

**National Center for Social
and Criminological Research**

PH-1000-417
**Ministry of Housing and Reconstruction
U.S. Agency for International
Development**

ARAB GHONEIM

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

Arab Ghoneim
A case study of an urban settlement
in greater Cairo

Table of Contents

I	Case study of the settlement.	2
	1- Geographical setting.	3
	2- Population.	4
	3- The physical aspect.	4
	4- Urban contact.	7
	5- Settlement economy.	8
	6- Services available.	9
	7- Urgent needs and demands.	10
II	Description of the sample.	12
	1- Householders socio-economic characteristics.	13
	2- Occupation background of householders.	14
	3- Children characteristics.	16
	4- Families characteristics.	17
III	Housing.	40
	1- Housing conditions of the buildings or houses.	14
	2- The dwelling unit or apartment.	46
	3- Dwelling facilities.	51
	4- Satisfaction from housing conditions.	55
IV	Social Relations values and aspirations.	69
	1- Spatial use and social relationship.	70
	a) Internal use of space.	70
	b) Social relationship.	74
	Values and aspirations.	75
V	Upgrading program.	90
	1- Utility and facility needs.	91
	2- Means of participation in upgrading program.	94
	Summary of statistical data	109

I Case study

- 1- Geographical setting.**
- 2- Population.**
- 3- The physical aspect.**
- 4- Urban context.**
- 5- Settlement economy.**
- 6- Services available.**
- 7- Urgent needs and demands.**

1- Geographical setting of the settlement:

Ezbet "Arab Ghoneim" is one of the many uncontrolled settlements dispersed around the city of Helwan, one of the nation's largest industrial complexes south of Cairo.

The settlement is situated almost on the main paved road, starting from Cairo down town to Helwan just behind the police office of El Messanee 33.6 miles south of the capital and 6.4 miles south of Helwan. An agricultural lodgement serving the nearby settlements and covering approximately 500 square meters, separates the settlement from the main road.

Arab Ghoneim is bordered on the North by "Ezbet El Walda" and the railway, on the south by Sharea "Omar Abdel Aziz" and the new railway, on the East by a land belonging to Mier Helwan Textile industry and Helwan public houses and on the west by sharea "Shark El Teraa," which borders the Khashaby canal.

The name of "Arab Ghoneim" derived from the name of the biggest Arab family of "Ahmed Ghoneim", who was among the first settlers 50 years ago. The original inhabitants of the settlement were Arabs coming from Sharkeya governorate who settled on the land occupied now by Helwan cement factory. When the governorate planned to build the factory they were asked to leave the land and to remove to the actual site. The officials convinced the Arab big families to move, and agree to give the new settlement the name of the biggest Arab family. Arabs were followed by rural Egyptian villagers coming chiefly from the governorates of upper Egypt: Sohag, El Minieh, Assiout, Beni Sweif, and El Gizeh, and the governorate of Sharkeya.

There are three popular associations formed by the settlers offering their help and aid to settlers affiliated to them, because of their place of origin, in emergency cases like marriage and death, such as: the association of the sons of upper Egypt. The association of the sons of Guizeh governorate - the Association of the sons of Sharkeys governorate.

2- Population

We can't be very precise about the population size of Arab Ghoneim. We can roughly estimate it to be between 30,000 and 50,000 inhabitants.

The settlement has a shape of almost a rectangular with 3.2 miles long and 0.8 miles wide. It covers nearly one square kilometers of land. Population density can be roughly estimate to be 126 persons per Faddan or 300 persons per hectare.

3- The physical aspect:

The physical aspect of the settlement is one of an urban village where traditional rural type of dwellings are combined with relatively modern architecture standards in new constructed house.

Many traditional houses have been renovated or are in their way to be ameliorated.

Nevertheless, traditional type of dwellings remains predominant with more utilization of modernised building materials: walls are mainly constructed of red bricks or

stone; roofs are made of joint pertinand board, and floors are made of cement and tiles.

Houses are aligned around long narrow irregular unpaved streets varying from 4 to 10 meters large. Only two of which are officially named: Sharea El Ezba El Sherkeys, or Sharea El Waste, which divides the settlement in two parts; and sharea El Tereh El Sherkeys which costs along the canal. Only these two streets are about 10 meters large.

There are four types of circulatory space:

- 1- The main paved road linking the settlement to Helwan and Cairo.
- 2- The main service road "El Waste", which also serves as the central social commercial area, provides access to narrow lanes which connect one housing group to another.
- 3- The border road longing the canal, which provides access to narrow lanes from the east.
- 4- Small cul-de-sacs

The absence of a sewage system, a permanent waste disposal and running water, make the physical aspect of the settlement similar to our rural Egypt.

Some traditional houses still have dust floors. Some have two stories and very few have more. Most of houses are now electrically lighted and have indoor watertap. Few of them have a kitchen and a bathroom.

The settlement contains seven public water taps; three in "sharea el teras el sharkeya" and four in "sharea el wasta".

Rural courtyard is found in almost every house; its dimension varies from 10 to 16 square meters, depending on the size of the house itself which varies between 40 to 100 square meters. The courtyard serves many functions: as a place of cooking in the summer, as a place for washing and lengthen clothes and as a place for breeding poultry.

Due to the relatively crowded housing conditions, some inhabitants with sufficient capital construct new dwellings for their own use or for rental purposes. Families with limited financial resources construct their units gradually in several stages according to priorities.

New houses constitute Arab Ghoneim El Bahareya or the northern Arab Ghoneim which is a new section of the settlement. Houses in that area are constructed either of bricks or of reinforced concrete. They are provided with electricity, indoor bathroom and kitchen; bedrooms are furnished with relatively modern furniture (a whole bedroom), and a special room (sitting room) is well furnished and reserved to accommodate visitors especially male guests.

In spite of the fact that the big majority of settlers are owners (Hikr system), some of them rent parts of their houses (rooms or apartments) to new arrivals or to new married couples as a mean of investment. The monthly rent

for the housing unit ranges between 2 and 5 L.E. depending if it is a room or an apartment with internal facilities or no.

4- Urban contact:

Arab Ghonaim is at 6.4 miles from Helwan. The settlement is connected to Cairo by the railway of Helwan, and a bus line starting down town the capital and ending in Helwan passing by Meadi* and the settlement. Taxis are also available from down town to Helwan on the main paved road running along the River Nile.

The Nile is at 3.5 miles west the settlement and could be a mean of transportation to villages and towns of Guizeh governorate - first governorate in upper Egypt neighbouring the capital - if there is a regular fairy boat (Meadiya) between the eastern and western bank of the Nile.

Arab Ghonaim is under the direct jurisdiction of the sub-administrative district (kism) of Helwan, which is in charge of the southern part of Cairo governorate.

Settlers of Arab Ghonaim conduct most of their affairs and business in Helwan, and are in daily direct contact with city life.

Security is maintained by the official police station of El Maassara - at the border line of the settlement - a committee of disputes from the inhabitants, and a formal delegate from the army to control the enlisting in the military service.

* Meadi: The second big city south of the capital.

5- Settlement economy:

The people in Arab Ghoneim are largely dependant upon the industrial work for their livelihood. 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 readily available. A narrow fraction of the population is engaged in agricultural work in nearby surrounded agricultural area.

Settlement economy stands on three principal activities: Industrial and building sector (90%), trade 9%, and agriculture Arab Ghoneim is surrounded by seven important factories located in a radius of 8 miles: The Helwan cement factory, the military and munition complex, the Nasr automotive and tractor industry, the Selke River boat company, the Ceemaf Railway wagons industry, the Coke and Chemical gas company, the Misr Helwan Textile Industry.

Trade is performed through many shops especially carpenteries workshops (6) which sell domestic furniture, saw shop (1), tiles workshop (1), a cement deposit, a carpet shop, and several shops for selling popular tissue. There are almost 50 groceries in Arab Ghoneim selling almost everything, 6 butchers 10 barbers, 15 tailors, 2 ironers, 10 popular restaurants selling popular meals, one coffee-house.

A daily vegetables souk named "El Khadra" stands in shorea el Westa till noon, and attracts settlers from the surrounding settlements.

6- Services available:

Arab Ghoneim as an uncontrolled settlement, is deprived of governmental services, Water disposal and sewage system are not available. There are no schools, neither primary nor preparatory. The only informal educational services are provided by two kuttabs which are supported by the settlers, Children are taught to read and write, receive religious education, and learn the Koran before going to the public schools. The nearest schools are in the public housing area of Helwan at 3 miles in Ezbet El Walde 6.4 miles, or in the city of Helwan at 6.4 miles.

There are no public medical services but there are private clinics. Registration of birth and death, and vaccination are done in Helwan or in the health unit of the public housing. The nearest public hospital is in Helwan.

Entertainments are missing. There is no public tele- phone in the settlement, one of the families have a private telephone which can be used by inhabitants in emergency cases.

There is no mailing post. The inhabitants mail is deposited in the police office nearby, and one of the settlers (Abdou Ahmed) distributes it to the inhabitants on a voluntary basis.

Nevertheless, there are four mosques build by settlers and named by their names: "Mehmoud Hamed", "Ahmad Ghoneim", "Mohamed Abou Eid", Salame Hoeni El Gazar". Services in these mosques are provided by sheiks who are volunteers.

Abdel Latif Daman, one of the settlers, begins to build a school for teaching Koran, to children from 5 to 12 years old.

Garbage is gathered by four "Zabal"(collectors). They work in a small section of the settlement, and families who are not released from their garbage are obliged to use the canal for dumping human waste and garbage.

Five places (diwan) belonging to the wealthier settlement families (Hamed, El Deli, Abou Diab, Ghoneim) are dedicated to marriage, funeral ceremonies, and reconciliations in case of conflicts or problems between settlers.

A cemetery is situated at the south of the settlement. Three popular associations are constituted in Arab Ghoneim.

7- Urgent needs and demands:

The most popular leader in Arab Ghoneim is "Hafez Hamed". He is 50 years old and acts as a "Sheikh Balad". He resolves inhabitants' problems. He works actually as chief of skilled labourers in the textile factory.

"Mohamed Atteya is very popular too. He was member in the Egyptian popular assembly, and is working now in the Near Textile Company.

By interviewing both of them, they expressed the worry of the settlers about their tenure situation. They, heard through a radio programme that their settlement is situated in the area belonging to Helwan university, and they are frightened that one day or another they will be obliged to remove.

The study team tried to calm and tranquillise them by assuring that the settlement has already been chosen as one of the five areas surrounding Helwan in which upgrading programme will be executed.

The most urgent services needed by the settlers seem to be the provision of a sewage system, and running water, the paving of the main streets, and the filling up of the canal. A multi-purpose center is also needed where medical, educational, economic, recreative and training services could be provided.

The informal leaders certify that the settlers are ready to contribute in all the upgrading programmes aiming to ameliorate the socio-economic situation of the settlement, and the settlers by offering their work and 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 Arab Ghoneim (250) are headed by 239 householders male (95.6%), and 11 householders female (4.4%).

The mean age of the householders is 42.4 year with a standard deviation of 12.7 while the mean age of their wives is 35.1 year with a standard deviation of 11. while 26.4% (66) of householders are below thirty five years, 20% (50) of them are over fifty five.

The majority of householders are married (92.4%), 3% of which have two wives, 5.2% (13) are divorced or widows, and only 2.4% (6) are single. The mean years of marriage is 19.1 year with a standard deviation of 9.316. Only 9.5% (22) of married householders are newly married couples.

Illiteracy spreads between householders and their wives, 80.4% (201) of householders, and 98% (234) of their wives have not even a primary certificate. Although, 39.3% (79) of householders and 2.9% (7) of wives can read and write.

Householders who hold a public certificate reach no more than 17.6% (44), 30 of them hold a primary certificate, 8 a preparatory certificate and 6 a secondary certificate.

Only 0.8% (2) of householders hold a university degree or an equivalent 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 92.4% (231) of householders fall in the first one, and that 5.6% (14) fall in the second one, and only 0.8% (2) fall in the third stage.

In term of education we have an homogenous group. Householders are mainly from rural origin, 73.2% (183). The remainders are native born in Arab Ghoneim 12.8% (32), or in urban cities of the delta or upper Egypt 11.2% (28), or in Cairo 2.8% (7).

The non-native householders originally settled in Arab Ghoneim near the emerged city of Helwan, hoping to find work in the surrounding areas (28.5%) 62, or settled there because they already worked in the area and wanted to move near their work 53.2% (116), or because of the housing crisis which induced them to live in the periphery of the capital 8.7% (19), or because of other reasons like migration with the family 6.9% (15), or marriage and their desire to be independent 2.7% (6).*

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

* For more details see Table (1) and (2).

Arab Ghonein is an urban settlement. Only 5% of its inhabitants are engaged in agricultural occupation, while the remainder are engaged in the secondary and tertiary sectors.

The proportion of householders engaged in the industrial sector reaches 59.2% (148), 56.1% (83) of them are skilled workers, while the remainder are unskilled workers. 4.4% (11) of householders are employees in the government, 6.8% (17) are in the service, and only 3.8% (8) are in business or trade, 3.2% (8), are artisans, 3.6% (9) are self-employed in private shops, 3.2% (8) are daily labourers without permanent job, 2.4% (6) work in the army, and 6% (15) are retired. It was noticed that 38.6% of tenants versus 31.1% of owners are skilled workers and that settlers engaged in the primary sector (Agriculture) are all owners.

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 15.3 year with a standard deviation 8.805. Householders female are mainly out of the labor force (9 out of 11), only two of householders wives are working, one as skilled labourer and the other as employee.

51.2% (128) of householders work actually in nearby factories and companies at less than eight miles from the settlement 19.6% (49) work for the government either in Cairo or in Helwan. The remainder work in Helwan or in the settlement in private shops or as labourers in shops or in workshops, while 34.8% (87) of householders go to

work on foot, 14.8% (37) depend in going to work upon factory and company bus. 13.2% (33) 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 Ezbat Arab Ghoneim as many of our rural villages or even urban towns and cities. The percentage of children below the school age (6 years) reaches 31% (276) of the children in families interviewed. 27.3% (243) of children are aged between 6 and 12 years, 23.5% (210) between 12 and 18 years, and 18.22 have more than 18 years old, averaging a mean age of 11.1 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 28.4% (165) of children in the age of schooling are illiterate (71 boys for 94 girls), the remainders have obtained an education certificate or are still in school (317). 55.1% (321) of children hold a primary certificate or less (213 boys for 108 girls). 14.6; (85) hold a preparatory or secondary certificate (63 boys for 22 girls), and 1.9% (11) hold a university degree or an equivalent certificate (8 boys for 3 girls).

* For more details see table (3).

As we see, 8 boys and 3 girls have obtained a university degree and a substantial percentage of children (35.5%) are still attending schools and faculties.

Only 16% (88) of boys were working at the time of the study. They are mainly engaged in industrial work as skilled labourers (29), unskilled labourers (18), in private shops as self employed (12), in the government as employees (10), in the army (19), and in the settlement as labourers in minor jobs. Sons go to their work mainly on foot (67.3%). The remainder depend in going to work on factory bus (12.2%), or rely upon public transportation private bicycle, or taxis.*

4- Families characteristics:

a- Despite the fact that the original settlers of Arab Ghoneim 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 10% (25) 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.

4.4% (11) 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 (85.6%), who acts as a socio-economic independent unit, and is constituted by one generation: householder and spouse, single householder with friends; or by two generations: householder 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: 59.6% (149) of families count more than 6 persons each, 32.8% (82) count between 3 and 6 persons each, and only 7.6% (19) of families count less than 3 persons each; averaging 6.2 persons per family with a standard deviation of 2.216.

It was found that there is a significant relationship between the tenure status and the number of persons per family ($\chi^2 = 31.647$ 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)

B A	-3	3-	6-	+9	Total
Owner	8	47	80	45	180
tenant	11	35	20	4	70
Total	19	82	100	49	250

c- The mean monthly income of householders was found to be in the order of 32.6 L.E with a standard deviation of 17.065. 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 41 L.E/month with a standard deviation of 21.60. While 29.8% (72) of families have a total monthly family income of more than 50 L.E, 30.4% (76) have a total family income between 30 and 50 and the remainders 40.8% (102) have a total family income between 10 and 30 L.E /month.

The per capite monthly income was found to be in the order of 8.79 L.E with a standard deviation of 8.032.

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, 50.4% (51) 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 (19.6%) have adopted the new ways of cooking by purchasing a range butagaz. 4% of families have a refrigerator, and 3.2% have a washing-machine.

Some few families own a radio, a television set and a recorder at the same time. Others have a washing-machine, a range butagaz, and a refrigerator.

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 3,36 with a standard deviation of 1.533. Only 5.7% of renters pay more than 30% of their income as rent; 67.1% pay between 10% and 3%, and 24.2% 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 A(L.E)	-10%	10%-	20%-	+30%	N/A	Total
30	5	25	14	4	54	102
30-	10	8			102	120
+70	4				24	28
Total	19	33	14	4	180	250

$r = -0.54$

22

2- The average monthly expenditure paid by families on electricity is 175.6 piastres with a standard deviation of 70.04%. Only 10.5% of the householders pay more than 9% of their income on electricity; 41.3% of the householders pay from 5 to 9% and 48.2% pay less than 5% 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 electricity (B).

B	1%-	3%-	5%-	7%-	+9%	Nothing	Total
A(L.E.)							
30	4	15	19	10	12	42	102
30-	7	39	23	16	6	29	120
+70	9	9	3			7	28
Total	20	63	45	26	18	78	250

$r = -0.44$

23

On the other hand the data showed that there is a significant relationship between the number of persons per family and the monthly expenditure paid on electricity: ($\chi^2 = 37.10$ significant beyond 0.05), as it is showed in the following table.

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

A \ B	-50 piastres	50-	100-	150-	200-	+250	None	Total
1			1				2	3
2		1	2	1	1	3	8	16
3	1	6	6		1	1	6	21
4	.	1	6	2	6	2	18	36
5		3	10	1	2	3	16	35
6	1	4	6	3	6	7	11	38
7		1	14	4	4	6	11	40
8			6	1	7	3	5	22
+9		2	10	5	11	10	11	49
Total	3	18	61	17	38	35	78	250

3- The average monthly expenditure paid by families on water is 150 piastres with a standard deviation of 69.46, 28.3% of the householders pay more than 5% of their income on water 26.4% pay between 3 and 5% and 45.3% pay less than 3% of their income on water.

There is a significant relationship between the number of person per family and the monthly expenditure on water ($\chi^2 = 6.35$ significant beyond 0.005) as it is shown in the following table.

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

B	-50pt.	50-	100-	150-	200-	+250	N/A	Total
A								
1						1	2	3
2		1	1		1		13	16
3			3	1			17	21
4	2	3	1				20	26
5			2		2	1	30	35
6	1	1	1	2		2	31	38
+7		2	13	4	2	3	87	111
Total	3	7	21	7	5	7	200	250

25

4- The average monthly expenditure paid by families for flushing is 139.1 piasters with a standard deviation of 92.476.

Only 15.1% of the householders pay more than 9% of their income on flushing. 19.4% pay between 5% and 9% and 65.5% pay less than 5% of their income on flushing.

There is a significant relationship between the number of person per family and the monthly expenditure on flushing; ($\chi^2 = 17.65$ significant beyond 0.005), as it is shown in the following table.

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

B	-50pt.	50-	100-	150-	200-	+250	N/A.	Total
A								
1					1		2	3
2	2	2				3	9	16
3	3	2	4	1		2	9	21
4	3	1	7		2	3	10	26
5	6	6	3	1		6	13	35
6	4	5	7	2	1	5	14	38
7	7	4	4	3	2	8	12	40
8	2	5	4			2	9	22
9	5	8	6	1	5	8	16	49
Total	32	33	35	8	11	37	94	250

5- The average monthly expenditure paid by families on transportation is 2.70 L.E with a standard deviation of 4,976.

Only 11.4% of the householders pay more than 3.5% of their income on transportation; 20.8% pay between 2.5% and 3.5%; and 67.8% pay less than 2.50% of their income on transportation.

- The average monthly expenditure paid by families on food is 31.9 L.E with a standard deviation of 16.7. There is a significant relationship between the number of persons per family and the monthly expenditure of families on food; ($\chi^2 = 19.29$ significant beyond 0.005).

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

B \ A	-10	10-	20-	30-	40-	50-	60-	70-	+80	Total
1		1		2						3
2	2	6	4	1	1	2				16
3	2	10	3	6						21
4		7	7	5	7					26
5		12	10	9	3	1				35
6		11	10	7	5		3	1	1	38
7		8	8	14	5	3	1		1	40
8		7	3	6	3	3				22
9	1	4	8	15	7	5	2	3	4	49
Total	5	66	53	65	31	14	6	4	6	250

While only 1.6% of families pay less than 30% of their income on food, 43.6% pay more than 80% of their income on food. 7.2% pay between 30 and 50%, and 39.6% pay between 50 and 80%. 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).

B	-30%	30-	40-	50-	60-	70-	+80	Total
A								
-30		2	5	7	14	15	59	102
30-	1	6	12	14	21	21	45	120
+70	3	11	2	2	3	2	5	28
Total	4	19	19	23	38	38	109	250

$$r = -0.472$$

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

- 10% of income on rent.
- 4% of income on electricity.
- 1% of income on water.
- 2.8% of income on flushing
- 1.1% of income on transportation

By local standards, Arab Ghoneim 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. 49.2% 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

1- Sex	N.	%
Male	239	95.6
Female	11	4.4
Total	250	100.0
2- Age		
- 25 years	8	3.2
25-	58	23.2
35-	69	27.5
45-	65	26.0
+55 years	50	20.0
3- Marital Status		
never married	6	2.4
Married (one wife)	224	89.6
Married (two wives)	7	2.8
Divorced/widow	13	5.2
4- Number of years being married		
- 5 years	22	9.5
5-	67	29.0
15-	72	31.2
+25	70	30.3
N./A.	19	
5- Education		
Illiterate	122	48.8
Read and write	79	31.6
Primary certificate	30	12.0
Preparatory certificate	8	3.2
Secondary certificate	6	2.4
University degree/equivalent	2	0.8
N.K.	3	1.2

6- Origin	N	%
City residents	28	11.2
Village residents	183	73.2
Arab Ghoneim	32	12.8
N/A (Born in Cairo)	7	2.8

7- Reasons for moving to the settlement

Near work	116	53.2
Migration to find work	62	28.5
Housing crisis	19	8.7
Migration with the family	15	6.9
Marriage and independence	6	2.7
N./A.(Birth place)	32	

Table (2)

Wives Characteristics

	N	%
1- Age		
- 20 years	16	6.6
20-	77	21.8
30-	72	29.8
40-	51	20.1
+50	26	10.7
2- Education		
Illiterate	220	91
Read and write	17	7
Primary certificate	2	0.8
Preparatory certificate	3	1.2
Secondary certificate	-	-
3- Occupation		
House wife	240	99.2
Skilled labourer	1	0.4
Employee	1	0.4

Table (3)

Occupation background of householders

	N	%
1- Previous job (if any)		
No	211	
Agricultural labourer	11	28.2
Unskilled labourer	7	18
Skilled labourer	5	12.8
Artisan	1	2.5
Self employed	3	7.7
Employee	5	12.8
Tradesmen	2	5.1
Service labourer	4	10.9
Military	1	2
2- Reasons for living previous job		
present job best	31	79.4
Illness or retirement	6	15.4
Other	2	5.2
N./A.	211	
3- Present occupation		
skilled labourer	83	33.2
unskilled labourer	65	26
Agriculture labourer	11	4.4
Service labourer	17	6.8
Employee	11	4.4
Artisan	8	3.2
Self employed	9	3.6
Tradesmen	8	3.2
Military	8	2.4
Domestic work	8	3.2
Don't work (Householder female)	9	3.6
Retired	15	6

4- Place of present work	N	%
Factory	54	24.7
Private workshop	1	0.4
Workshop labourer	4	1.8
Private shop	18	8.3
Shop labourer	6	2.8
Government	49	22.5
Army or police	6	2.8
Company	74	33.9
Agriculture land	6	2.8
N./A.(retired/householder female/ and dolly worker?)	32	

5- Number of working years	N	%
< 5 years	39	16.6
5-	36	15.3
10-	37	15.7
15-	50	21.3
+20	73	31.1
N./A.	15	

6- Distance Home/work	N	%
< 5 km	122	64.5
5-	37	19.6
10-	16	8.5
15-	4	2.1
+20 km	10	5.3
N./A.(working in the settlement)	61	

7- Means of transportation to work	N	%
On foot	87	46
Factory/company bus	37	19.6
Public transportation	27	14.3
Bicycle	18	9.5
Trein	6	3.2

	N.	%
Taxi	4	2.1
Two means	7	3.7
More than two means	3	1.5
N./A.	61	

8- Time spent to go to work

< 1/2 hour	95	50.3
1/2 -	59	31.2
1-	24	12.7
+1 1/2	11	5.8
N./A.	61	

9- Monthly income

< 20 L.E	62	24.8
20-	122	48.8
40-	48	19.2
+60 L.E	18	7.2

Table (4)
Children Characteristics

1- Sex		N.	%	
Male		521	58.4	
Female		371	41.6	
Total		892	100	
2- Age		Male	Female	
		Total	%	
6 years	146	130	276	31.0
6-	130	113	243	27.3
12-	120	90	210	23.5
+18	125	38	163	18.2
3- Education				
Illiterate	71	94	165	
Read and write	148	99	247	
Primary certificate	65	9	74	
Preparatory certificate	36	16	52	
Secondary certificate	27	6	33	
University certificate/ equivalent	8	3	11	
N./A.(Younger than School age)	166	144	310	
4- Occupation		N.	%	
- Unemployed		(794)		
Student		317	39.9	
Dont work		146	18.4	
Under the work age		276	34.7	
Girls at home		55	6.9	
- Employed		(98)		
Government employee		10	10.2	
Skilled labourer		29	29.6	
Military		19	19.4	
Self employed		12	12.2	
Unskilled labourer		18	18.4	

	N.	%
Other	10	10.2
Total	(892)	
5- Distance Home/work		
< 5 km	43	43.9
5-	8	8.2
10-	8	8.2
15-	2	2
+20 km	6	6.1
Work in the settlement	31	31.6
N./A.	794	
6- Means of transportation to work		
On foot	66	67.3
Factory bus	12	12.2
Public transportation	13	13.3
Bicycle	3	3.1
Train	3	3.1
Taxi	1	1
N./A.	794	
7- Monthly income		
< 10 L.E	34	34.7
10-	50	51
+20	11	11.2
N./K.	3	3.1
N./A.	794	

Table (5)
Families Characteristics

	N.	%
1- Type of family		
nuclear	214	85.6
extended	25	10
joint-family	11	4.4
2- Constitution of families		
Householder, spouse, children	149	59.6
Householder, spouse, children, relatives	36	14.4
Householder, spouse	12	4.6
Widow householder, children	11	4.4
Single householders, friends/relatives	6	2.4
Householder, spouse, married and unmarried children	20	8
Widow householder, married and unmarried children, relatives	5	2
Two families	11	4.4
3- Number of children/household		
None	27	11.8
3 Children	46	18.4
3-	104	41.6
6-	56	22.4
+9	17	6.8
4- Number of persons/family		
- 3 persons	19	7.6
3-	82	32.8
6-	100	40
+9	49	19.6
5- Total family income		
10- L.E	102	40.8
30-	76	30.4

	N.	%
50-	44	17.6
70-	14	5.6
+90	14	5.6

6- Per capita monthly income

< 5 L.E	84	33.6
5-	134	53.6
15-	7	2.8
+25	22	8.8
N./K.	3	1.2

7- Ownership consumer durables

Radio	107	42.8
Television	4	1.6
Radio, Television	47	18.8
Radio, television, recorder	15	6
Butagez	39	15.6
Butagez, refrigerator	4	1.6
Washing machine	2	0.8
Washing machine, butagez, refrigerator	6	2.4
Bicycle	26	10.4

8- Monthly expense of families on some variants relevant to housing.

a- Rent

< 1 L.E	1	1.4
1-	33	47.1
3A	25	35.7
5-	9	12.9
+7	2	2.9
N./A.	180	

b- Electricity

< 1 L.E	21	12.2
1-	78	45.8
+2	73	42.4
N./A.	78	

c- Water

<1 L.E	10	20
1-	28	56
+2	12	24
N./A.	200	

d- Flushing

<1 L.E	65	41.7
1-	43	27.5
+2	48	30.8
N./A.	94	

e- Transportation

<1 L.E.	27	18.4
1-	74	50.3
3-	33	22.4
+5	13	8.9
N./A.	103	

f- Food

< 10 L.E	5	?
10-	119	47.6
30-	96	38.4
50-	20	8
+70	10	4

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 individuals 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 "Arab Ghoneim" which are the material elements of the dwellings, as much

42

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 30,000 inhabitants on an area of one square kilometer.

This high concentration is achieved using, mainly single storey dwellings (78%), or two stories buildings (15.2%), organised in such a way that no open spaces have been retained adjoining the housing areas. Only 2.8% 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% (180), of houses are owner-occupied while 28% (70) are renter occupied. 70% of owners hold the plot on a formal hkr Lease. The remainders (2%) occupy the plot with others as a joint property. While some householders claim to have paid for hkr 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 ($\chi^2 = 29.675$ which is significant beyond 0.05) as it is shown in the following table:

43

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

B	Owner	tenant	total
A			
-30	40	19	59
30-	70	8	78
+70	10	3	13
Total	120	30	150

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 80 and 100 square meters averaging 75 square meters.

Buildings or houses are divided into independent apartments or rooms. The former is predominant; 50% (75) or houses are divided into independent rooms, mainly occupied by sons or close relatives, 34.7% (26) of which are rented. Households are sheltered together but are acting as independent economic units. The average number of independent rooms in the houses visited is 3.526 rooms with a standard deviation of 1.275.

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 a private independent rooms. ($\chi^2 = 18.14$ 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	53	41	1	95
2	32	7	3	42
3	20	4	1	25
4	22		5	27
5	11	4	4	19
6	9			9
+7	20	2	11	33
Total	167	58	25	250

33.2% (83) of houses are divided into apartments or dwellings. 12% (10) of which are rented to new comers; 50.7% (42) of these houses are divided into apartment exclusively occupied by the families which owned them; while 49.3% (41) are shared between members of the owing family and their tenants. The average number of apartments in houses is 2.25 apartments with a standard deviation of 1.290.

The monthly rent of the housing unit in general, either if it is a room or an apartment, ranges between 2 and 5 L.E depending on the facilities available in each and if it is shared or private.

45

Some few owners (1%) rent shops in the ground floor of their houses at an average monthly rent of 7 L.E.

While 38% (95) of houses are occupied by only one household, 26.8% (67) are occupied by between 2 and 4 households, 18.4% (46) by between 4 and 6, and 16.8% (42) by more than 6 households.

The average number of households in the houses visited reaches 3.756 households with a standard deviation of 1.228.

- Building materials:

Three kinds of building materials prevailed: mud brick (8.4%) red brick (48.4%), and stone (19.6%). The remainder houses (23.6%) represent a combination of these building materials.

Materials used for the roofs range from palm trunks and reed (4.8%), to concrete (17.2%). The majority (78%) used a combination of joint and pertinend board, joint board and reed, joint board and asbestos.

Floors are mainly in cement (38.3%) or in tiles (36.8%), or a combination of both materials (5.6%). Floors of only 18.8% of houses are in earth.

Only 13.9% (25) of houses had been bought by the present owners, while 11.7% (21) had been inherited.

74.4% (134) of householders visited have built their houses. Only 1.5% (2) of them have built it in one stage, while the remainders (98.5%) have built their houses in two or four stages over a maximum period of 20 years. Each stage had added rooms to the house either horizontally or vertically.

The different building operations was carried out by a local bricklayer (84.3%), or by the members of the family itself (12.7%), Only 3% of families have delegated a contractor to carry out all the building and construction procedures.

It was found that there is a significant 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 ($\chi^2 = 24.11$ significant beyond 0.05) 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		27	5	70	102
30-	1	74	10	35	120
+70	3	12	2	11	28
Total	4	113	17	116	250

44.8% (59) of families financed the different stages of the building works from the family's own savings. 39% (53) financed partly the building works, and borrowed the remain money needed mainly from relatives and friends (57.3%), or by entering into a gameya (18.8). 16.2% (22) of householders with no savings at all have borrowed all the money needed for the building procedure. Only 10 of owners who have built their houses relied upon a credit from their work (9), or a credit from the bank (1).

2- The dwelling unit:

The dwelling is defined as the independent room or apartment, or house rented or owned by a socio-economic independent unit. Householders occupying the dwelling visited in the study, are not from the first generation which immigrated to the settlement. 19.6% (43) of them have been in their present dwellings for less than 5 years. 49.6% (124) have lived in their present dwellings for 15 years and more. The average years spent in the present dwellings is 15.221 year with a standard deviation of 9.690.

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* 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 No.2 May 1961 - P. 128.

1 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 3.144 rooms with a standard deviation of 1.617 while 19.2% (48) of dwellings count one room, 48.8% (122) count three rooms and more. It was noticed that some dwellings (7 owners) count more than 8 rooms each

The following patterns of internal densities emerged:

Number of rooms	Person/room (crowding rate)	Average number of person per household
1	4.7	4.7
2	2.8	5.4
3	1.8	5.3
4	1.5	5.9
5	1.4	7.2
6	0.9	5.2

Several conclusions could be done 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 a reverse relationship between the total family income (A) and the number of person/room (crowding rate) the more the total family income the less the number of person/room ($r = -0.12$) 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).

	B	-1	1-	3-	+5	Total
A						
30 L.E	8	41	36	17		102
30-	7	74	32	7		120
+70		20	6	2		28
Total	15	135	74	26		250

If we consider that overcrowding exists when there is more than two persons/room, then 62.8% (157) of dwellings are overcrowded; 31.9% (50) of which count more than 4 persons/room.

The average crowding rate in the dwellings visited is 2.86 persons/room, with a standard deviation of 1.617. The data shows that there is a positive 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 rooms 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

B	1	2	+3	Total
A				
-30	32	38	32	102
30-	12	36	72	120
+70	4	6	18	28
Total	48	80	122	250

(r = 0.389)

Since the internal density of dwellings had shown that the more numerous the rooms, the lower the crowding rate; and the figures above had shown that the more the family income, the more numerous the rooms households can built or rent, we can reach a conclusion 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 (χ^2 : 77.844 significant beyond 0.05 and 0.01) as indicated in the following table:

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

	0	1	2	3	4	+5	Total
A							
Owner		15	50	53	37	25	180
tenant		33	30	7			70
Total		48	80	60	37	25	250

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 (78.4%) 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 (7 taps in the settlement) was found to be 241.3 meters, with a standard deviation of 188.106.

76.4% (191) 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 (15.2%), through having a

53

Kitchen (23.6%), and having a private water-closet (70%) or a shared water closet (26.4%). The dwellings provided by all these facilities reach 12% 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	55	4	59
	No	123	66	189
	Shared	2		2
Bathroom	Yes	38		38
	No	140	67	207
	Shared	2	3	5
Water Closet	Yes	151	24	175
	No	7	2	9
	Shared	22	44	66
Water	Running water	44	10	54
	Private or public tap.	136	60	196
Electricity	Yes	145	46	191
	No	35	24	59
TOTAL		180	70	250

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, Bathroom, water closet) and the tenure status*.

* Kitchen $\chi^2 = 18.455$ significant beyond 0.05 and 0.01
 Bathroom $\chi^2 = 22.421$ significant beyond 0.05 and 0.01
 Water closet $\chi^2 = 69.854$ significant beyond 0.05 and 0.01

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.

93.2% of settlers who have a kitchen are owners
all owners have a private Bathroom.

86.2% Of settlers who have a water closet are
owners.

81.5% of settler who connected their house with
running water are owners.

75.9% 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.

		30 L.E	30-	+70	Total
Kitchen	Yes	13	31	15	59
	No	88	88	13	189
	Shared	1	1		2
Bathroom	Yes	7	18	13	38
	No	91	101	15	207
	Shared	4	1		5
Water closet	Yes	57	95	23	175
	No	5	4		9
	Shared	40	21	5	66
Water	Connected	12	17	15	54
	Public or private tap.	90	103	13	196
Electricity	Yes	63	105	23	191
	No	39	15	5	59
Total		102	120	28	250

It was found that there is a significant relationship between the availability of all amenities and the total family income.

$\chi^2 = 19.223$ significant beyond 0.05 and 0.01
~~Bathroom~~
 $\chi^2 = 32.644$ significant beyond 0.05 and 0.01
 Water closet $\chi^2 = 16.5129$ significant beyond 0.05 and 0.01
 water $\chi^2 = 26.954$ significant beyond 0.05 and 0.01
 electricity $\chi^2 = 20.894$ significant beyond 0.05 and 0.01

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 82.8% (207) of householders in our sample are satisfied while only 17.2% (43) are not, in spite the fact that the general standard of housing in "Arab Ghoneim" is low. Most houses have neither piped water nor a sewage system. The only bathroom or lavatory may be a rough shelter in a corner of the courtyard, 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 a significant relation between the attitude of householders towards housing conditions, and only certain households or householders characteristics such as family income and tenure status as it could be seen in the following tables.

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

B	Satisfied	Dissatisfied	Total
A			
30-L.E	77	25	102
30-	106	14	120
+70	24	4	28
Total	207	43	250

(χ^2 = 8.1 significant beyond 0.05)

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

B	Satisfied	Dissatisfied	Total
A			
- one	11	4	15
1-	67	11	78
2-	51	6	57
3-	42	8	50
+4	36	14	50
Total	207	43	250

($x^2 = 6.99$ not significant)

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

B	Satisfied	Dissatisfied	Total
A			
Illiterate	101	21	122
Read and Write	71	8	79
Primary Certificate	20	10	30
Preparatory "	6	2	8
Secondary "	4	2	6
University degree	2		2
N./K.	3		3
Total	207	43	250

58

Relation between Tenure status (A) and
Satisfaction from present housing condition
(B)

B A	Satisfied	Dissatisfied	Total
Owner	170	10	180
Tenant	37	33	70
Total	207	43	250

$\chi^2 = 126.835$ significant beyond 0.05)

As the table shows 52.9% of tenants are dissatisfied from their present housing conditions versus only 5.5% of owners.

When the field workers raised 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 17.2% (43) of householders had reported their feeling of dissatisfactions 25% 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 9.17% (19) 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 being 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 (52.4%).

The other sources of satisfaction are related to the location of the house which is near the work (20%), or being in a good social neighborhood (7.6%). The suitable rent of the dwelling unit has been reported by 8% of householders, while only 3.6% reported that living in the family house represents main reason of their satisfaction from their housing conditions. The largeness of the housing unit and its healthy condition were reported only by 3 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 63.2% (158), the smellness of the dwelling unit 8.2% (22), its bad building materials 5.6% (14), its unhealthy conditions 5.6% (14), and the deterioration of the house as a whole.

The other group concentrated on the location of the dwelling which is far from the means of transportation

2.8% (7), its location in a bad neighbourhood 1.2% (3), only 3.2% (8) 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 hypotheses 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 Arab Ghoneim 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.

Table (6)
Housing Conditions

a) <u>The building</u>	N.	%
1- Number of floors		
One	195	78
2	48	19.2
+3	7	2.8
2- Number of apartments		
One	42	50.7
2	10	12
3	5	6
4	5	6
5	8	9.6
6 and more	13	15.7
N./A.	167	
3- Number of rooms		
One	53	31.7
2	32	19.2
3	20	12
4	22	13.2
5	11	6.6
6	9	5.4
7	8	4.8
8	3	1.7
9 and more	9	5.4
N./A.	83	
4- Number of families		
One	95	38
2	42	16.8
3	25	10
4	27	10.8

613

	No.	%
5	19	7.6
6	9	3.6
7	12	4.8
8 and more	21	8.4

5- Building materials

Walls

Red bricks	121	48.4
Stone	49	19.6
Red brick and stone	35	14
Mud bricks	21	8.4
Mud bricks, red bricks	16	6.4
Mud brick, stone	4	1.6
Red bricks, stone, Mud bricks	2	0.8
Red bricks, reinforcement concrete	2	0.8

Roofs

Tin		
Palm trunk and reed	12	4.8
Joint board, Asbestos	8	3.2
Joint board, reed	32	12.8
Joint, pertinent board	152	60.8
Concrete	43	17.2
Joint and concrete	3	1.2

Floors

Earth	47	18.8
cement	97	38.8
tiles	92	36.8
tiles, cement	14	5.6
tiles, framed		
Framed		

<u>b) Tenure</u>	N.	%
6- Types of tenure		
Owner	175	70
Joint property	5	2
Renter	70	28
7- Number of rooms rented in the building		
One room	9	18.4
2-	23	47
4-	11	22.4
6-	55	10.2
+8		
N/A { Don't rent (Renters)		
8- Number of appartments rented (to owners only)		
One	4	40
2	3	30
3	2	20
+4	1	10
N/A (Don't rent (renters)	170 70	
9- Average rent of the housing unit (to owners only)		
< 2 L.E	27	45
2 -	30	50
+4	3	5
N./A.	190	
10- Other parts rented in the building (to owners only)		
None	170	94.5
Shop	10	5.5
N./A.(renters)	70	

11- Average rent of shop	N.	%
< 5 L.S	6	60.0
5-	2	20
+9	2	20
N./A.(renters)	240	

12- Ways of owning the building
(to owners only)

Built	134	74.4
Inherited	21	11.7
Bought	25	13.9
N./A.(renters)	70	

c) Ways of building

13- Building procedure

One stage	2	1.5
Several stages	132	98.5
N./A.	116	

14- Responsibility of the building
procedure

Bricklayer	113	84.3
Family	17	12.7
Contractor	4	3
N./A.	116	

15- Money needed for construction

Hed the money	59	44.8
Borrowed the money	22	16.2
Both	53	39
N./A.	116	

66

16- Sources of borrowing money	N.	%
Friends or relatives	43	57.3
Neighbors	14	18.8
Work	9	12
Bank	1	1.3
More than one source	8	10.6
N./A.	175	

d) The householder's dwelling

17- Number of years in present dwelling

< 5 years	49	19.6
5-	75	30
15-	77	30.8
+ 25 years	47	18.8
N./A.	2	0.8

18- Number of rooms

One room	48	19.2
2	80	32
3	60	24
4	37	14.8
+5	25	10

19- Number of persons/room (crowding rate)

< 1 person	15	6
1-	135	54
3-	74	29.6
5-	19	7.6
+7	7	2.8

20- Rent

< 1 L.E.	1	1.4
1-	33	47.1
3-	25	35.7
5-	9	12.9
+7	2	2.9
N./A.(owners)	180	

Utilities

	N.	%
21- Kitchen		
Yes	59	23.6
No	189	75.6
Shared	2	0.8
22- Bathroom		
Yes	38	15.2
No	207	82.8
Shared	5	2
23- Water-closet		
Yes	175	70
No	9	3.6
Shared	66	26.4
24- Type of flushing		
cesspool	24	
Trench	217	
N./A.	9	
25- Number of flushing/year		
Don't flush	28	11.2
< 1	37	14.8
1	72	28.8
2	37	14.8
3	11	4.4
4	17	6.8
+5	31	12.4
Don't know	17	6.8
26- Source of water		
Water connected	54	21.6
Public taps	196	78.4

27- Distance house/public tap

< 100 m	70	35.8
100-	31	15.8
200-	23	11.7
300-	23	11.7
400-	16	8.2
+500	33	16.8
N/A	34	

28- Reasons of not connecting water

Don't know How	79	40.3
very expensive	68	34.7
there are other priorities	5	2.6
owners responsibilities	44	22.4
N./A.	34	

29- Having electricity

Yes	191	76.4
No	59	23.6

30- Reasons of not introducing electricity

Very expensive	20	33.9
no sense	13	22
use a gaz lamp	4	6.8
owners responsibilities	18	30.5
Not necessary	4	6.8
N./A.	191	

Table (7)

Satisfaction of housing conditions

1- General satisfaction from housing conditions

Yes	207.	82.8
No	43	17.2

2- Important reasons of satisfaction

None	10	7.2
Ownership	131	52.4
Near work	50	20
Good neighbour-hood	19	7.6
Cheap	20	8
Family house	9	3.6
Large	2	0.8
Healthy	1	0.4

3- Important reasons of dissatisfaction

None	19	7.6
No facilities	158	63.2
Small	22	8.8
bad building materials	19	7.2
Not healthy	14	5.6
High rent	8	3.2
Far from transportation	7	2.8
Bad neighborhood	3	1.2
Likely to collapse	1	0.4

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 arrangements, 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 shows that these different activities are fulfilled in one or two rooms in 51.2% of dwellings visited.

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

Cooking	48.8% (122),
receiving visitors	68% (170).
washing clothes	27% (68).
lengthen clothes	15.2% (38).
breeding poultry	14.3% (36).
studying	83.4% (211).
Playing	14.8% (37).

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

cooking	20% (8).
washing clothes	25.2% (63).
lengthen clothes	33.2% (83).
breeding poultry	34.3% (86).

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

a. Cooking:

Kitchen	Courtyard	Hall	Passage	any room
25.2%	8%	11.2%	8.8%	48.8%

b. Washing clothes:

Bathroom	courtyard	the roof	kitchen	Hall	in front the house	any room
9.6%	25.2%	0.4%	3.2%	3.6%	2.8%	27.2%

c. Lengthen clothes:

Balcony	roof	Courtyard	Street	Any room
15.2	38.3%	33.2%	7.6%	15.2

73

d. Breeding poultry:

<u>Courtyard</u>	<u>Roof</u>	<u>Balcony</u>	<u>Kitchen</u>	<u>Any room</u>
34.3%	36.4%	0.7%	14.3%	14.3%

e. Places assigned to the study of children:

<u>Sitting room</u>	<u>Any room</u>
16.6%	83.4%

- 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 the 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 book 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 houses, 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 16.6% 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: one third of the dwellings visited has a rural courtyard; 92.4% (231) of families are getting their meals on a floor table; 77.6% (194) of families are using Primus, and 20.8% (52) are using a range buttegas for cooking, 56% (140) of families are breeding poultry. 78.4% (196) are relying for getting water on public taps. 76.4% (191) have electricity. 26.4% (66) have a television set, 4% (10) have a refrigerator, and 3.2% (8) 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 neighbours quite often; They don't need to visit their near neighbours, because they are together every one and then.

The current patterns of social relations suggest the following:-

- 1- Kinship relations (relatives) are 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 families 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 57.2% (143) 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 have experienced a high degree of residential stability since 49.6% (124) have lived 15 years and more in their present dwellings, 37.9% (47) of which have lived more than 25 years in the settlement. They thought about Arab Ghoneim 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.*

2- Values and aspirations

The research seeks to determine the social values of Arab Ghoneim 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:

* For more details see Table (8) and (9).

** These techniques have been used before in a research project done by the center: "The study of housing conditions in rural Qalqalyah governorate" - Dr. Sami Zaki and Noha Fomy - in National Review of Social Sciences - Special issue - Vol. VII No. 3 September 1965.

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.

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	50.8%
Living peacefully with wife and children	18.8%
Education of children	13.6%
Owning a decent dwelling	6.8%
Having money	4.8%
N./K.	5.2%

1- The above results show that health represents the most important variable for 50.8% 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 adequate dwelling didn't appear to have a primary importance. 6.8% 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:

"A. 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	31.6%
Educate children	25.2%
Make a pilgrimage to Mecca	12 %
Buy furniture for the house	11.2%
Make a project	7.2%
Buy clothes for children	4.4%
Buy a piece of land	1.2%
Others	7.2%

Build a new house and educate children represent the main important aspirations of 56.8% of settlers in our sample. Nevertheless, the above variables on aspirations

were ordered in 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	41	27	11	79
Educate children	25	26	12	63
Make a pilgrimage	17	6	7	30
Buy furniture	17	5	6	28
Make a project	8	4	6	18
Buy clothes	8	3		11
Buy a piece of land	2	1		3
Others	4	7	7	18
Total	122	79	49	250

The data shows that there is a significant relationship between the education status of Householders and their aspirations ($\chi^2 = 20.77$ significant beyond 0.05).

If we divide our sample in three income group: 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)

B A	<30 L.E.	30-	+70	Total
Build new house	37	35	7	79
Educate children	25	33	5	63
Make a pilgrimage	2	22	6	30
Buy furniture	13	13	2	28
Make a project	12	3	3	18
Buy clothes	8	1	2	11
Buy a piece of land		3		3
Others	5	10	3	18
Total	102	120	28	250

the data shows that there is a significant relationship between total family income of householders and their aspirations ($\chi^2 = 19.62$ significant beyond 0.05).

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

81

and achievement for the whole family, and the education of children, were cited as the two first priorities for 57% of our sample.

- 3- Make a pilgrimage to Mecca represents an individual aspiration of settlers. 12% (30) of the settlers, expressed their desire to make this sacred obligation if they obtain money. Two of them only are from the poorest group, 22 are from the middle income group and six are from the upper income group.*

- 4- Arab Ghonein settlers are opened to the urban city life, as 11.2% 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 46% of settlers wish to buy extra beds, and that 19.8% 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 34.8% a refrigerator 16% a sewing - machine 9.2% and a washing machine 5.6%. A television set was quoted by 12% of settlers, and once again 17.2% 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.

JK

Three domestic needs emerged in our sample: a range butagaz, furniture, and refrigerator 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	42	21	24	87
Furniture	27	13	3	43
Refrigerator	17	10	13	40
Television	14	13	3	30
Sewing-machine	11	9	3	23
Washing-machine	5	7	2	14
Ventilator	4	5		9
Recorder	2	1		3
Water-heater			1	1
Total	122	79	49	250

There is no significant relation between the educational status of householders and their aspiration concerning furniture ($\chi^2 = 4.78$)

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

The first group quoted their priorities as follows:-

Butagas	41	(40.3%)
Furniture	21	(20.6%)
Television	14	(13.7%)
Refrigerator	8	(7.8%)
Ventilator	6	(5.9%)
Sewing-machine	5	(4.9%)
Washing-machine	4	(3.9%)
Recorder	2	(2%)
Water-heater	1	(0.9%)
Total	102	(100%)

The second group quoted their priorities as follows:-

Butagas	37	(30.8%)
Refrigerator	23	(19.2%)
Furniture	20	(16.7%)
Television	16	(13.3%)
Sewing-machine	16	(13.3%)
Washing-machine	5	(4.2%)
Ventilator	3	(2.5%)
Total	120	(100%)

The third group quoted their priorities as follows:-

Butagas	9	(32.1%)
Refrigerator	9	(32.1%)
Washing-machine	5	(17.8%)
Furniture	2	(7.2%)
Sewing-machine	2	(7.2%)
Recorder	1	(3.6%)
Total	28	(100%)

A range butagez represents the urgent need of settlers in the three income-groups, and especially in the first group where 40.3% of settlers express their desire to buy one. This item has been followed by furniture, then television, in the first group; by a refrigerator then furniture in the second group; a refrigerator, then a washing-machine in the third group.*

* For more details see table 10.

Table (8)

Social habits related to housing

1-	Means of cooking	N.	%
	Primus	194	77.6
	Butagez	52	20.8
	Gas lamp	4	1.6
2-	Place of cooking		
	Any room	122	48.8
	The kitchen	58	23.2
	The hall	28	11.2
	The court-yard	20	8.0
	The passage	22	8.8
3-	Ways of getting meal		
	On the floor	9	3.6
	On a floor table	231	92.4
	On a table	10	4.0
4-	Places assigned for visitors		
	Any room	170	68.0
	Sitting room	73	29.2
	Living-room (hall)	7	2.8
5-	Places assigned for washing clothes		
	The hall	79	31.6
	Any room	68	27.2
	Court-yard	63	25.2
	Bathroom	24	9.6
	Kitchen	8	3.2
	In front of the house	7	2.8
	On the roof	1	0.4

6- Places assigned for lengthen clothes	N.	%
On the roof	97	38.8
The courtyard	83	33.2
Inside the house (any room)	38	15.2
Outside the house	19	7.6
The balcony	13	5.2
7- Places assigned for breeding poultry		
Dont't breed (N/A)	110	
Cage on the roof	51	36.4
Court-yard	48	34.3
Cage in the kitchen	20	14.3
Cage in a room	20	14.3
Cage in the balcony	1	0.7
8- Places assigned for throwing garbage		
Demolished area	61	24.4
The street	36	14.4
The canal	110	44.0
In front of the house	23	9.2
On the roof	6	2.4
In the mountain	14	5.6
Garbage man collects it.		
9- Places where children usually study		
Any room	131	83.4
Sitting-room	26	16.6
N./A.	93	
10- Places where children usually play		
Indoors	27	14.8
In front of the house	41	22.5
In the street	114	62.7
N./A.	68	

Table (9)
Social relationship

1- Persons visited in the settlement	N.	%
Don't visit any one (N/A)	40	
Relatives	73	34.8
Neighbors	18	8.6
Friends	13	6.2
Relatives and neighbors	42	20.0
Relatives and friends	13	6.2
Friends and neighbors	15	7.1
Relatives friends and neighbors	36	17.1
2- Occasions of visiting people in the settlement		
Death	179	85.2
Marriage	127	60.5
Feast	24	11.4
Birth	24	11.4
Sickness	49	23.3
N./A.	40	
3- Mutual aid happened between		
Relatives	32	12.8
Neighbors	11	4.4
Friends	2	0.8
Relatives and neighbors	32	12.8
Relatives and friends	11	4.4
Neighbors and friends	17	6.8
All	143	57.2
N./K.	2	0.8
4- Persons resolving conflicts between neighbors in the settlement		
Older people	115	46.0
Nobody interferes	47	18.8

	N.	%
Neighbors	30	12.0
Relatives	16	6.4
A friend to both sides	15	6.0
Police	4	1.6
No conflicts happen	23	9.2

Sources of borrowing if money is needed

Don't like to idea of borrowing (N/A)	52	
Neighbors	72	36.4
Relatives	61	30.8
From work	47	23.7
Gameya	18	9.1

Table (10)
Social values related to housing

	N.	%
1- Factors which contribute to individual happiness		
Health	127	50.0
Living peacefully with children	47	18.8
Education of children	34	13.6
Owning a decent dwelling	17	6.8
Having money	12	4.8
N./K.	13	5.2
2- Things which can be done if having money		
Make a project	18	7.2
Educate children	63	25.2
Buy a land	3	1.2
Pilgrimage to Mecca	30	12.0
Building a new house	79	31.6
Buy clothes for children	11	4.4
Buy furniture for the house	28	11.2
Others	18	7.2
3- Furniture which can be bought if having money		
Bed	116	46.0
Sitting-room	49	19.8
Wardrobe	25	10.0
Table	16	6.4
Sofa	10	4.0
Two chairs	10	4.0
Wood sofa	9	3.8
Cupboard	3	1.2
Others	12	4.8

4- Consumer durable which can be bought if having money	N.	%
Butagas	87	34.8
Furniture	43	17.2
Refrigerator	40	16.0
Television	30	12.0
Recorder	3	1.2
Water-heater	1	0.4
Sewing machine	23	9.2
Washing machine	14	5.6
Ventilator	9	3.6

91

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 these 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 Arab Ghoneim case study, the settlement is deprived from all kind of public services and utilities. Voluntary associations like "the sons of upper Egypt," "the sons of Guizeh governorate," "the sons of Sherkiyeh governorate," have a very narrow range of activity restricted to offering aid and help mainly in case of death, and occasionally in case of marriage.

I- 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 labor 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 piped-water supply was asked by 62.8% of settlers as priority number one, and the most urgent needs of the settlement. It was followed by a sewage system (34.4%) and by electricity (2.8%). 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	114	61	5	180
	Tenant	49	25	2	70
	Total	157	86	7	250

The majority of owners and tenants (63.3% versus 61.4%) gave their priority to the connection of running water to their settlement and consequently to their houses. A sewage system has been asked by both as priority No.2 it was followed by electricity.

2- The demand for a primary school was asked by 52% of settlers as priority number one in term of their basic social facilities needs. It was followed by a health unit (31.2%), a consumer cooperative (8.8%), and easy means of transportation to the outside world (4.8%).

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

95

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, etc..., 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 1 to 3 L.E. until they pay their due.

Concerning the house improvements, 78.8% (142) 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 (112) or a private contractor (16) 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.
- Interests of the government are usually high.
- Government realization is slow and bad.

97

The correlation between the number of person/room per family, and the willingness to make housing improvement is significant ($\chi^2 = 21.87$ significant beyond 0.05), as it is shown in the following table:

Correlation between the number of person/room per family (A), and the willingness to make housing improvement (B)..

B	Yes	No	N/A.	Total
A				
-1	11	3	1	14
1-	84	24	27	135
3-	38	8	28	74
5-	4	3	12	19
+7	5		2	7
Total	142	38	70	250

As for renters who can not by housing law make any reparations in their dwelling, they 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 to be paid or considere housing improvements as the responsibility of the owner.

2- Settlement facilities:

While housing improvements represent a household choice which reflect its needs and its aspirations in

form 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 two main issues related to the welfare and the improving of living conditions of the settlement as a whole:

- The pavement of the streets.
- The establishment of a welfare association.

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 90% (225) of settlers are willing to cooperate for the pavement of the streets mainly on a voluntary basis (204), nevertheless 21 of them welcomed the idea of participating in the pavement works providing a salary.

Concerning the welfare association, 95.2% (238) are willing to cooperate in its creation by giving money (56.3%) or by participating in the building works (38.4%). 11.3% of settlers want to cooperate but don't know how to do it. The data shows that four settlers were ready to give the land necessary to the erection of the welfare association.

3- Training opportunities:

The study team though 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 opportunities for youth were considered as important, consequently, settlers were asked about their willingness to attend literacy classes in their free time. (85.6%) 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	40.2%
Plumbing	17.6%
Electricity	12.8%
Bathing and filing	8.4%
Building	8.0%
Mechanics	4.0%
Carpets weaving	3.6%
Painting	2.4%
N./K.	2.4%

84% 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:

N a m e s	P r o f e s s i o n
Mohamed Ateya	Member of Populer Council
Sheikh Oaman El Dali	Police Guard
Mohamed El Dali	Peasant
Abdel Hamid Gomea	Head Police Guard
Shaban Abou Ghoneim	Employee in the public hospital
Fathi Ibrahim	Employee in Cement Factory
Abdel Hafez Ali Hamed	Employee in Mier Helwan Factory
Mohamed Hamed	Employee in Iron and Steel Factory
Youssef Sarag	Youth responsible
Mohamed Rahouma	Agricultural Engineer
Mohamed Mehgoub	Physician
Mohamed Amin Soliman	Member of populer council
Nabil Ahmed Zeki	Employee in Mier Bank
Hani Ali Diab	Guard in El Neer Core Factory
Ahmed El Shefei Hamed	Employee in Mier Helwan Factory

As we can see the chosen leaders represent the social structure of Arab Ghoneim: employee in the factories, peasants, guard, members in the populer council ...etc..

Names of the wealthier families in the Ezba have been cited such as Dali, Hamed, Diab, Ghoneim etc...

Nevertheless, 14.8% 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 an idea. The first group suggested the following items in order to importance:

101

Sewing	63.6%
Knitting	11.2
Embroidery	4.8
Weaving	2.8
Carpet weaving	1.2
N./K.	16.4

34.4% of them affirmed the availability of women who can handle the organization of girls and their training. The remainders were unable to do so (12%), and a big majority did not know any women in the settlement capable to undertake this responsibility. Only three names were cited:

N a m e s	P r o f e s s i o n
Leila Ibrahim Mohamed El zir	House wife
Awatef Rahouma	Teacher
Reweys Rahouma	Lecturer in Girls faculty

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 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

	N.	%
1- The most important utilities needed by the settlement		
Water	157	62.8
Sewage	86	34.4
Electricity	7	28.0
2- The most important services needed by the settlement		
Primary School	130	52.0
Health units	78	31.2
Consumer cooperatives	22	8.8
Transportation	12	4.8
Trade shop	2	0.8
Preparatory School	1	0.4
Others	5	2.0
3- Education problems confronted by the settlers		
Lacking of schools	147	58.8
Lacking of transportation to school	17	6.8
Education opportunities very bad	11	4.4
Number of classes limited	7	2.8
School masters cupidity	9	3.6
Escape of children from school	7	2.8
No children in school age	52	20.8
4- Places where settlers usually cure themselves		
Hospital in Helwan	191	76.4
Private doctor in Helwan	52	21.2
Public hospital in Cairo	2	0.8
Traditional means		
Medical barber	4	1.6

104

	N.	%
5- Health problems confronted by settlers		
Hospitals are far (no means of transportation)	130	52.0
Free prescription is not efficient	26	10.4
Costs of cure are high	22	8.8
Lacking of Pharmacy	20	8.0
Lack of doctors	7	2.8
Others	2	0.8
No problems	43	17.2
6- Suggestions to confront health problem		
Creation of governmental clinics in the settlement	133	53.2
Creation of health units in the settlement	53	21.2
Governmental control on hospitals	21	8.4
Creation of Pharmacies in the settlement	28	11.2
Don't know	15	6.0

Table (12)

Upgrading.

	N.	%
<u>Owners:</u>		
1- Agreement to introduce utilities in the settlement and to share costs		
Yes	180	100
No.		
N./A.		
2- Monthly share of settlers		
One L.E	116	64.4
2	58	29.4
+3	11	6.2
N./A.	70	
3- Nature of housing improvements done by settlers		
None	91	50.5
Add rooms	35	19.4
Add Floor	13	7.2
Ceiling reparation	5	2.8
Floor reparation	6	3.3
Installation of cesspool	18	10.1
More than one reparation	12	6.7
N./A.	70	
4- Need of housing improvement		
Yes	142	78.8
No	38	21.2
N./A.	70	

106

	N.	%
5- Nature of housing improvements needed		
Add floor	(51	35.9
Add room	{ 5	.
Repair the floor	6	4.2
Construct or repair water closet	9	6.3
New roofing system	35	24.6
Paint the house	4	2.8
Reconstruction of the house	15	10.7
Reparations (more than one)	22	15.5
N./A.	108	
6- Persons which could be responsible for doing the reparations needed		
The settlers themselves	14	9.9
A brick layer	112	78.8
A contractor	16	11.3
N./A.	108	
7- Willingness to make reparations and to pay costs on credit		
Yes	135	75.0
No	22	12.2
Yes but under my control	23	12.8
N./A.	70	
8- Reasons for refusing such opportunity		
House doesn't need improvement	9	40.9
There are other priorities	5	22.7
Interests are high	2	9.2
Government realization slow and bad	6	27.2
N./A.	228	

107

	N.	%
<u>Renters</u>		
9- Willingness to share with the owner the cost of any reparations needed.		
Yes	35	50.0
No.	35	50.0
N./A.	180	
10- Monthly share of renters (supplement to the rent)		
One L.E.	25	71.4
2	4	11.4
+3	6	17.2
N./A.	215	
11- Reasons for refusing such opportunity		
Have no surplus	24	68.6
This is the responsibility of the owner	9	25.7
Didn't ask for any reparations	2	5.7
N./A.	215	
12- Willingness to cooperate for the initial installation of a welfare association		
Yes	238	95.2
No	12	4.8
13- Means of cooperation		
Give money	134	56.3
Work	73	30.7
Give land	4	1.7
Don't know	27	11.3
N/A	12	

108

	N.	%
14- Willingness to participate in classes for illiterate		
Yes	107	85.6
No	18	14.4
N./A.	135	
15- Reasons of non-participation		
Education not efficient in old age	6	33.3
Don't have time	5	27.8
Don't have aptitude	4	22.2
N./K.	3	16.7
N./A.	232	
16- Opinion concerning the most important training needed by youth		
Wood work	86	34.4
Plumbing	44	17.6
Electricity	32	12.8
Lathing and Filing	21	8.4
Building	20	8.0
Carpentry	17	5.8
Mechanics	10	4.0
Carpets weaving	9	3.6
Painting	5	2.0
N./K.	6	2.4
17- Availability of settlers which can be responsible of the training of youth		
Yes	210	84.0
No	37	14.8
N./K.	3	1.2

	N.	%
18- Agreement of settlers for girls vocational training		
Yes	195	78.0
No	55	22.0
19- Most important training needed for girls		
Sewing	159	63.6
Knitting	28	11.2
Embroidery	12	4.8
Weaving	7	2.8
Carpet weaving	3	1.2
N./K.	41	11.4
20- Availability of women's settlers which can be responsible of girls training		
Yes.	86	34.4
No	30	12.0
N./K.	134	53.6
21- Need for a nursery		
In need	219	87.6
Not in need	31	12.4
22- Willingness to cooperate in the reparation of settlement's streets		
Will cooperate	204	81.6
Will not cooperate	24	9.6
Will cooperate with a salary	21	8.4
N./K.	1	0.4

110

Summary of Statistical Data

111

Summary of Statistical Data

I Socio-Economic characteristics of Householders

Average age	42.7 year
Marital status	92.4% married
Mean years of marriage	19.1 year
Education status	80.4% illiterate
origin	73.2% rural
occupation	59.2% secondary 20.0% tertiary 5.0% primary
Average monthly income	32.6 L.E

II Household characteristics

Household pattern	85.6% nuclear
Average number of person/Household	6.2 person
Average number of children/Household	5.2 children
Average total household income	41.0 L.E
Average per capita income	8.79 L.E
Average monthly expenditure spent on rent	3.36 L.E
Average monthly expenditure spent on electricity	175 piasters
Average monthly expenditure spent on water	150 piasters
Average monthly expenditure spent on flushing	139 piasters
Average monthly expenditure spent on transportation	270 piasters
Average monthly expenditure spent on food	31.9 L.E

III Housing Conditions

1. The Building

Tenure	78% owners
Type of building	78% single storey

112

Division of the building	66.8% into rooms 33.2% into apartments
Average number of independent rooms	3.144 room
Average number of apartment	2.25 apar.
Average number of household	3.756 Household
Building material	48.4% red brick
Roof system	78% joint board with red (or asbestos)
Floor system	36.8% Cement 38.3% tiles

Building Procedures

Householders who built their house	74.4%
The responsible of the building procedure	84.3% Bricklayer
Sources of financing	44.8% own saving

2. The dwelling unit

Average number of years in the present dwelling	15.221 year
Average number of rooms	3.144 room
Average person/room	2.86 person
Have water	21.6 %
Have electricity	76.3%
Have Bathroom	15.2%
Have Kitchen	23.6%
Have water closet	78%

IV Satisfaction with housing conditions

Satisfied	82.8%
Main sources of satisfaction	52.4% ownership 20.0% near work
Main sources of discontent	63.2% lack of facilities 8.8% smallness of the dwelling

Comparison between owners and tenants

	Owner	Tenant	Total	
Number of rooms				
1	15	33	48	
2	50	30	80	
3	53	7	60	
4	37		37	
+5	25		25	
Person/room				
< 3 persons	8	11	19	
3-	47	35	82	
6-	80	20	100	
+9	45	4	49	
Amenities				
Kitchen	Yes	55	4	59
	No	123	66	189
	Shared	2		2
Bathroom	Yes	38		38
	No	140	67	207
	Shared	2	3	5
Water closet	Yes	151	24	175
	No	7	2	9
	Shared	22	44	66
Water	Running water	44	10	54
	Public tap.	136	60	196
Electricity	Yes	145	46	191
	No	35	24	59

114

	Owner	Tenant	Total
Satisfaction			
Yes	170	37	207
No	10	33	43
Priorities			
Water	114	43	157
Sewage	9	2	7
Electricity	61	25	86
TOTAL	200	70	270

115

**Comparison between different Income group.
(Total family income)**

	<30 L.E.	30-	+70	Total	
Tenure status					
Owner	84	101	25	180	
Tenant	8	19	3	70	
Number of rooms					
1	34	12	2	48	
2	39	36	5	80	
3	19	32	9	60	
4	7	26	4	37	
+5	3	14	8	25	
Persons/room					
< 1 Person	8	7		15	
1-	41	74	20	135	
3-	36	32	6	74	
+5	17	7	2	26	
Satisfaction					
Yes	77	107	23	207	
No	25	13	5	43	
Amenities					
Kitchen	Yes	13	31	15	59
	No	88	88	13	189
	Shared	1	1		2
Bathroom	Yes	7	18	13	38
	No	91	101	15	207
	Shared	4	1		5

116

	< 30 L.E	30-	+70	Total
Yes	57	95	23	175
Water Closet No	5	4		9
Shared	40	21	5	66
Water Connected	12	17	15	54
Public tap.	90	103	13	196
Electricity Yes	63	105	23	191
No	39	15	5	59
TOTAL	102	120	28	250

117

References

- 1- Cullingwork, J.B.: "Housing needs and planning policy" - Routledge and Kegan Paul - New York - Humanities Press, 1960.
- 2- El Shafei, Hussein; "Evolution de la planification technologique des projets d'habitat urbain pour les categories a bas revenu en Republique Arabe d'Egypte" - in "Journées d'Etudes sur l'habitat social," organisees par le (Entre National de Recherches sociales et Criminologiques, en collaboration avec le centre Franco-egyptien de Documentation et d'Etudes juridiques, economiques et sociales - Le Caire - Mai, 1976.
- 3- Fahmy, Noha: "Studies in Urbanization" - Madbat El Killani - Cairo - 1979.
- 4- Fakhouri, Hani: "Kafr El Elow": An Egyptian village in transition " - Holt, Rinehart and Winston, Inc., New York, 1972.
- 5- Gamel, Zaki - Fahmy, Noha: "Housing Conditions in rural Guizeh", in the National review of social sciences, issued by the National Center for Social and Criminological Research - Special issue - Cairo - VII No. 2-1965.
- 6- Césari (Noel), and Fleis Fava (Sylvia);(ed): "Urban society"- Thomas Y. Crowell Company - New York 1964.
- 7- Gutman, Robert - Popenoe, David (ed.): "Neighborhood, city and metropolis: an integrated reader in urban sociology" - Rando House Inc. - New York - 1970.
- 8- "Immediate Action proposal for housing in Egypt": Statistical Appendix - Ministry of Housing and Reconstruction with Office of Housing Agency for. International Development - June 1976.-

118

- 9- Orville, F - Brkunes, Jr: "Housing for low income urban families" - Economics and policy in the developing world - International Bank for Reconstruction and Development - Washington 1976.
- 10- United Nations: "Community programmes for low-income population", in urban settlement of developing countries" - ST/ESA/52.
- 11- United Nations: "Improvement of slums and uncontrolled settlements" - Report of the interregional seminar of the improvement of slums and uncontrolled settlements - New York - 1971 - ST/TAD/SER. C/124.
- 12- United Nations: Report of the AD Hoc, group. of experts on "Housing and urban development"- ST/SDA/50-New York 1962.
- 13- United Nations: The Environmental Aspects of Human Settlements: Standards and criteria in the provision of Shelter-project report submitted to the U.N. Environment program - Nairobi-Kenya-September- 1976.
- 14- Wheaton, W.C. - Milgren, F. - Meyerson, M.E.(ed.): "Urban Housing" - The free press - New York - 1962.