Average number of Household 3.81

Householders who built their house 80%

Responsible of the building procedure 87.7 Bricklayer

Sources of financing 54.4% family saving

3. Building materials

Walls 63% red bricks

Floors { 42% tiles
28% cement

49% concrete

Roofs 21% Joint and pertinand board

4. The dwelling unit

Average number of years in the dwelling 10.25

Average number of room. 2.9

Average person/room. 2.85

117

Have water	13%
Have electricity	84%
Have kitchen	34%
Have Bathroom	14%
Have water closet	67% Private 32% shared

IV Satisfaction with housing conditions

Satisfied 85%

Main sources of satisfaction ownership 54%
Near work 17%

Main sources of discontent Lack of facilities 45%
Smallness 16%

Comparison between Owners and tenants

	Owner	Tenant	Total
Number of room			
1	4	16	20
2	30	12	42
3	20		
4	14		
+5	4		
Person/Dwelling			
< 3	7	8	15
3-	13	11	24
6-	42	8	50
+9	10	1	11
Satisfaction			
yes	70	15	85
No	2	13	15
Priorities			
Water	5	7	12
Sewage	66	21	87
Electricity	1		1
<u>Amenities</u>			
Kitchen			
Yes	31	3	34
No	40	24	64
Shared	1	1	2

	Owner	Tenant	Total
Bathroom			
Yes	12	2	14
No	59	25	84
Shared	1	1	2
Water closet			
Yes	59	8	67
No	1		1
Shared	12	20	32
Water			
Connected	10	3	13
Tap.	62	25	87
Electricity			
Yes	62	22	84
No	10	6	16
Total	72	28	100

120

Comparison between different
Income group .

Tenure status	- 30	30 -	+ 70	Total
Owner	24	38	10	72
Tenant	10	15	3	28
Number of room				
1	10	8	2	20
2	18	21	3	42
3	2	15	3	20
4	3	8	3	14
+5	1	1	2	4
Person/Family				
< 3	7	6	2	15
3-	11	11	2	24
6-	14	28	8	50
+9	2	8	1	11
Satisfaction				
Yes	26	46	13	85
No	8	7		15
Priorities				
Sewage	27	48	12	87
Water	7	5		12
Electricity			1	1

Amenities	- 30	30 -	+ 70	Total
Kitchen				
Yes	7	21	6	34
No	27	30	7	64
Shared		2		2
Bathroom				
Yes	5	6	3	14
No	29	45	10	84
Shared		2		2
Water closet				
Yes	22	35	10	67
No		1		1
Shared	12	17	3	32
Water				
Connected		8	5	13
P. or private tap.	34	45	8	87
Electricity				
Yes	26	46	12	84
No	8	7	1	16
Total	34	53	13	100

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