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ARAB RASHED

A case study of an urban settelment in greater Cairo

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A Case Study of an Urban Settlement in Greater Cairo

I Case study

1- Geographical Setting

2- Population

3- The Physical aspect.

4- Urban contact.

5- Settlement economy.

6- Services available

7- Urgent needs and demands.

Arab Rashed

1- Geographical setting of the settlement:

Esbet "Arab Rashed" is an uncontrolled settlement which emerged unformally around the city of Helwan. It is situated at 400 meters on the right side of the paved main road going to Helwan.

The Nile for-warding and its shunting separes the settlement from the main road. The settlement is bordered on the west by the silk factory on the east by the cement national factory (Portland) and on the south by Misr Helwan textile industry.

Arab Rashed originated in 1720 when an Egyptian citizen called Labib Nessim bought at 4 piastres the meters a piece of land in the area to erect the Silk compagny. He began with a small section for grinding colours but after a little while he was obliged to close the company. In 1927 another trial was made to open the factory this time by an Arab Called Rashed Mahmoud El Sanee coming from the city of Hodaida in Yemen; he settled near by the factory. In 1944 he was followed by almost 20 other Households who settled in the surrounding area. In 1945 an overflow drawned the area with all the houses erected

on it. The government through the Helal Association transfered the families and indemnified them to rebuild their houses near Rached Mahmoud house; in compensation, the government agreed to give to this new agglomeration its actual name. Rural migrants coming chiefly from upper Egypt: Quina, Sohag and Fayoum followed.

There are four popular associations in Arab Rashed: they offer their help and aid to settlers affiliated to them in emergency cases like death, illness and marriage. Two time a year the associations distribute popular tissue to its poor members.

2- Population.

We can't be very precise about the population size of Arab Rashed.*

Arab Rashed has a shape of almost a rectangular with 0.64 miles long and 1.28 miles wide. It covers mearly 0.32 Square Kilometer of land. Population density can be roughly estimated to be 144 persons per Feddan or 343 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 houses built with concrete and aligned in one street. 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 or concrete and floors are made of cement or earth.

Houses are aligned around long narrow irregular unpaved streets from 3 to 6 large. The main streets are "Omar Street" "Abou Bakr Street," "Osman Street" and "El Zahraa Street". As we can notice Settlers gave the streets the name of great personalities in Islam.

Houses are mainly one floor building, some are two floors and only very few are three floored; there are three types of circulatory space.

1. The main paved road linking the settlement to Helwan and Cairo .
2. The main service road "Sharea Omar" or El Wasta which provides access to narrow lanes which connect one housing group to another.
3. The border road longing the cement national factory which provides access to narow lanes from the east.

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. Most of the houses are now electrically lighted, few of them have a kitchen and less have

a bathroom. Arab Rashed contains three public water taps, one near the youth club at the entrance of the settlement the other in the middle near Omar Mosque and the third on in the end of the settlement near the silk company. Some settlers have connected indoors water.

Rural courtyard is less spread in the settlement but still existding, it serves in many functions.

In spite of the fact that the big majority of settlers are owners (hikr system) Almost 40% of them rent parts of their houses (rooms) to new comers as a mean of investment

4- Urban Contact.

Arab Rashed is at 6.4 miles from Helwan. The settlement is connected to Cair o 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 rood running along the River Nile

The Nile is at 3.2 miles and could be a mean of transportation to villages and towns of Guizeh governorate if there is a regular fairy boat (Meadiya between the eastern and western bank of the Nile). While Arab Rashed is under the direct jurisdiction of the subadministrative district (kism) of Helwan which is in charge of the southern part of Cairo governorate, salama Hamlet is under it s direct jurisdiction.

Settlers conduct most of their affairs and business in Helwan and are in daily direct contact with city life, but they have to walk 3 miles to reach the main street and then take the bus to Helwan.

Security is maintained by the official police station of El Massanea.

A Commiteo of disputes coustituted by 11 elder settlers: (mainly retired settlers) resolves the problems and the conflict which can arise between settlers.

5- Settlement Economy.

The people in Arab Rashed are largely dependant upon the industrial work for their livelihood (90%) Few traders work on their own account and a narrow fraction of the population is engaged in agricultural work in the surrounded area (no more than 50 families).

Settlement economy stands on three principal activities: Industrial, building sector and electricity (93%) trade and services (6%) and agriculture. The main factories where settlers work are: the Nasr Automative and tractor industry at 9.6 miles, the military and munition complex at 6.4 miles, the silk factory at 1.6 miles, the Helwan cement factory at 6.4 miles, the iron and steel factory at 9.4 miles, Factory 63 for munition at 3.2 miles and the steel united factory at 3.2miles).

These factories spread from Maasara to Tebin. Trade is performed through many shops especially 25 groceries , a cooperative butchers a workshop for the repairing and maintenance of cars,"El Khadra Market" in Arab ghoneim serves the Settlement in term of vegetables.

6- Services available.

Arab Rashed as an uncontrolled settlement is deprived of governmental services, water disposal and Sewage system are not available, there are no educational, health or economic services in the settlement.

The nearest hospital is in Helwan at 6.4 miles. Services of childhood care and motherhood are lacking. The nearest pharmacy Ambulance and private clubs are situated in the Public Housing area of Helwan at 3.2 miles.

If there are no public medical services there are 3 private clinics in the settlement; Registration of birth and death as well as vaccination of children are done in Helwan.

There is no school and the nearest one is in the Public housing. Settlers began to create a primary school which will open next year.

There is no public telephone, the nearest one is in Ezbet El Bagour at 25 minutes walk. There are two Mosques and the third one is in the making, they have been erected through popular effort.

There is a mailing post in a grocery at the end of the silk factory; one of the retired settler distributes the mails on a voluntary basis. There are no collectors of garbage.

Families use the lack for dumping human waste and garbage. Although there are some smelly swamps in the entrance of the settlement which attract flies and mospuitos, the general condition of the settlement is better than Arab ghoneim perhaps this is due to popular awareness and participation which are evident, Settlers have erected a youth club, they. handle its administration on a voluntary basis. Twelve of them supervise in their free time its cultural and sportive activities. The club includes a library, sportive activities include foot-ball hand-ball, basket ball etc..

There is no coffee house in the settlement because settlers spent their leisure time in the club. A welfare association is on its way to be erected; one of the settlers, Salem Tamaa is handling the responsability of the association, he is a member of Hewan local council.

A cemetery is situated at the North-west of the settlement; it is a public one.

Four popular associations are constituted by settlers: the sons of Guiza, of Sohag, of Fayoum and of upper Egypt.

7- Urgent needs and demands.

The comittee of disputes resolved as we have already said the problems of settlers. Two of its members "Hagg Shehata Belal" and "Raiss Mostapha" have been cited as local leaders capable of handling the responsability of training of youth, their organization and participation in upgrading programme .

The informal leaders mentioned as urgent needs of the settlement the provision of a sewage system and running water Beside these vital utilities they mentioned the following sercices as urgent demand: a Health unit provided with an ambulance, a primary school and a public telephone. They certify that the settlers are ready to contribute and to participate in any programme aiming to ameliorate the socio - Economic conditions of their settlement 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 Rashed (200) are headed by 190 householders male (95%), and 10 householders female (4.4%).

The mean age of the householders is 42.8 year with a standard deviation of 9.187 while the mean age of their wives is 34.7 year with a standard deviation of 10.1; while 27.5% (55) of householders are below thirty five years, 17% (34) of them are over fifty five,

The majority of householders are married 92.5% (185), 2.7% of which have 2 wives; 5% (10) are divorced or widowes, and only 2.5% (5) are single. The mean year of marriage is 18.9 years with a standard deviation of 9.288.

Only 10% (20) of married householders are newly married couples.

Illiteracy spreads between householders and their wives: 86% (172) of householders and 96.5% (189) of their wives have not even a primary certificate. Although, 33.7% (58) of householders and 6.3% (12) of wives can read and write.

Householders who hold a public certificate reach no more than 13% (26), 13 of them hold a primary certificate, 8 a preparatory certificate and 4 a secondary certificate.

Only 0.5% (1) 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 92.5% (185) of householders fall in the first one, and that 6% (12) fall in the second one, and only 0.5% (1) fall in the third stage.

In term of education we have an homogenous group Householders are mainly from rural origin, 86.2% (150). The remainders are native born in Arab Rashed (26), or in urban cities of the Delta or upper Egypt.

The non-native householders originally settled in Arab Rashed near the emerged city of Helwan, hoping to find work in the surrounding areas (39.1% (68)), or settled there because they already worked in the area and wanted to move near their work (44.3% (77)), or because of the housing crisis which induced them to live in the periphery of the capital (4.6%(8)), or because of other reasons like migration with the family (6.3% (11)), or marriage and their desire to be independant (3.4 (6)) *

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* For more details see table 1 and 2

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.

Arab Rashed is an urban settlement. Only 0.5% of its inhabitants are engaged in agricultural occupa (1) ., while the remainders are engaged in the secondary and tertiary sectors.

The proportion of householders engaged in the industrial sector reaches 64% (128) 61.7% (79) of them are skilled workers, while the remainders are unskilled workers 2 5% (5) of householders are employees in the government, 4% (8) are in the service, and only 5% (10) are in business or trade. 3% (6), are artisans, 4% (8) are self-employed in private shops 6.5% (13) are daily labourers without permanent job, 0 5% (1) work in the army, and 6% (12) are retired. It was noticed that 3[illegible] of tenants versus 25 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 class. Their working years average 14.6 year with a standard deviation 9.019. Householders female are mainly out of the labor force (8), only two of householders wives are working, one as skilled labourer and the other as employee.

While 76.81 (128) of householders work actually in nearby factories and companies at less than 5 miles from the settlement 3.6% (6) work for the government either in Cairo or in Helwan. The remainders work in Helwan or in the settlement in private shop or as labourers in shops or in workshops.

While 69.9% (102) of householders go to work on foot, 18.4% (27) depend in going to work upon factory and company bus. 8.9% (13) rely upon public transportation. The remainders rely on bicycles and taxis, etc.*

3- Children characteristics:

The children characteristics of our sample reveal the very young population of Ezbet Arab Rashed as many of our rural villages or even urban towns and cities. The percentage of children below the school age (6 years) reaches 32.2% (234) of the children in families interviewed. 26.4% (186) of children are aged between 6 and 12 years, 28.1% (198) between 12 and 18 years, and 12.3% have more than 18 years old averaging a mean age of 10.2 year.

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* For more details see table 3.

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 32.5% (149) of children in the age of schooling are illiterate (61 boys for 88 girls), the remainders have obtained an education certificate or are still in school (239). 59.5% (273) of children hold a primary certificate or less (179 boys for 94 girls). 7.1% (33) hold a preparatory or a secondary certificate (30 boys for 3 girls), and 0.2% (4) hold a university degree or an equivalent certificate (4 boys).

As we see, 4 boys only have obtained a university degree and a substantial percentage of children (34%) are still attending schools and faculties.

Only 25.7% (101) of boys were working at the time of the study. They are mainly engaged in industrial work as skilled labourers (22), unskilled labourers (18), in private shops as self employed (8), in the government as employee (10), in the army (11), and in the settlement as labourers in minor jobs. Sons go to their work mainly on foot (23.8%) or rely upon public transportation, (28.7%). The remainders depend in going to work on factory bus (9.9%), or rely upon private bicycle, (17.8%) or taxis.*

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* For more details see table 4.

4- Families characteristics:

a. Despite the fac that the original settlers of Arab Rashed were from rural areas, they were from they very beginning engaged in industrial work.

Their occupation in the secondary sector has affected the social structure of their families: only 7% (14) 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.

Only 3% (6) 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 (90%), who acts as a socio-economic independant 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: 51% (102) of families count more than 6 persons each, 39% (78) count between 3 and 6 persons each, and only 10% (20) of families count less than 3 persons each; averaging 5.9 persons per family with a standard deviation of 2.306.

It was found that there is a significant Relationship between the tenure status and the number of person per family (χ^2 = 18.7837 sifnificant beyond 0.05 and 0.01) as it is showed in the following table:

Relationship between the tenure Status (A) of Householders and the number of Person in their Families (B)

A \ B	-3 person	3-	6-	+9	Total
Owner	13	48	58	33	152
Tenant	7	30	8	3	48
Total	20	78	66	36	200

c. The mean monthly income of householders was found to be in the order of 35.6 L.E, with a standard deviation of 16.515. 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 40.1 L.E/month with a standard deviation of 19.874. While 28.5% (57) of families have a total monthly family income of more than 50 L.E. 34% (68) have a total family income between 30 and 50 and the remainders 37.5% (75) have a total family income between 10 and 30 L.E./month.

The per capita monthly income was found to be in the order of 8.525 with a standard deviation of 5.415.

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, 29.5% (59) have a television set which had been sold on a credit basis and usually families invite their neighboors to follow certain programmes; some of householders wives (19.5%) have adopted the new ways of coocking by purchasing a range butagaz. 8% of families have a refrigerator, and 3% have a washing-machine.

Some few families (4%) own a radio, a television set a recorder at the same time. Others (2%) have a washing-machine, a range butagaz, 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 2.7 L.E. with a standard deviation of 1.5005. Only 12.5% (6) of renters pay more than 30% of their income as rent; 50% (24) pay between 10 and 30%, and 37.5% (18) 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 showndin the following table:

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

A(L.E) \ B	-10%	10%-	20%-	+30%	N/A	Total
-30	7	13	10	1	44	75
30-	8	1		5	95	109
+70	3				13	16
Total	18	14	10	6	152	200

r = -0.376

2- The average monthly expenditure paid by families on electricity is 175.4 piastres with a standard deviation of 67.242. Only 7.5 (10) of the householders pay more than 9% of their income on electricity; 40.6% (54) of the householders pay from 5 and 9% and 51.9% (69) 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).

A(L.E) \ B	1%-	3%-	5%-	7%-	+9%	Nothing	Total
-30	3	10	14	4	7	37	75
30-	9	36	28	4	3	29	109
+70	5	6	4			1	16
Total	17	52	46	8	10	67	200

$r = -0.344$

On the other hand the date showed that there is a significant relationship between the number of persons per family and the monthly expenditure paid on electricity: ($\chi^2 = 2029$ significant beyond 0.05), as it is shown in the following table:

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

A \ B	-50 piastres	50-	100-	150-	200-	+250	None	Total
1					1		3	4
2		3	4	1			8	16
3			4		2		14	20
4	1	4	8	1		1	9	26
5	1	1	9	4	4	5	8	32
6		2	2	1	7	2	10	24
7		2	5	5	7		8	27
8		1	5	1	2	2	4	15
+9		1	7	3	12	10	3	36
Total	2	14	44	16	35	22	67	200

3- The average monthly expenditure paid by families on water is 131.4 piastres with a standard deviation of 58.370:269% (21) of the householders pay more than 5% of their income on water 35.9% (28) pay between 3 and 5% and 37.2% (29) pay less than 3% of their income on water.

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

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

A \ B	1%-	3%-	+5%	None	Total
-30		9	9	57	75
30-	20	18	12	59	109
170	9	1		6	16
Total	29	28	21	122	200

r = -0.592.

The average monthly expenditure paid by families for flushing is 132 piasters with a standard deviation of 78.090.

Only 15% (16) of the householders pay more than 9% of their income on flushing. 131% (14) pay between 5 and 9% and 71.9% (77) 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; (χ^2 = 5.94 significant beyond 0.05), 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).

A \ B	-50pt.	50-	100-	150-	200-	+250	N/A	Total
1			1				3	4
2	2	2	4				8	16
3		1	2			1	16	20
4	2	3	7		1		13	26
5	4	2	7		1	2	16	32
6	2	2	6			3	11	24
7	3	2	9	1		3	9	27
8		1	3		1	4	6	15
+9	5		13		3	4	11	36
Total	18	13	52	1	6	17	93	200

5- The average monthly expenditure paid by families on transportation is 2.80 L.E. with a standard deviation of 1.916

Only 3.2% (3) of the householders pay more than 3.5% of their income on transportation; 30.8% (29) pay between 2.5% and 3.5% and 66% (62) pay less than 2.50% of their income on transportation.

- The average monthly expenditure paid by families on food is 31.2 L.E. with a standard deviation of 16.6. There is a significant relationship between the number of persons per family and the monthly expenditure of families on food: (X^2 = 32.84 significant beyond 0.05).

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

A \ B	-10	10-	20-	30-	40-	50-	60-	70-	+80	Total
1	2	1	1							4
2	4	4	5	2	1					16
3		14	2	3	1					20
4		12	9	3	2					26
5	1	9	7	10	3		2			32
6		7	3	6	4	2		1	1	24
7	1	4	6	11	5					27
8			4	5	3		1	2		15
+9			10	6	7	4	4	5		36
Total	8	51	47	46	26	6	7	8	1	200

While only 1% (2) of families pay less than 30% of their income on food, 36.5% (73) pay more than 80% of their income on food 51% (102) pay between 50 and 80%, and 11 5% (23) pay between 30 and 50% of their income on food. There is a reversed relationship between the total family income and the percentage of income spent on food; The more the total family income, the less the percentage of income spent on food as it is shown in the following table:

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

A \ B	-30%	30-	40-	50-	60-	70-	+80	Total
-30	1	1	5	8	13	19	28	75
30-		5	9	16	19	20	40	109
+70	1	3		3	2	2	5	16
Total	2	9	14	27	34	41	73	200

r = -0 313

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

12% of income on rent.

3 3% of income on electricity.

2 2% of income on water.

2.8% of income on flushing

60 1% of income on transportation.

By local standards, " Arab Rashed"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 maintened an appreciable rate of upward mobility. 44.2% 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.

	N	%
1 Sex		
male	190	95
female	10	5
2 Age		
< 25 years	14	7
25 -	41	20.5
35 -	54	27
45 -	57	28.5
+55 years	34	17
3 Marital status		
never married	5	2.5
Married (one wife)	180	90
Married (two wives)	5	2.5
Divorced/widower	10	5
4 Number of years being married		
< 5 years	20	10.
5 -	45	22.5
15-	62	31
+25	58	29
N./A.	15	7.5

	N	%
5 Education		
Illiterate	114	57
Read and write	58	29
Primary certificate	13	6.5
Preparatory certificate.	8	4
Secondary certificate	4	2
University degree/equivalent	1	0.5
N. / K.	2	1
6 Origin		
City residents	24	13.8
village residents	150	86.2
N. / A. (born in settement)	26	
7 Reasons for moving to the settlement		
Near work	77	44.3
Migration to find work	68	39.1
Housing crisis	8	4.6
Migration with the family	11	6.3
Marriage and independence	6	3.4
Others	4	2.3
N. /A. (birth place).	26	

Table 2

Wives characteristics.

	N.	%
1 Age		
<20 years	9	4.7
20-	57	30
30-	72	37.9
40-	35	18.5
+50	17	8.9
N./A.	10	
(median age 34.7 years S.D = 10.1)		
2 Education		
Illiterate	187	93.5
Read and write	12	6.5
Primary certificate		
Preparatory certificate		
Secondary certificate.	1	0.5
N./A.		
3 Occupation		
House wife	188	99
Skilled labourer		
Employee	1	0.5
Trade	1	0.5

Table 3

Occupation background of householders.

	N.	%
1 Previous job (if any)		
No	170	
Agricultural labourer	15	50
Unskilled labourer	2	6.7
Skilled labourer	7	23.3
Artisan	1	3.3
Selfemployed	2	6.7
Employee	-	
Tradesman	-	
Service labourer	1	3.3
Military	2	6.7
2 Reasons for living previous job		
Present job best	19	63.3
Moving to cairo	3	10
Illiness or retirement	3	10
Left the government to be self Employed	2	6.7
Other	3	10
N./A.	170	

	N.	%
3 Present occupation		
Skilled labourer	79	39.5
Unskilled labourer	49	24 5
Agriculture labourer	1	0.5
Service labourer	8	4
Employee	5	2.5
Artisan	6	3
Self employed	8	4
Tradesman	10	5
Military	1	0 5
Daily work	13	6.5
Don't work (Householders female)	8	4.0
Retired	12	6
Place of present work		
Factory	49	29.3
Private workshop	8	4.8
Workshop labourer	6	3.6
Private shop	10	60
Shop labourer	8	4.8
Government	5	3
Army or police	1	0.6
Company	79	47.4
Agriculture land	1	0.6
N./A. (Retired and daily work - Housholders women who didn't work).	33	33

	N.	%
5 Number of working years		
- 5 years	29	16.2
5-	22	12.3
10-	32	17.8
15-	56	31.3
20-	17	9.5
+25	23	12.9
N./A.	21	-
6 Distance Home/work		
- 5 km	102	69
5-	27	18.4
10-	8	5.5
15-	3	2.1
+20 km	6	4.1
N./A. (working in the settlement) + not working + agriculture	54	
7 Means of transportation to work		
On foot	76	52.1
Factory/company bus	44	30.1
Public transportation	13	8.9
Bicycle	11	7.5
Taxi	1	0.7
Train	1	0.7

	N.	%
Two means	[illegible]	
More than two means	--	
N /A.	54	

8 Time spent to go to work

¼ hour	110	75.3
½ -	21	14 4
1 -	8	5.5
+ 1½	7	4.8
N /A	54	

9 Monthly income

20 L.E.	35	17.5
20 -	100	50
40 -	45	22.5
60 -	18	9
+ 80 L.E.	2	1

median income 35 6 L.E.

Table 4

Children characteristics

1 Sex	N.	%
Male	392	55.6
Female	313	44.4
Total	705	100
median number of children 3.93		

2 Age	Male	Female	Total	%
- 6 years	118	116	234	33.2
6 -	92	94	186	26.4
12-	106	92	198	28.1
+18	76	11	87	12.3
median age				

3 Education				
Illiterate	61	88	149	32.5
Read and write	134	77	211	46
Primary certificate	45	17	62	13.5
Preparatory certificate	21	3	24	5.1
Secondary certificate	9		9	2
University certificate/ equivalent	4		4	0.9
N/A (younger than school age).	118	128	246	

	N.	%
4 Occupation		
Unemployed	604	
Student	239	39.6
Dont work	102	16.9
Under the school age	232	38.4
Girls at home	31	5.1
Employed	101	
Government employee	10	9.9
Skilled labourer	22	21.8
Military	11	10.9
Self employed	8	7.9
Unskilled labourer	18	17.8
Agriculture. L	11	10.9
Trader	14	13.9
Others	7	6.9
		101
Total	Total	705
6 Distance Home/work		
- 5 km	33	32.7
5 -	17	16.8
10-	14	13.9
15-	9	8.9
+ 20 km	9	8.9

	N.	%
Work in the settlement	19	18.8
N./A.	604	
7 Means of transportation to work		
On foot	24	23.8
Factory bus	10	9.9
Public transportation	29	28.7
Bicycle	18	17.8
Train	15	14.9
Taxi	5	4.9
N./A.	604	
8 Monthly income		
-10 L.E.	11	10.9
10-	34	42.6
+20	27	26.7
N./K.	20	19.8
[illegible]		
N./A.	604	

Table 5

Families characteristics

	N	%
1 Type of family		
Nuclear	180	90
Extended	14	7
Joint-family	6	3
2 Constitution of families		
Householders, spouse children	130	65
Householder, spouse children, relatives	34	17
Householder, spouse	9	4.5
Widower or divorced children	2	1
Single householders friends/relatives	5	2.5
Householder, spouse married and unmarried children	6	3
Windower or divorced married and unmarried children relatives	8	4
Two families	6	3
3 Number of children/household		
None	20	10
- 3 children	45	22.5
3-	78	39
6	49	24.5
+9	8	4

	N.	%
median number of children 3.9 children		
4 Number of persons/family		
—3 persons	20	10
3-	78	39
6-	66	33
+9	36	18
5 Total family income		
10- L.E.	75	37.5
30—	68	34
50-	41	20.5
70-	10	5
+90	6	3
6 Per capita monthly income		
—5 L.E.	40	20
5-	141	70.5
15-	15	7.5
+25	4	2
7 Ownership consumer durables		
Radio	73	36.5
Television	17	8.5

	N.	%
Radio, television	34	17
Radio, television, recorder	8	4
Butagaz	23	11.5
Butagaz, refrigerator	12	6
Washing machine	2	1
Washing machine, butagaz, refrigerator	4	2
Bicycle.	27	13.5

8 Monthly expenses of families on some variants relevant to housing

a. <u>Rent</u>

-1 L.E.	5	10.4
1-	26	54.2
3-	12	25
5-	5	10.4
N./A.	152	10

median rent 2.7

b. <u>Electricity</u>

-1 L.E.	16	12.5
1-	60	45.1
+2	57	42.4
N./A.	67	

	N.	%
c. **Water**		
- 1 L.E.	20	25.6
1 -	48	61.6
+ 2	10	12.8
N./A.	122	
d. **Flushing**		
- 1 L.E.	21	29
1 -	53	49.5
2 -	23	21.5
N./A.	93	
e. **Transportation**		
- 1 L.E.	20	21.1
1 -	41	43.2
3 -	25	26.3
+ 5	9	9.4
N./A.	105	
f. **Food**		
10 L.E.	8	4
10-	98	49
30-	72	36
50-	13	6.5
+70	9	

III Housing:

1 - Housing conditions of the buildings or houses.

2 - The dwelling unit or apartment.

3 - Dwelling facilities.

4 - Satisfaction from housing conditions.

III Housing

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

Form 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 Rashed" which are the material elements of the dwellings, as mush 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 accomodated approximatively 11.000 inhabitants on an area of 0.32 square kilometer.

This high concentration is achieved using, mainly single storey dwellings (63%), or two stories buildings (34%), orgnised in such a way that no open spaces have been retained adjoining the housing areas. Only 3% 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, 76% (147), of houses are owner-occupied, while 24% (48) are renter occupied. 71% of owners hold the plot on a formal hikr lease. The remainders (5%) occupy the plot with others as a joint property. While some householders

claim to have paid for hikr title, the others claim to have purchased their plots from residents without registration.

It was found that there is a significant relationship between the total family income and tenure status (χ^2 = 22.934 significant beyond 0.05 and 0.01) as it is shown in the following table:

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

A \ B	Owner	Tenant	Total
-30	43	32	75
30-	95	14	109
+70	14	2	16
Total	152	48	200

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 70 and 90 square meters averaging 65 square meters.

Buildings or houses are divided into independant apartments or rooms. The former is predominant: 84% (168) of houses are divided into independant rooms, 41% of which are rented to new comers and new married couples.

Households are sheltered together but are acting as independant economic units, the average mumber of independant rooms in the houses visited is 1.725 rooms with a standard deviation of 1.313.

The data shows that there is a significant relationship between the number of families in the building and the inclination of owners to divide the building into private independant rooms. (r^2 = 13.09 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	50	21	3	74
2	28			28
3	33		2	35
4	23		2	25
5	14	1	2	17
6	7			7
+7	13		1	14
Total	168	22	10	200

Only 11% (22) of houses are divided into apartments or dwellings; none of which are rented they are exclusively occupied by the families which owned them.

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.

Some few owners (5) rent sphops in the ground floor of their houses at an average monthly rent of 4 L.E.

While 37% (74) of houses are occupied by only one hous-elod 31.5% (63) are occupied by between 2 and 4 households, 21% (42) by between 4 and 6 and 10.5% (21) by more than 6 households.

The average number of households in the houses visited reaches 3.54 households with a standard deviation of 2.668.

- Building materials:

Two kinds of building materials prevailed: red brick (48%), and stone (20%). The remainder houses (32%) represent a combination of these building materials.

Materials used for the roofs range from palm trunks and reed (10.5%), to concrete (24%). The majority (65.5%) used a combination of joint and pertinand board, (50%) joint board and reed, (11.5%) joint board and asbestos.

Floors are mainly in cement (51.5%) in earth 22% or in tiles (19.5%), or a combination of both materials.

Only 21.1% (31) of houses had been bought by the present tenants, while 14.3% (21) had been inherited.

64.6% (95) of householders visited have built their houses. Only 6.2% (6) of them have built it in one stage, while the remainders 93.8% (89) have built their houses in two or four stages over a maximum period of 30 years. Each stage had added rooms to the house either Horizontally or vertically.

The different building operations was carried out by a local bricklayer (87.6%), or by the members of the family itself (11.3%). Only 1.1% of families have delegated a contractor to carry out all the building and construction procedures.[x]

It was found that there is no significant relationship between the total family income and the decision of families to delegate to a bricklayer, or to a contractor, the responsability of the building procedure; (= 1.9 not significant), 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		21	1	53	75
30-		54	8	47	109
+70	1	8	2	5	16
Total	1	83	11	105	200

A big majoity (52.1%) of families financed the different stages of the building works from the family's own savings; 36.6% (34) financed partly the building works, and borrowed the remain money needed mainly from relatives and friends (52.2%), or by entering into a gameya (13%). 10.3% (10) of householders with no savings at all have borrowed all the money needed for the building procedure. Only 9 owners relied upon a credit from their work (8), or a credit from the bank (1).

2- The dwelling unit:

The dwelling is defined as the independant room, or apartment, or house rented or owned by a socio-economic independant unit. Householders occupying the dwelling visited in the study, are not from the first generation which immigrated to the settlement. Only 21% (42) of them have been in their present dwellings for less than 5 years while 41.5% (83) have lived in their present dwellings for 15 years and more. The average years spent in the present dwellings is 14.15 year with a standard deviation of 8.987.

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 ke; 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 affored 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 infection diseases, the formerdeprives 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).

* Rosow, Irving: "The Social effects of the physical environment" journal of the American Institute of planners-Vol XXXII N ۹ 2 May 1961 - P. 128.

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

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

When we look to the crowding rate in the households visited, we shall find that the average number of rooms per household is 2.790 rooms with a standard deviation of 1.214 while 32% (64) of dwellings count one room, 36% (72) count three rooms and more. It was noticed that some dwellings (Owners) count more than 7 rooms each.

The following patterns of internal densities emerged:

Number of rooms	Person/room (crowding rate)	Average number of person per household
1	4.1	4.1
2	2.5	4.9
3	1.8	5.5
4	1.6	6.2
5	1.1	5.4
6	0.9	5.3
7	0.4	2.6

Several conclusion 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 reveres relationship between 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 = -0.157), as it is shown in the following table :

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

A \ B	-1	1-	3-	+5	Total
30(L.E.)	2	33	25	15	75
30-	6	62	26	15	109
+70		10	6		16
Total	8	105	57	30	200

on the other hand the data shows that there is significant relationship between the tenure status and the crowing rate (χ^2 = 29.555 significant beyond 0.05 and 0.01).

as it is shown in the following table .

Relation between tenure status
(A) and the crowding rate (B).

A \ B	-1	1-	3-	+5	Total
Owner	6	96	32	18	152
Tenant	2	9	25	12	48
Total	8	105	57	30	200

If we considere that overcrowding exists when there is more than two persons/room, 72.5% (145) of the dwellings visited are overcrowded; 60% (87) of which count more than 4 persons room.

The average crowding rate in the dwellings visited is 3.175 persons/room, with a standard deviation of 1.734. The data shows that there is a significant relationship between the total income of families and the number of rooms owned or rented by households as indicated in the following table:

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

A \ B	1	2	+3	Total
-30	44	10	21	75
30-	20	49	40	109
+70		5	11	16
Total	64	64	72	200

($r = 0.2$).

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 householders can built or rent, and 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 unit ($\chi^2 = 75.908$ significant beyond 0.05 and 0.01) as indicated in the following table.

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

A \ B	one room	2	3	4	+5	Total
Owner	25	56	34	24	13	152
Tenant	39	8	1			48
Total	64	64	35	24	13	200

3- Dwelling facilities:

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

49.5% (99) of dwellings visited still rely 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 (3 taps in the settlement) was found to be 209.595 meters, with a standard deviation of 149.018.

76.5% (153) of dwellings have electricity. The remainders are deprived from this vital utility because they don't have the means, to connect their houses with electricity which are considered very expensive, 29.8% (14) of renters who don't have electricity in their dwellings argue that electricity is owners responsabilities. 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 condidered, among other deprivations, as an indicator of bad housing conditions. Facilities within the dwellings visited vary from having a private bathroom which is rare (10.5%), through having a kitchen (1[illegible]%), and having a private water-closet (54%) or a shared water closet (41%). The dwellings provided by all these facilities reach 7% 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	33	1	34
	No	117	45	162
	Shared	2	2	4
Bathroom	Yes	20	1	21
	No	132	47	179

		owner	tenant	total
Water closet	Yes	97	11	108
	No	6	4	10
	Shared	49	33	82
Water	Running water.	82	19	101
	Private or public tap.	70	29	99
electricity	Yes	116	37	153
	No	36	11	47
Total		152	48	200

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.* Owners erect their houses with their own means and share 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.

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* Kitchen (χ^2 = 10.5587 significant beyond 0.05)
Bathroom (χ^2 = 4.6897 significant beyond 0.05)
Water closet (χ^2 = 25.0735 significant beyond 0.05 and 0.01)

97.1% of settlers who have a kitchen are owners

95.2% who have a private Bathroom are owners.

73% of settlers who have a private or a shared water closet are owners

81.2% of settlers who connected their house with running water are owners

75.8% of settlers who introduced 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. (91.7% of tenants have a water closet for their own use or shared with other families).

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

		30 L.E.	30-	+70	Total
	Yes	5	21	8	34
Kitchen	No	70	86	6	162
	Shared		2	2	4
	Yes	4	12	5	21
Bathroom	No	71	97	11	179
	Yes	32	66	10	108
Water closet	No	5	5		10
	Shared	38	38	6	82

		30 L.E.	30-	+70	Total
Water	Connected	31	60	10	101
	Public or private tap	44	49	6	99
Electricity	Yes	50	87	16	153
	No	25	22		47
Total		75	109	16	200

It was found that there is a significant relationship between the availability of certain amenities (Kitchen, Bathroom and electricity) and the total family income.

Kitchen χ^2 = 30.276 significant beyond 0.05 and 0.01

Bathroom χ^2 = 7.4827 significant beyond 0.05

Electricity χ^2 = 8.082 significant beyond 0.05

4- <u>Satisfaction from housing conditions:</u>

a. If we define general satisfaction from housing condition as being the absence of complaints, and dissatisfaction as complaints from defects related to housing, we shall notice that 83% (166) of householders in our sample are satisfied while only 17% (34) are not, in spite the fact that the general standard of housing in " Arab Rashed " is low. Most houses have neitheir piped water nor a sewage system.

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 tenure status the crowding rate and the education of householders, etc., but the data shows that while there is a significant relation between the attitude of householders towards housing conditions, and certain households or householders characteristics 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).

A \ B	Satisfied	Dissatisfied	Total
< 30 L.E.	60	15	75
30-	93	16	109
+70	13	3	16
Total	166	34	200

(χ^2 = 1.38 - not significant).

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

A \ B	Satisfied	Dissatisfied	Total
- one	7	1	8
1 -	42	5	47
2 -	52	6	58
3 -	27	7	34
+ 4	38	15	53
Total	166	34	200

(x^2 = 19.31 significant beyond 0.005).

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

B	Satisfied	Dissatisfied	Total
Illiterate	94	20	111
Read and Write	48	10	58
Primary certificate	12	1	13
Preparatory "	8		8
Secondary "	2	2	4
University degree		1	1
N. / K.	2		
Total	166	34	200

(x^2 = 0.07 not significant).

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

A \ B	Satisfied	Dissatisfied	Total
Owner	136	16	152
Tenant	30	18	48
Total	166	34	200

As the table shows 37.5 of tenants are dissatisfied from their present housing conditions versus only 10.5% of owners.

When the field workers risked 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% (34) of householders had reported their feeling of dissatisfaction, 28 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 8.5% (17) only of householders who reported to be satisfied did not complain and expressed again their feeling of satisfaction.

We can conclude <u>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.</u>

b. When we examined the sources of satisfaction of householder, we found that they are concentrated on ownership (50%).

The other sources of satisfaction are related to the location of the house which is near the work (25.5%), and children's school, or being in a good social neighborhood (11%). The suitable rent of the dwelling unit has been reported by 6.5% of householders, while only 3% reported that living in the family house reprents a main reason of their satisfaction from their housing conditions. The largeness of the housing unit and its healthy condition were reported only by 3 settlers.

c. Concerning the imported 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 59% (118), the smallness of the dwelling unit 13.5% (27), its bad building materials 8% (16), its unhealthy conditions 4.5%(9), 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 2.5 % (5), its location in a bad neighbourhood 2%(4), only 0.5%(1) of renters complained about the rent of their dwelling which was condidered 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 condidered too high.

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

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

Several hypothesis can be tested in further studies, as the relation between satisfaction from housing conditions and family life cycle, with the assumption that one environment

which is suited to the needs of the young couple, becomes perhaps inadequate when children reach school, or that a shift in job location, or the enlargement of family size can render a previous convenient dwelling quite unsuitable.

f. As for Arab Rashed settlers, we think that these 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.*

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* For more details see table 6 and 7.

Table 6.

Housing Conditions.

	a) The building	N.	%
1	Number of floors		
	one	126	63
	2	68	34
	+3	6	3
2	Number of appartments		
	one	116	72.7
	2	5	22.7
	3		
	4		
	5	1	4.6
	6 and more		
	N./A.	178	
3	Number of rooms		
	one	9	5.1
	2	22	12.4
	3	19	10.7
	4	40	22.5
	5	32	17.9
	6	22	12.4
	7	10	5.6
	8	11	6.2
	9 and more	13	7.2
	N./A.	22	

	N.	%
4 Number of families		
One	74	37
2	28	14
3	35	17.5
4	25	12.5
5	17	8.5
6	7	3.5
7	6	3
8 and more	8	4
5 Building materials		
walls		
Red bricks	96	48
Stone	40	20
Red brick and stone	29	14.5
Mud bricks	12	6
Mud bricks, and red brick	17	8.5
Mud bricks, stone	1	0.5
Red bricks, stone, Mudbricks	3	1.5
Red bricks, reinforcement concrete.	2	1

	N.	%
Roofs		
Tin		
Palm trunks and reed	21	10.5
Joint board, Asbestos	8	4
Joint board, reed	23	11.5
Joint, pertinant board	100	50
Concrete	46	23
Joint, concrete	2	1
Floors		
Earth	44	22
Cement	103	51.5
Tiles	39	19.5
Tiles, cement	14	7
Tiles, framed		
Framed.		
b) Tenure		
6. Type of tenure		
Owner	42	71
Joint property	10	5
Renter	48	24
7. Number of rooms rented in the building		
One room	10	16.1
2-	28	45.2
4-	14	22.6
6-	6	9.7

	N.	%
+ 8	4	6.4
Don't rent	90	
N./A.	48	

8. Number of apartments rented(to owners only)

one	-	
2	-	
3	-	
+4	-	
Don't rent	152	100
N./A (renters)	48	

9. Average rent of the housing unit (to owners only)

< 2 L.E.	7	11.3
2 -	46	74.2
+ 4	9	14.5
N./A. (Don't rent + renters)	138	

10. Other parts rented in the building (to owners only)

None	147	96.7
Shop	5	3.3
N./A. (renters).	48	

	N.	%
11. Average rent of shops		
< 5 L.E.	5	100
N./A.	195	
12. Ways of owning the building (to owners only).		
Built	95	64.6
Inherited	21	14.3
Bought	31	21.1
N./A. (renters).	48	
N./K.	5	
c) Ways of building		
13. Building procedure		
One stage	6	6.2
Several stages	89	93.8
N./A.	105	
14. Responsability of the building procedure.		
Bricklayer	83	87.6
Family	11	11.3
Contractor	1	1.1
N/A.	105	
15. Money needed for construction		
Had the money	51	52.5
Borrowed the money	10	10.9
Both	34	36.6
N./A.	105	

70

	N.	%
16. Sources of borrowing money		
Friends or relatives	23	52.2
Gameya	5	13
Work	8	17.4
Bank	1	2.2
More than one source	7	15.2
N./A.	156	
D) <u>The householder's dwelling.</u>		
17. Number of years in present dwelling.		
< 5 years	42	21
5 -	75	37.5
15 -	55	27.5
+ 25 years	28	14
N./K.		
18. Number of rooms		
one room	64	32
2	64	32
3	35	17.5
4	24	12
+5	13	6.5
19. Number of persons/room (crowding rate).		
< 1 person	8	4
1 -	105	52.5
3 -	57	28.50
5 -	19	9.5
+ 7	11	5.5

	N.	%
20. Rent.		
<1 L.E.	5	10.4
1 -	26	54.2
3 -	12	25
5 -	5	10.4
N./A. (owners).	152	
Utilities		
21. Kitchen		
Yes	34	17
No	164	82
shared	2	1
22. Bathroom		
Yes	21	10.5
No	179	89.5
Shared		
23. Water - claset		
Yes	108	54
No	10	5
Shared	82	41
24. Type of flushing		
Cesspool	16	8.4
Trench	174	91.6
N./A.		

	N.	%
25. Number of flushing/year		
Don't flush	12	6
< 1	24	12
1	39	19.5
2	31	15.5
3	21	10.5
4	9	4.5
+5	29	14.5
Don't know	35	17.5
26. Source of water		
Water connected	101	50.5
Public taps	96	48
Shared tap inside the house	3	1.5
27. Distance house / public tap.		
< 100 m	36	36.5
100 -	20	10
200 -	16	16.3
300 -	14	14.2
400 -	1	1
+ 500	12	12
N/A.	101	
28. Reasons of not connecting water		
No connection in the settlement	12	12.2
very expensive	59	59.5

	N.	%
there are other priorities	2	2.1
Owners responsabilities.	26	26.2
N./A.	101	
29. Having electricity		
Yes	153	76.5
No	47	23.5
30. Reasons of not introducing electricity		
Very expensive	15	31.9
no means	17	36.2
use a gaz lamp		
owners responsabilities	14	29.8
Not necessary	1	2.1
N./A.	153	

Table 7

Satisfaction of housing conditions

		N.	%
8.1	General satisfaction from housing condition		
	Yes	166	83
	NO	34	17
8.2	Important reasons of satisfaction		
	None	6	.3
	ownership	100	50
	Near work and school	51	25.5
	Good neighborhood	22	11
	Cheap	13	6.5
	Family house	6	3
	Large and healthy	2	1
8.3	Important reasons of dissatisfaction		
	None	17	8.5
	Lack of facilities.	118	59
	Small	27	13.5
	bad building materials	16	8
	Not healthy	9	4.5
	Expensive	1	0.5
	Far from transportation	3	1.5
	Bad neighborhood	4	2
	Likely to collapse	3	1.5
	Far from work and school	2	1

IV Social Relations values and aspirations.

1- Saptial 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 has for settlers.

a. The internal use of space:

The overcrowding of the dwellings visited makes the internal arrangements for the space use difficult, and the multifunction of each room an obligation.

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

1- Room fulfill many functions as a place for sleeping, eating, cooking, washing and lengthen clothes, receiving visitors, and 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 64% of dwellings visited.

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

Cooking	(63.5%).
Receiving visitors	(70.5%).
Washing clothes	(28 %).
Lengthen clothes	(15.2%).
Breeding poultry	(8.5 %).
Studying	(60.3%).
Playing	(8.7 %).

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

Cooking	(8.5 %).
Washing clothes	(37 %).
Lengthen clothes	(42.5%).
Breeding poultry	(46.2%).

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

a. <u>Cooking:</u>

+ Kitchen	Courtyard	Hall	Passage	any room -
17%	8.5%	6%	5%	63.5%

b. Washing clothes:

Bathroom	Courtyard	The roof	Kitchen	Hall	Infront the house	Any room
13%	37%	1.5%	1%	17.5%	2%	28%

c. Lengthen clothes:

Balcony	Roof	Courtyard	Street	Any room
6%	33.5%	42.5%	9%	9%

d. Breeding poultry:

Courtyard	Roof	Balcony	Kitchen	Any room
46.2%	29.2%		16.1%	8.5%

e. Places assigned to the study of children:

Sitting room	Any room
15.3%	84.7%

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 books or radio, or television), wardrobe (for food storage).

7- The street is the space in which many activities and social networks are localized. Women (mothers, daughters, female relatives) are acting together the every day activities. They use the street to prepare food for cooking, to wash, and lengthen clothes, to breed poultries, to talk with friends and neighboors. Men go to their work and return back only to eat and sleep. They are either in work, or with friends and neighboors in the coffee house, or sitting in the 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 15.3% 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 arround 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; 89.5% (179) of families are using Primus, and 17.5% (35) are using a range butagaz for cooking, 53% (106) of families are breeding poultry, 49.5% (99) are relying for getting water on public taps. 76.5% (153) have electricity, 29.5% (59) have a television set, 8% (16) have a refrigerator, and 3% (6) 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 neighboors quite often; They don't need to visit their near neighboors, because they are together every one and then.

The current patterns of social relations suggest the following:

1- Kinship relations (relatives) is of considerable importance in term of visiting, mutual aid and borrowing money, but there are other alternatives which are quite evident in these terms: neighbours relations and friends relations.

2- Death and marriage are among the main events in which settlers must visit each other to present their condolence or congratulation.

3- Mutual aid occurs between settlers without any preference in 61.5% (123) 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 41.5% (83) have lived 15 years and more in their present dwellings, 33.7% (28) of which have lived more than 25 years in the settlement. They thought about "Arab Rashed" 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 Rashed" 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 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:

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* 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 Guizeh governorate" Dr. Gamal Zaki and Noha Fahmy - 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 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	58.5%
Living peacefully with wife and children	14 %
Education of children	13 %
Owning a decent dwelling	9 %
Having money.	1.5%
N./K.	4 %

1- The above results show that health represents the most important variable for 58.5% 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 78% of settlers are owners who erect their houses without any help from public authority, the owning of a decent dwelling didn't appear to have a primary importance. 14% only of settlers, mainly renters mentioned this variable as being the most important variable in their opinion.

But when the settlers were left to determine the variables themselves in a projective question which put the settlers in an assumed position thus:
"In case of obtaining money, what is the most important thing you choose to do or to buy".

Building a new house emerged as indicated in the following figures.

To build a new house	41%
To educate children	17.5%
To buy furniture for the house	13%
To make a pilgrimage to Mecke	10.5%

To make a project	7 %
To buy clothes for children	5.5%
To buy a piece of land	3 %
Others.	2.5%

Build a new house and educate children represent the main imortant aspirations of 58.5% of settlers in our sample. All aspirations turn around the family. To make a pilgrimage to mecke is the only individual aspiration made by 10.5% of the settlers. 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).

A \ B	Illiterate	Read and write	Certificate	N/K	Total.
Build new house	50	22	10		82
Educate children	10	17	7	1	35
Buy furniture	18	14	3	1	26
Make a piligrimage	13	5	3		21
Make a project					
Buy clothes	9	2			11
Buy a piece of land	5	1			6
Others	1	3	1		5
Total	114	58	26	2	200

the data shows that there is a signifi relationship between the education status of Householders and their aspirations (χ^2 = 14.15 significant beyond 0.05).

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

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

A \ B	30 L.E.	30 -	+ 70	Total
Build new house	35	42	5	82
Educate children	12	22	1	35
Buy furniture	11	12	3	26
Make a pilgrimage	5	13	3	21
Make a project	4	7	3	14
Buy clothes	4	7		11
Buy a piece of land	3	3		6
Others	1	3	1	5
Total	75	109	16	200

the data shows that there is no significant relationship between total family income of householders and their aspirations (χ^2 = 826 not significant).

From the above results, we can note that:

1- When setters had to choose between material and non - material objects, they are mostly inclined to choose non - material object as health, living peacefully with wife and children, which represents values of the individual settler.

2- When settlers were left to their proper initiative to decide what will be the most important thing to do if they obtain money, they are family oriented. The building of a new house, which is a symbol of prestige and achievement for the whole family, and the education of children and buying furniture were cited as the three first priorities for 71.5% of our sample.

3- Make a pilgrimage to Mecke represents an individual aspiration of settlers. 10.5% (21) of the settlers, expressed their desire to make this saored obligation if they obtain money. 5 of them only are from the poorest group, 13 are from the middle income group and 3 from the upper income group.*

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

4- "Arab Rahed" settlers are opened to the urban city life, as 10.5% 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 39.5% of settlers whish to buy extra beds, and that 15.5% 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 (23.5%) a refrigerator (18%) a television set (21.5%) a sewing - machine (6.5%).

Once again 23% of settlers expressed their desire to buy furniture.

Four domestic needs emerged in our sample: a range butagaz, furniture, a television set and a 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	N/K	Total
Butagaz	21	16	9	1	47
Furniture	34	11		1	46
Television	28	11	4		43
Refrigerator	17	8	11		36
Sewing - machine	6	7			13
Recorder	3	2	1		6
Washing - machine	1	1	1		3
Ventilator	1	1			2
Others	3	1			4
Total.	114	58	26	2	200

the data shows that there is a significant relation between the educational status of householders and their aspiration concerning furniture (χ^2 = 12.92 significant beyond 0.05).

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:

Television	29.3%
Furniture	28 %
Butagaz	16 %
Refrigerator	10.7%
Sewing - machine	6.7%
Recorder	4.0%
Washing machine	1.3%
Other	2.7%

The second group quoted their priorities as follows:

Butagaz	28.4%
Refrigerator	20.2%
Furniture	20.2%
Television	18.3%
Sewing - machine	6.5%
Recorder	2.8%
Washing - machine	0.9%
Ventilator	0.9%
Other	1.8%

The third group quoted their priorities as follows:

Refrigerator	37.5%
Butagaz	25 %
Furniture	18.6%
Television	6.3%
Sewing - machine	6.3%
Washing machine	6.3%

While a television set represents the priority N° = 1 of the first group, a range butagaz represents the urgent need of settlers in the second income - groups, and a refrigerator represents the aspiration of the third group.*

* For more details see table 10.

The third group quoted their priorities as follows:

Refrigerator	37.5%
Butagaz	25 %
Furniture	18.6%
Television	6.3%
Sewing - machine	6.3%
Washing machine	6.3%

While a television set represents the priority N° = 1 of the first group, a range butagaz represents the urgent need of settlers in the second income - groups, and a refrigerator represents the aspiration of the third group.*

* For more details see table 10.

	N.	%
5 Places assigned for washing clothes		
The hall	35	17.5
Any room	56	28
Court - yard	74	37
Bathroom	26	13
Kitchen	2	1
In front of the house	4	2
On the roof	3	1.5
6 Places assigned for lenghten clothes.		
On the roof	67	33.5
The courtyard	85	42.5
Inside the house (any room)	18	9
Outside the house	18	9
The balcony	12	6
7 Places assigned for breeding poultry.		
Don't breed	94	47
Cage on the roof	31	29.2
Court - yard	49	46.2
Cage in the Kitchen	17	16.1
Cage in a room	9	8.5
Cage in the balcony	-	-

	N.	%
8 Places assigned for throwing garbage		
Demolished area	112	56
The street	76	38.5
The canal		
In front of the house	10	5
On the roof	1	0.5
In the mountain		
Garbage man collects it		
9 Places where children usually study		
Any room	105	84.7
Sitting - room	19	15.3
Under the age of schooling		
Don't study		
N. / A.	76	
10 Places where children usually play		
Indoors	13	8.7
In front of the house	21	14.0
In the street	113	75.3
In the near club	3	2.
Not in the age of playing N/A	50	

Table 9

Social relationship

	N.	%
1 Persons visited in the settlement		
Don't visit any one	16	8
Relatives	37	18.5
Neighboors	14	7
Friends	7	3.5
Relatives and neighboors	39	19.5
Relatives and friends	16	8
Friends and neighboors	22	11
The three	49	24.5
2 Occasions of visiting people in the settement		
Death	151	
Marriage	86	
Feast	18	
Birth	2	
Sickness	43	
N./A.		
3 Mutual aid happened between		
Relatives	20	10
Neighboors	4	2
Friends	2	1

Table 9

Social relationship

	N.	%
1 Persons visited in the settlement		
Don't visit any one	16	8
Relative	37	18.5
Neighboors	14	7
Friends	7	3.5
Relatives and neighboors	39	19.5
Relatives and friends	16	8
Friends and neighboors	22	11
The three	49	24.5
2 Occasions of visiting people in the settlement		
Death	151	
Marriage	86	
Feast	18	
Birth	2	
Sickness	43	
N.\A.		
3 Mutual aid happened between		
Relative	20	10
Neighboors	4	2
Friends	2	1

	N.	%
relatives and neighboors	16	8
Relatives and friends	16	8
Neighboors and friends	19	9.5
All	123	61.5
N./K.		

4 Persons resolving conflicts between neighboors in the settlement

Older people	93	46.5
Nobody interfere	26	13.5
Neighboors	34	17
A friend to both sides	28	11
Relatives	6	3.5
Police		
No conflicts happen	13	6.5

5 Sources of borrowing if money is needed

Don't like the idea of borrowing	31	15.5
Neighboors	60	30
Relatives	54	27
From work	33	16.5
Gameya	9	4.5
Can always be in the safe side	13	6.5

Table 10

Social values related to housing

	N.	%
1 Factors which contribute to individual happiness		
Health	117	58.5
To live peacefully with children	18	9
To educate children	26	13
To own a decent dwelling	28	14
To Have money	3	1.5
N./K.	8	4
2 Things which can be done if having money		
To make a project	14	7
To educate children	35	17.5
To buy a land	6	3
Pilgrimage to Mecca	21	[illegible]
To build a new house	82	41
To buy clothes for children	11	5.5
To buy furniture for the house	26	13
Others	5	2.5
3 Furniture which can be bought if having money		
Bed	79	39.5
Sitting - room	31	15.5
Wardrobe	25	12.5
Table	10	5
Sofa	4	2

	N.	%
Two chairs	14	7
Wood sofa	14	7
Cupboard	4	2
Others.	19	9.5

4 Consumer durable which can be bought if having money

Butagaz	47	23.5
Furniture	46	23
Refrigerator	36	18
Television	43	21.5
Recorder	6	3
Water-heater		
Sewing machine	13	6.5
Washing machine	3	1.5
Ventilator	2	1
N./K.	4	2

V Upgrading programme.

I - Utility and facility needs.

II - Means of participation in upgrading program.

III - Training opportunities.

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 sence, 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 ressources, to ensure training and employment for adults and education for the young.

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

Accordingly, the study aimed to gather informations about the available utilities and services in the settlement, as well as the voluntary associations which can help as

vehicule 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 Rashed 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 Guizek governorate", "the sons of Sharkiyeh 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- <u>Utility and facility needs:</u>

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

1- The demand of a sewage system was asked by 78% of settlers as priority number one, and the most urgent needs of the settlement. It was followed by a piped water supply (21%) and by electricity (1%). The data shows that priorities in term of utilities are distributed between owners and tenants as follows

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

A \ B	Water	Sewage	Electricity	Total
Owner	32	119	1	152
Tenants	10	37	1	48
Total.	42	156	2	200

A big majority of owners and tenants (77.5% versus 77%) gave their priority to the connection of a sewage system to their settlement and consequently to their houses. A piped water system has been asked by both as priority N° = 2 it was followed by electricity.

2- The demand for a primary school was asked by 50.5% of settlers as priority number one in term of their basic social facilities needs. It was followed by a health unit (27%), a consumer cooperative (13%), and easy means of transportation to the outside world (5.5%).

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

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

II- <u>Means of participation in upgrading program</u>:

The informations gathered concerning the means of participation of settlers in the upgrading programme, were divided into the following subjects: - Housing improvement.
- 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 rolein maintaining privacy, health and stability.

The upgrading programme represents in itself the main incentive for active participation of settlers who considere it as a garantee of tenure security. By providing loans on credit, for the connection of water or sewage, the improving of roof or floor system, installation of a water closet,ect.., the local authorities ascertain indirectly the legacy of their wrights on the land, and on the houses they have erected.

Settlers are accordingly well motivated by the programme 95.4% (145) of 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, 88.2% (134) 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, (87.5%) they would prefer to rely on a private bricklayer (102) or on a private contractor (12) to accomplish the improvements needed, rather to depend on themselves (20) government realization which is considered very slow.

Settlers who refused this opportunity gave the following reasons:
- There are other priorities.
- House doesn't need improvement.
- Government realization is slow and bad.
- Interests of the government are usually high.

The correlation between the number of person/room per family, and the willingness to make housing improvement is significant (χ^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).

A \ B	Yes	No	N./A.	Total
-1	5	1	2	8
1-	81	13	11	105
3-	32	2	23	57
5-	9		10	19
+7	7	2	2	11
Total	134	18	48	200

As for renters who can not by housing law make any reparations in their dwelling, they (57.1%) 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 responsability of the owner.

2- Settlement facilities:

While housing improvements represent a household choice which reflect its needs and its aspirations in term of its private living arrangement, settlement improvements and settlements facilities represent popular and communal aspirations in terms of the whole living situation. The study team choosed to ask settlers about their agreement to participate in 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 97.5% (195) of settlers are willing to cooperate for the pavement of the streets mainly on a voluntary basis (178), nevertheless 17 of them welcomed the idea of participating in the pavement works providing a salary.

Concerning the welfare association, 92.5% (185) are willing to cooperate in its creation by giving money (119) or by participating in the building works (54). 11 settlers want to cooperate but don't know how to do it. The data shows that one settlers is ready to give the land necessary to the erection of the welfare association.

3- Training opporturities:

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

Opening classes for illiterate adults, and providing training opportunities for youth were considered as important. Consequently, settlers were asked about their willingness to attend literacy classes in their free time. 90.5% of illeterate settlers welcomed the idea and were ready to learn. Those who refused the idea, argued that education is efficient only in the childhood, that they don't have any aptitude or that they don't have time.

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

Wood work and carpentry	29%
Electricity	23%
Plumbing	18.5%
Building	9.5%
Mechanics	8 %
Carpentry	6 %
Carpets weaving	3 %
Lathing and filing	2.5%
Painting	2 %
N./K.	2.5%

85.5% of settlers affirmed the availability of local leaders or skilled workers who can in their opinion handle the mobilization of youth, their organization, and their guidance. The following names were cited by order of importance:

Names	Profession
Abd El Al	S.L. general authority for industrialization.
Hag Shehata	S.L. Helwan silk company .
Hosni Soliman	S.L. " " " .
Moussa Soliman	S.L. " " " .
Salem Tamaa	S.L. amunation company.
Hag Ibrahim Hosni	S.L. Helwan cement company.
Sheik Eid El Samea	Head police guard.
Hamed Hussein	S.L. Helwan silk company.
Rais Mostapha	Helwan Portland.

As we can see the chosen leaders are mainly skilled labourer working in the surrounding factories.

Some of them are members of the committee of disputes.

Only 14.5% (29) of settlers were unable to name an unofficial leader.(25) of them claimed that the settlement is deprived from persons who can take this responsability.

If a big majority, 85% of settlers, agreed to organize a vocational training programme for girls, 15% of them refused such idea. The first group suggested the following items in order of importance:

Sewing	27%
Knitting	11%
Embroidery	1.5%
Weaving	1 %
Carpet weaving	2 %
N. / K.	

24.5% of them affirmed the availability of women who can handle the organization of girls and their training. The remainders were unable to do so (10.5%), and a big majority did not know any woman in the settlement capable to undertake this responsability (65%).

One name only has been cited: Nadia El Sayed she is educated and engaged in the labour force in the ministry of social insurance.

As we can see from the aboce 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 ressources towards a better use of latent skiis are welcomed. They are hoping

for a better life and they are ready to invest, to work, in order to achieve such a goal.

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

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* For more details see table 11 - 12.

Table 11

Availability of services

1 The most important utilities needed by the settlement.

	N.	%
Water	42	21
Sewage	156	78
Electricity	2	1

2 The most important services needed by the settlement

Primary school	101	50.5
Health units	54	27
Consumer cooperatives	26	13
Transportation	11	5.5
Trade shop	2	1
Preparatory school	5	2.5
Others	1	0.5

3 Education problems confronted by the settlers

Lacking of schools	127	63.5
Lacking of transportation to school	15	7.5
Education opportunities very bad	13	6.5
Number of classes limited	2	1
School masters very opportunist	2	1
Escape of children from school		
No children in school age	41	20.5

	N.	%
4 Places where settlers usually cure themselves		
Hospital in Helwan	158	79
Private doctor in Helwan	40	20
Public hospital in Cairo	-	-
Traditional means	2	1
Medical barber		
5 Health problems confronted by settlers.		
Hospital are far (no means of transportation)	104	52
Free prescription is not efficient	29	14.5
Costs of cure are high	20	10
Lacking of pharmacy	13	9.5
Lack of doctors and Doctor's absences	8	2
Others		
No problems	20	10
6 Suggestions to confront health problem.		
Creation of governmental clinics in the settlement	93	46.5
Creation of health units in the settlement	55	27.5
Governmental control on hospitals	15	7.5
Creation of pharmacies in the settlement	19	9.5
Don't know	11	5.5

Table 12

Upgrading.

Owners.	N.	%
.1 Agreement to introduce utilities in the settlement and to share costs.		
Yes	145	95.4
No	7	4.6
N./A.	48	
.2 Monthly share of settlers.		
One L.E.	53	38
2	69	46.5
+3	23	15.5
N./A.	55	
.3 Nature of housing improvements done by settlers		
None	86	55.8
Add rooms	31	20.1
Add floor	9	5.8
Ceiling reparation	6	3.9
Floor reparation	9	5.8
Other (more than one)	9	5.8
Installatio of cesspool	4	2.8
N./A.	46	

	N.	%
4 Need of housing improvement.		
Yes	134	88.2
No	18	11.8
N./A.	48	
5 Nature of housing improvements needed		
Add floor		
Add room	56	41.3
Repair the floor	11	8.3
Construct or repair water closet	8	6
New roofing system	17	12.8
Paint the house	6	4.5
N./A.	66	
6 Persons which could be responsible for doing the reparation needed.		
The settlers themselves	20	14.9
A bricklayer	102	76.1
A contractor	12	9
N./A.	66	
7 Costs of the reparations.		
-500 L.E.	39	29.1
500-	32	23.7
1000	42	31.1
1500-	6	4.7
+2000	15	11.4
N./A.	66	

	N.	%
.8 Willingness to make reparations and to pay costs on credit.		
Yes	108	71.1
No	19	12.5
Yes but under my control	25	16.4
N./A.	48	
.9 Reasons for refusing such opportunity		
House doesn't need improvement	3	15.8
There are other priorities	5	26.3
Interests are high	3	15.8
Government realization slow and bad	8	42.1
N./A.	181	
<u>Renters</u>		
10 Willingness to share with the owner the costs of any reparations needed.		
Yes	27	57.1
No	21	42.9
N./A.	152	
.11 Monthly share of renters (supplement to the rent)		
One L.E.	25	92.6
2	2	7.4
+3	-	
N./A.	173	

	N.	%
12 Reason for refusing such opportunity		
Have no surplus	16	64
This is the responsability of the owner	3	12
Didn't ask for any reparations	6	24
N./A.	175	
13 Willingness to cooperate for the installation of a welfare association		
Yes	185	92.5
No	15	17.5
14 Means of cooperation		
Give money	119	64.3
Work	54	29.2
Give land	1	0.5
Don't know	11	6
N./A.	15	
15 Willingness to participate in classes for illiterate (illiterate only).		
Yes	103	90.5
No	11	9.5
16 Reasons of non-participation.		
Education not efficient in old age	11	9.1
Don't have time	3	27.3
Don't have aptitude	4	36.3

	N.	%
N./K.	3	27.3
N./A.		

17 Opinion concerning the most important training needed by youth.

Wood-work	58	29
Plumbing	37	18.5
Electricity	46	23
	5	2.5
Building	19	9.5
Carpentry	12	6
Mechanics	8	4
Carpets weaving	6	3
Painting	4	2
N./K.	5	2.5

18 Availability of settlers which can be responsible of the training of youth.

Yes	171	85.5
No	25	12.5
N./K.	4	2.

19 Agreement of settlers for girls vocational training

Yes	170	85
No	30	15

	N.	%
X 20 Most important training needed for girls		
Sewing	144	72
Knitting	22	11
Embroidery	3	1.5
Weaving	2	1
Carpet weaving	4	2
N./K.	25	12.5
21 Availability of women's settlers which can be responsible of girls training.		
Yes	49	24.5
No	21	10.5
Don't know	130	65
22 Need for a nursery		
In need	153	76.5
Not in need	47	23.5
23 Willingness to cooperate in the reparation of settlement's streets.		
Will cooperate	178	89
Will not cooperate	2	1
Will cooperate with a salary	17	8.5
N./K.	3	1.5

Summary of Statistical Data

Summary of statistical data

I Socio-Economic characteristics of Householders

Average age	42.8 years
Marital status	92.5% married
Mean years of marriage	18.9 year
Education status	57% illiterate
Origin	86.2% rural
Occupation	64% secondary 25.5% tertiary 0.5% primary
Average monthly income	35.6 L.E.

II Household characteristics.

Household pattern	90% nulear
Average number of persons/ Household	5.9
Average number of children/ Household	3.9
Average total Household income	40.1 L.E.
Average per capita income	8.525 L.E.
Average monthly expenditure on rent	2.7 L.E.
Average monthly expenditure on electricity	175 piasters
Average monthly expenditure water	131 piasters
Average monthly expenditure on flushing	132 piasters
Average monthly expenditure on transportation	2.80 L.E.
Average monthly expenditure on food	31.2 L.E.

III Housing Conditions

1. The building

Tenure	76% Owner
Type of building	63% Single storey
Division of building	84% into rooms 11% into apartment
Average number of independent rooms	1 725
Average number of Household/House	3.54
Building materials	48% Red bricks 20% Stone
Roof system	65% joint and pertinand
Floor system	51.5% Cement

<u>Building Procedures</u>

Householders who built their house	64.6%
Responsible of the building procedure	87.6% Bricklayer
Sources of financing	52 5% Family saving

2. The dwelling unit.

Average number of years in the dwelling	14.15 year
Average number of rooms	2.790
Average persons/room.	3.175
Have water	50.5%
Have electricity	76.5%
Have bathroom	10.5%
Have kitchen	17%

	Have water colset.	Private	54%
		Shared	41%
IV	Satisfaction with housing conditions Satisfied		83%
	Main sources of satisfaction		50% ownership
			25% near schools and work
	Main sources of discontent		59% lack of facilities
			13% smallness of the dwelling.

Comparison between Owners and tenants.

	Owner	Tenant	Total
Number of room			
1	25	39	64
2	56	8	64
3	34	1	35
4	24		24
+5	13		13
Person/room			
<1	6	2	8
1-	96	9	105
3-	32	25	57
+5	18	12	30
Satisfaction			
Yes	136	30	166
No	16	18	34
A menities			
Kitchen			
Yes	33	1	34
No	117	45	162
Shared	2	2	4

	Owner	Tenant	Total
Bathroom			
Ye.	20	1	21
No	132	47	179
Water close			
Yes	97	11	108
No	6	4	10
Shared	49	33	82
Water			
Connected	82	19	101
Public or private tap	70	29	99
Electricity			
Yes	116	37	153
No	36	11	47
Total	152	48	200

Comparison between different income group.

	<30 L.E.	30-	+70	Total
Tenure status				
Owner	43	95	14	152
Tenant	32	14	2	48
Number of rooms				
1	44	20		64
2	10	49	5	64
3	7	22	6	35
4	1	18	5	24
+5	13			13
Persons/room				
<1	2	6		8
1-	33	62	10	105
3-	25	26	6	57
+5	15	15		30
Satisfection				
Yes	60	93	13	166
No	15	16	3	34
Amenities				
Kitchen				
Yes	5	21	8	34
No	70	86	6	162
Shared		2	2	4

	< 30 L.E.	30-	+70	Total
Bathroom				
Yes	4	12	5	21
NO	71	97	11	179
Watercloset				
Yes	32	66	10	108
No	5	5		10
Shared	38	38	6	82
Water				
Connected	31	60	10	101
Public or private tap.	44	49	6	99
Electricity				
Yes	50	87	16	153
No	25	22		47
Total	75	109	16	200

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