

Chapter 5 Results of Household Survey



Appendix 5 Results of Household Survey

I. Summary of Citizens Awareness Survey

Citizens awareness survey was implemented by counterparts of each urban commune. Three hundred (300) households were selected for the survey. In each commune, one hundred (100) households categorized by three income levels (40 high income households, 40 medium, and 20 low) were selected. The interviewees of those selected households were mostly cooperative for the survey.

Part A - General Conditions

1. Interviewee

Figure A1 shows the status of the interviewee. Fourty three percent (43%) of interviewees were housewives, followed by masters of houses and children at 30% and 18% respectively.

2. Residence Type

The residences of Safi city are mostly detached villas and economic habitations (flats). The economic habitations are classified into high density and medium density by dwelling units. Figure A2 shows the residence types in which interviewees live. In order to classify the income level, the residence type is also used. Figure A3 shows the residence types of the interviewees classified by income level. Sixty seven percent (67%) of total households in high income level live in detached villas. Most of households in medium income level live in economic habitation of medium density. Households in low income level are mostly in economic habitation of high density.

3. Cleanliness Conditions

Cleanliness conditions are mostly fair both in front of the house and on the street, as shown in Figure A4. The awareness of interviewees on the cleanliness condition at the collection station are mostly not available because the waste is directly collected by the collection workers in front of each house. Figure A5 shows the awareness by each urban commune. Most of interviewees in those three communes judge that the cleanliness condition in front of the house is good or fair, while the figures which judge good or fair on cleanliness condition on the street are relatively low. Especially in Biada urban commune, 44 out of 100 interviewees think that the condition of the street is poor.

Part B - Household Attributes

1. Number of Persons Living in the Household

The average family size of Safi city is at 5.2 in 1994 census. This figure appears obviously in Figure B1 which shows the distribution by the family size of surveyed households. The households in Biada and Zaouia urban communes have larger family size than Boudheb urban commune as shown in Figure B2.

2. Status of House

Sixty six percent (66%) of surveyed households have privately owned their houses, and 26 % of those households have rented, as shown in Figure B3.

3. Number of Years Living in the House

Figure B4 shows the number of years living in the house by income level. All the households of high income level have not lived in their houses over 20 years, while 23% of middle and 41% of high income level have lived in their houses over 20 years.

4. Income Earners and Total Family Income

Most of households have one income earner, at 236 out of 300 households, as shown in Figure B5. Although 101 interviewees did not comment on the total family income, it is supposedly less than 5000 DH per month at lot of families, as shown in Figure B6.

5. Share of Household Income by Category

Figure B7 shows the share of household income by category. Food and clothing account occupies 43% of the family expenses, followed by transportation at 22% and house rent/loan repayment at 21%. Transportation has a large share in the households of high income level.

Part C - Household Solid Waste Management Practice

1. Storage Container in the House

Figure C1 (1) shows the type, size and location of the storage container in the house. Eighty three percent of 300 households use plastic bin (mostly plastic bucket). Most of those containers have a capacity of less than 20 liters. And 67% of the containers are placed in the kitchen. Two hundred ninety six (296) out of 300 households use one container only in their houses.

Eighty percent (80 %) of the households use plastic bags for lining of the containers, as shown in Figure C2 (2).

2. Discharge Practice

Figure C2 (1) shows that the waste is discharged put in one large container and taken out at 56% of the households, and each container used in the house being taken out separately is at 32%. However, these two practices are presumed the same because most of households use only one container in their houses. Interviewers or interviewees probably misunderstanding the meaning of the question.

In the members of households, mothers mainly discharge the waste outside the houses at the rate of 48%, and at 35% of households are not fixed, as shown in Figure C2 (2).

Ninety two percent (92 %) of the households discharge the waste from the houses once a day, as shown in Figure C2 (3).

Most of the waste from the houses is discharged between 6 AM and noon as shown in Figure C2 (4). Forty one percent (41 %) of the households discharge the waste from the house between 6 and 8 AM, and 31% are between 8 and 10 AM and 22% are between 10 AM and noon.

As shown in Figure C2 (5), 286 out of 300 households think that one of problems is bad odor and 192 households complain the attraction of insects while the waste is kept inside their houses.

All the households do not separate any waste items for recycling.

3. Collection Service

The wastes are mostly picked up in front of the houses or handed directly collection workers, as shown in Figure C3 (1).

As shown in Figure C3 (3), 77% of the interviewees satisfy the collection service, however, there are some complaints; 15 interviewees complain about noise of collection trucks, 13 interviewees complain about the leavings from the collection service, and so on. By commune, 21 out of 100 interviewees of Biada urban commune reply that the collection service is not provided satisfactory, and 38 interviewees did not reply to the question at Boudheb urban commune.

4. Willingness to Assist in Efforts to Improve SWM

Figure C4 shows the willingness of interviewees to assist in efforts to improve SWM by commune. At Zaouia urban commune, 96 out of 100 interviewees have willingness to sweep the road in front of the house, then 84 interviewees have willingness to discharge the waste in plastic bin. At Boudheb urban commune, 80 interviewees have willingness to discharge the waste in plastic bags, then 35 interviewees have willingness to separate newspapers, plastic and glass for recycling. And at Biada urban commune, 96 out of 100 interviewees have willingness to take the waste personally to a 50-100 meters distant collection station, then 60 interviewee have willingness to sweep the road in front of the house.

Part D - Cleanliness Campaigns

As for cleanliness campaigns, there are only 18 out of 100 interviewees who remember the campaigns implemented in 1996, while most of other interviewees of Boudheb and Zaouia urban communes remember them, as shown in Figure D (1). Most of those interviewees of Boudheb and Zaouia communes remember that the campaigns took place during summer or during autumn, and know the campaign message or purpose, as shown in Figure D (2) and (3).

Figure D (4) shows the number of interviewees classified by what sources informed about the campaign. At Zaouia urban commune, 80 out of 100 interviewees have been informed about it through television, then 67 interviewees have been informed through loud speakers. At Boudheb urban commune, 73 interviewees have been informed through loud speakers.

Figure D (5) shows the effects of the campaign, and there is the difference between Boudheb and Zaouia urban communes. Seventy seven (77) out of 100 interviewees of Boudheb urban commune replied that they were influenced by the campaign; however, 44 out of 100 interviewees of Zaouia urban commune did not get any influence and 52 interviewees did not comment on it.

Figure D (6) shows if the interviewees changed their idea or behavior after the campaign. Sixty nine interviewees of Zaouia urban commune admit it in idea and four interviewees also admit in behavior. However, these figures are somewhat doubtful because 44 interviewees replied that they did not get any influence in preceding question.

Awareness of the interviewees on the improvement of cleanliness in the city is shown in Figure D (7). Most of interviewees think that the city has improved in cleanliness, especially at Boudheb urban commune in which all interviewees admit that the cleanliness of the city has improved.

Part E - Others

Figure E shows the opinion of interviewees about the most serious problems of infrastructures by commune. Ninety six (96) out of 100 interviewees of Biada urban commune insisted that SWM is the serious problem facing the city, while there are few opinion about that at the other two communes. Regarding public transport, Zaouia urban commune is the most, at 79 out of 100 interviewees. At Zaouia and Biada urban communes, many interviewees insisted that roads are the serious problem, at 90 and 84 respectively. Fourty one interviewees at Biada urban commune insisted that the sewerage is the serious problem. As for housing, seventy interviewees insisted that it is the serious problem.

Part A - General Condition

Fig. A1 Interviewee

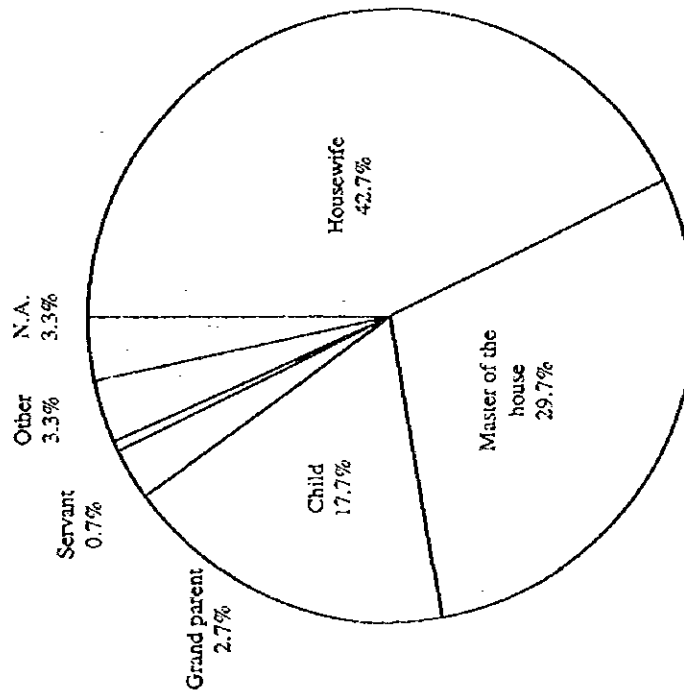


Fig. A2 Residence type

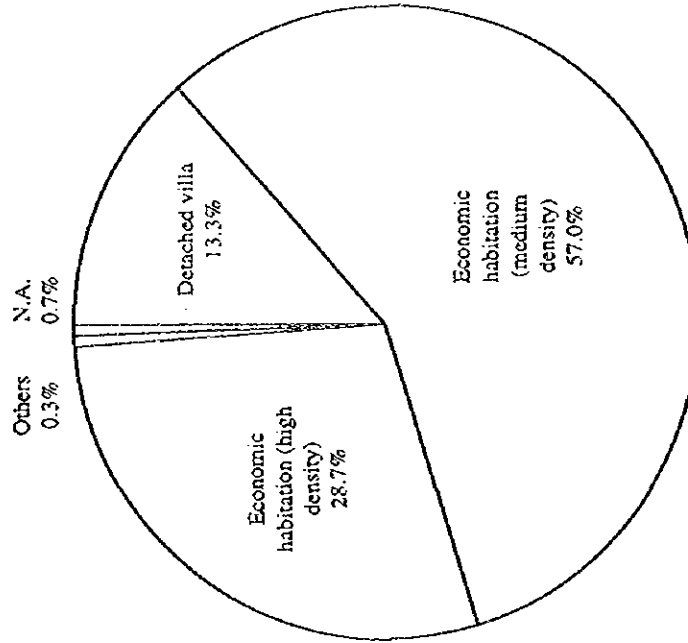


Fig. A.3 Residence Type by Income Level

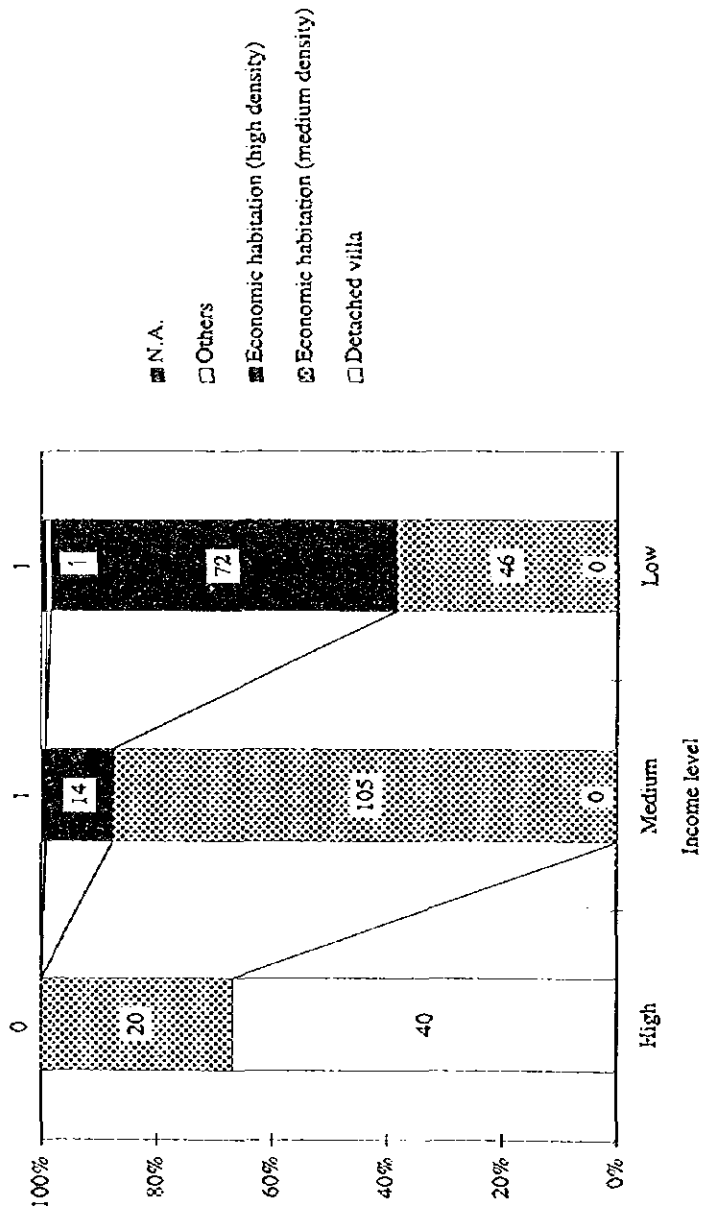


Fig. A4 Cleanliness Conditions

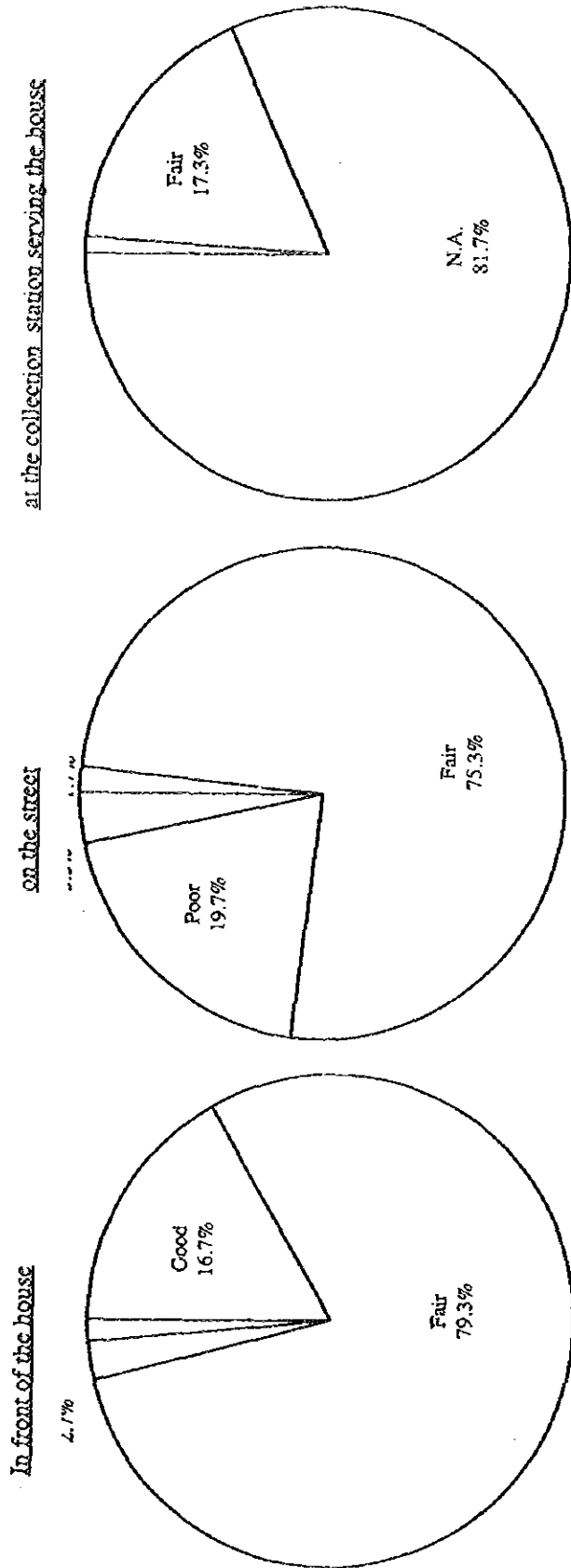
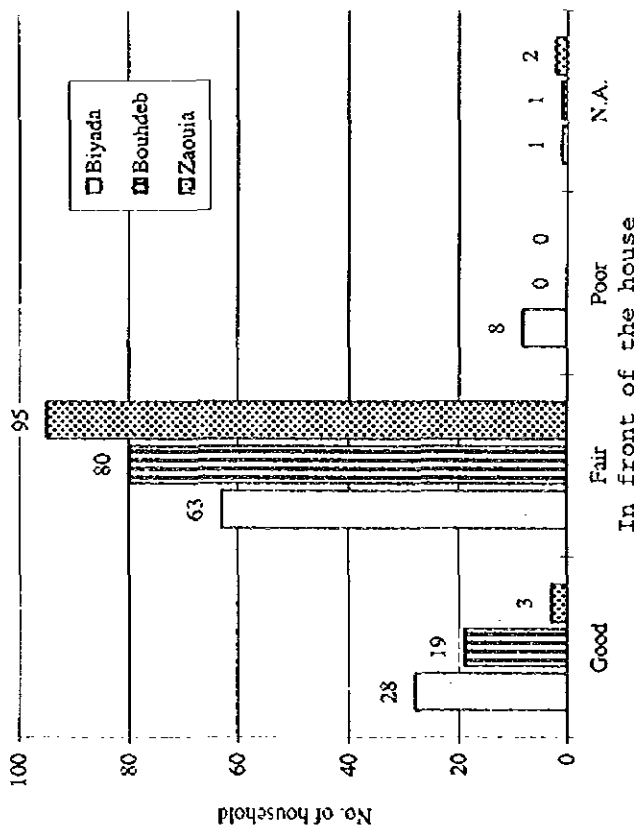
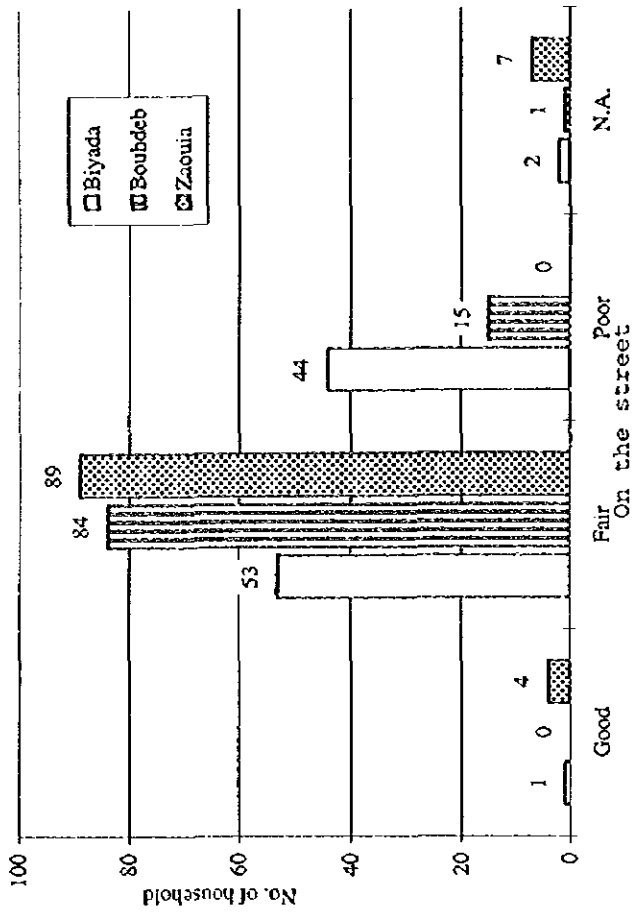


Fig. A.5 Cleanliness Conditions by Commune



Part B - Household Attributes

Fig. B1 Number of persons living in the household

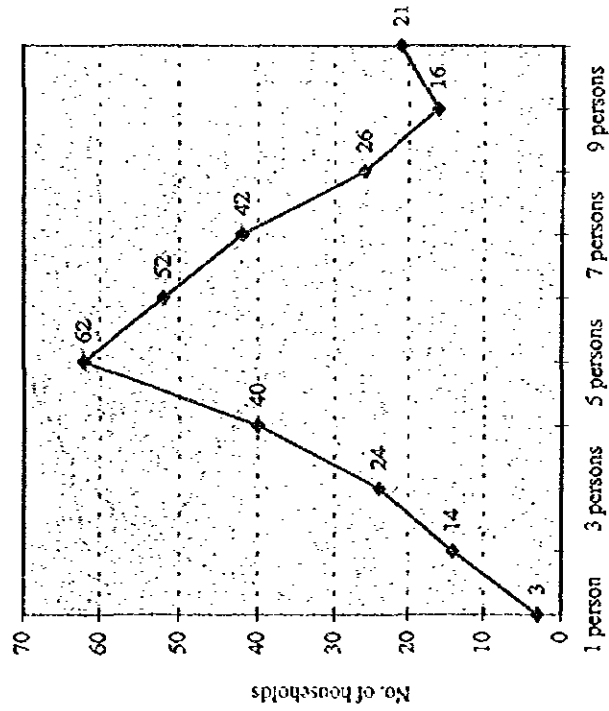


Fig. B2 Number of persons living in the household by commune

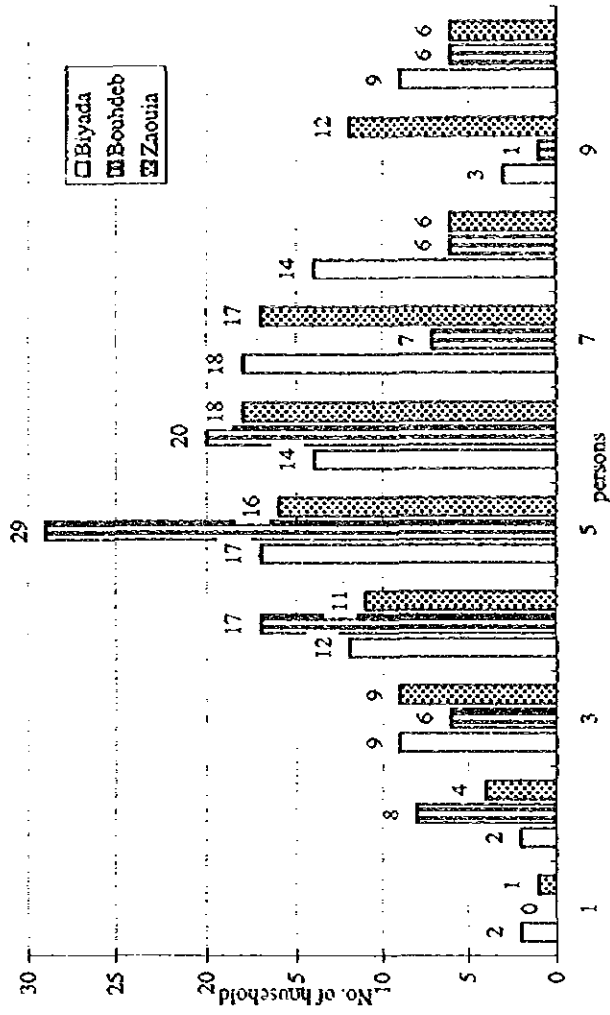


Fig. B3 Status of house

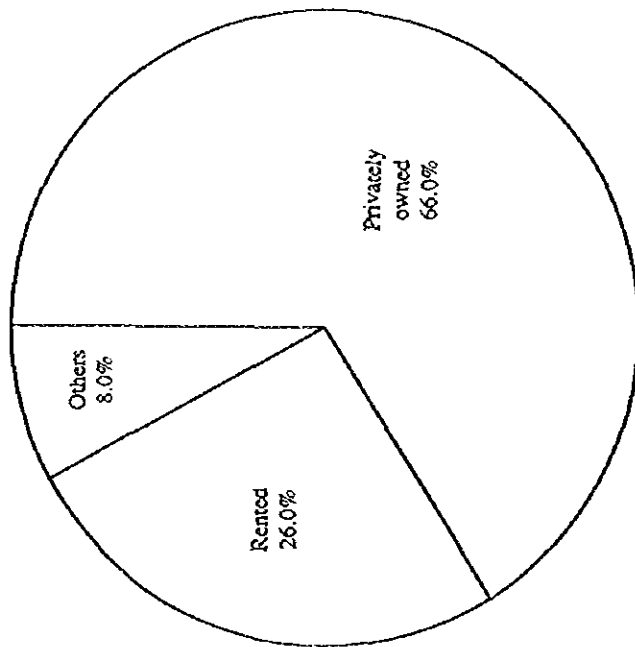


Fig. B4 Number of Years Living in the House by Income Level

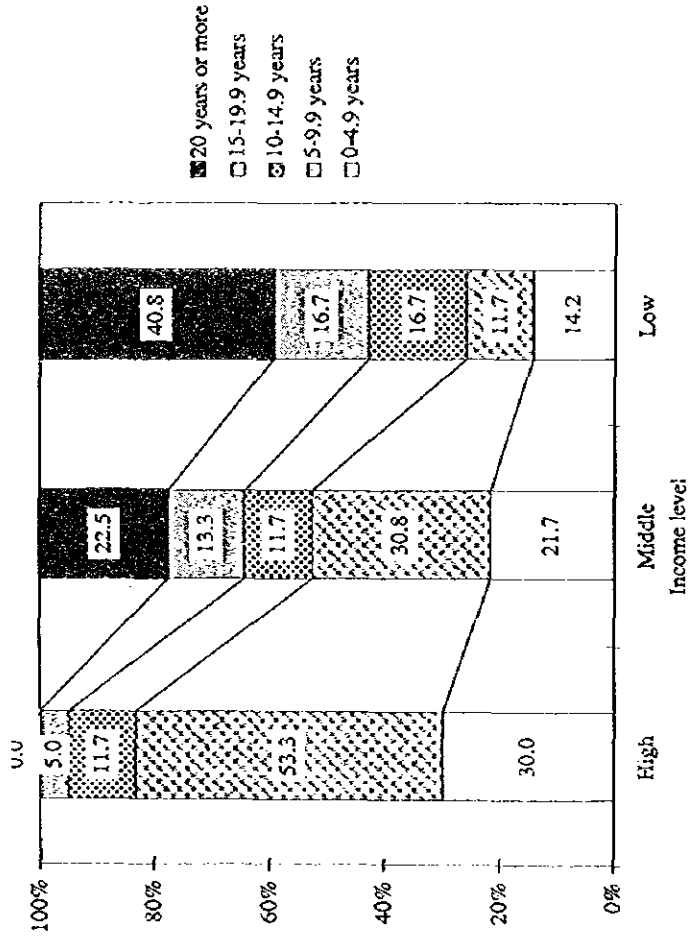


Fig. B5 Income earner

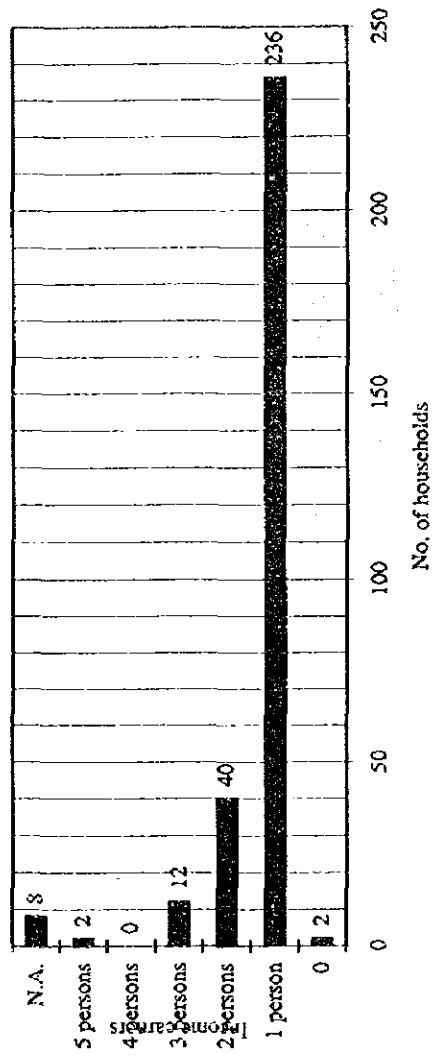


Fig. B6 Total family income

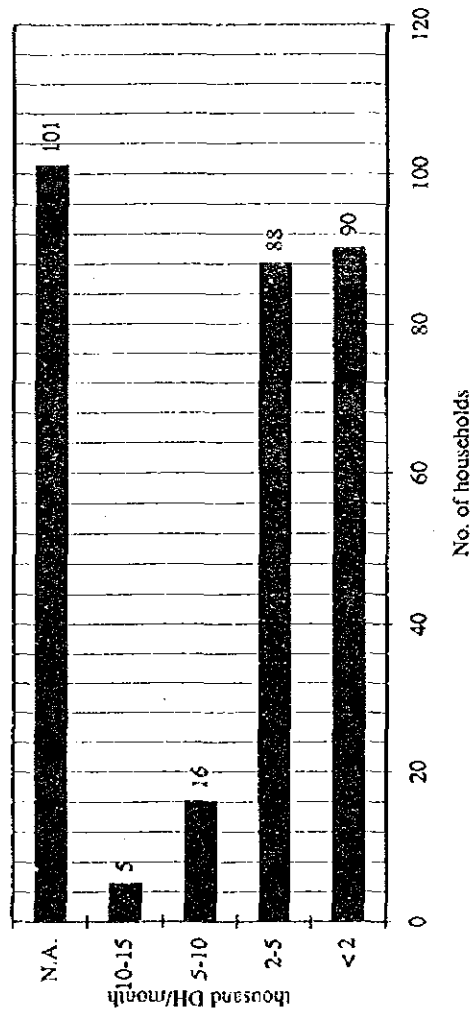
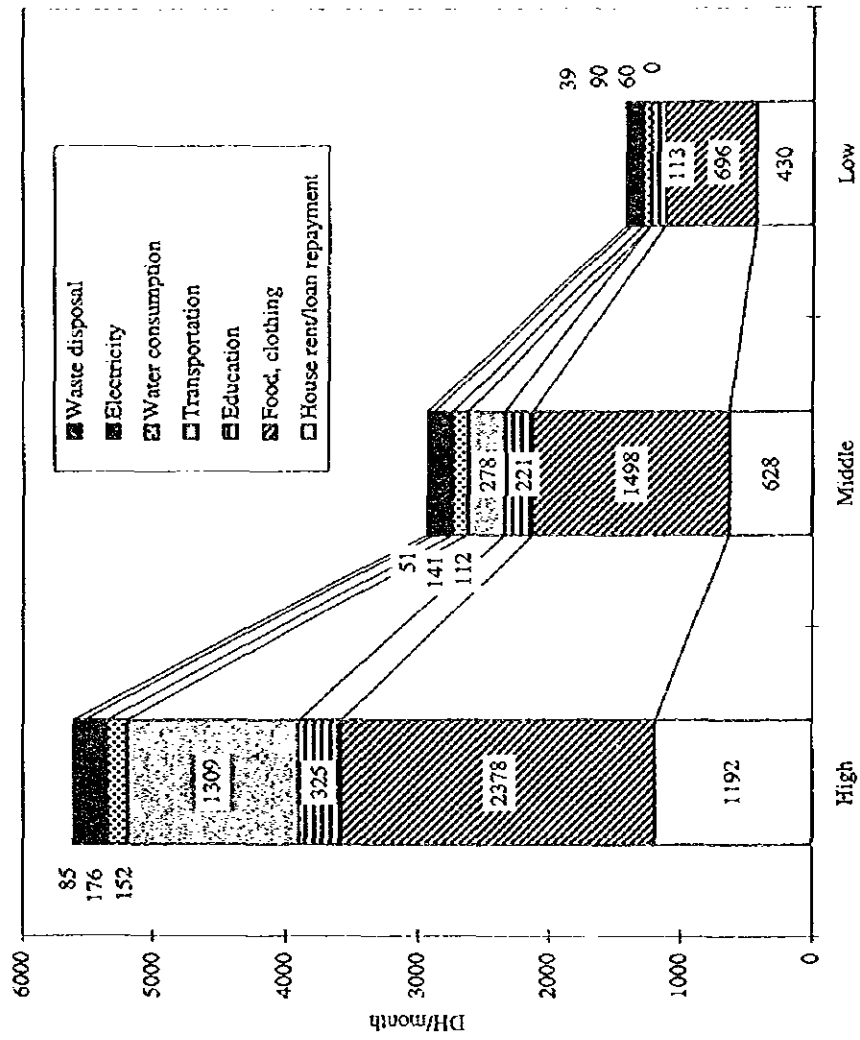
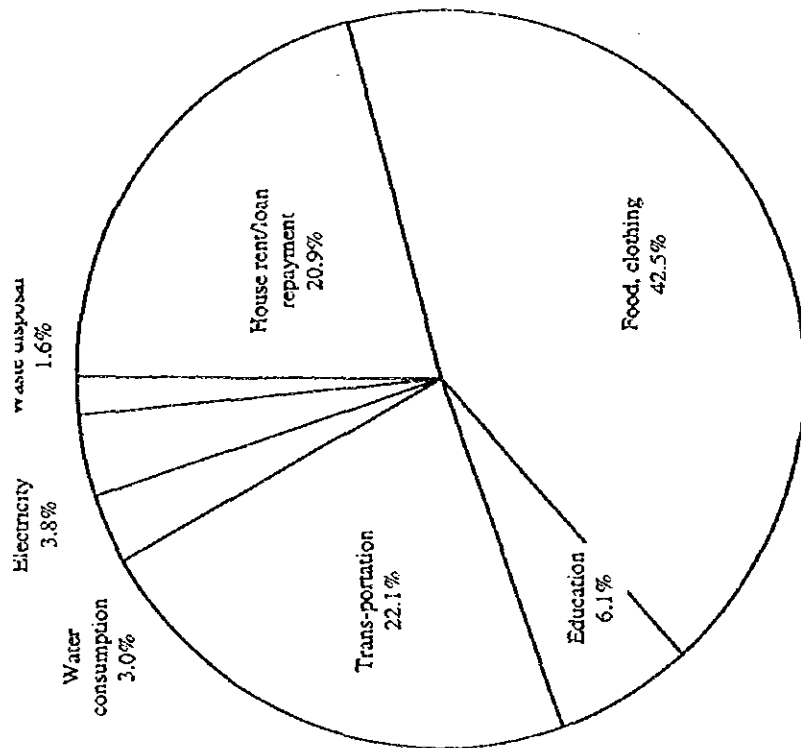


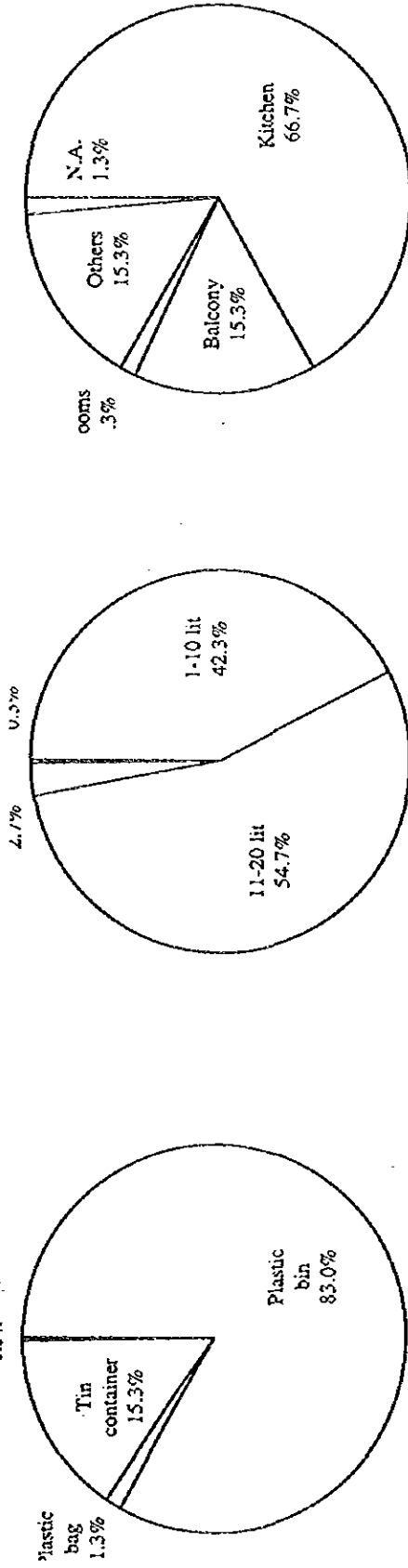
Fig. B7 Share of household income by category



Part C - Household Solid Waste Management Practice

Fig. C1 Storage container in the house

(1) Containers used inside the house for storage of waste



(2) Are plastic bags used for lining of the containers ?

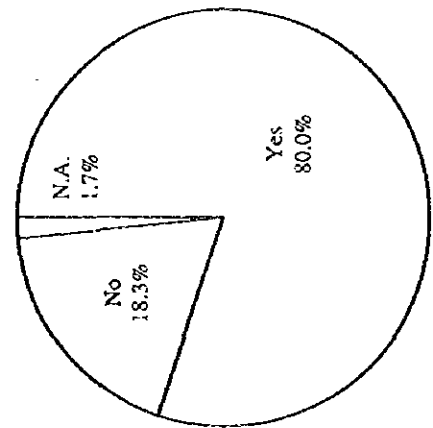
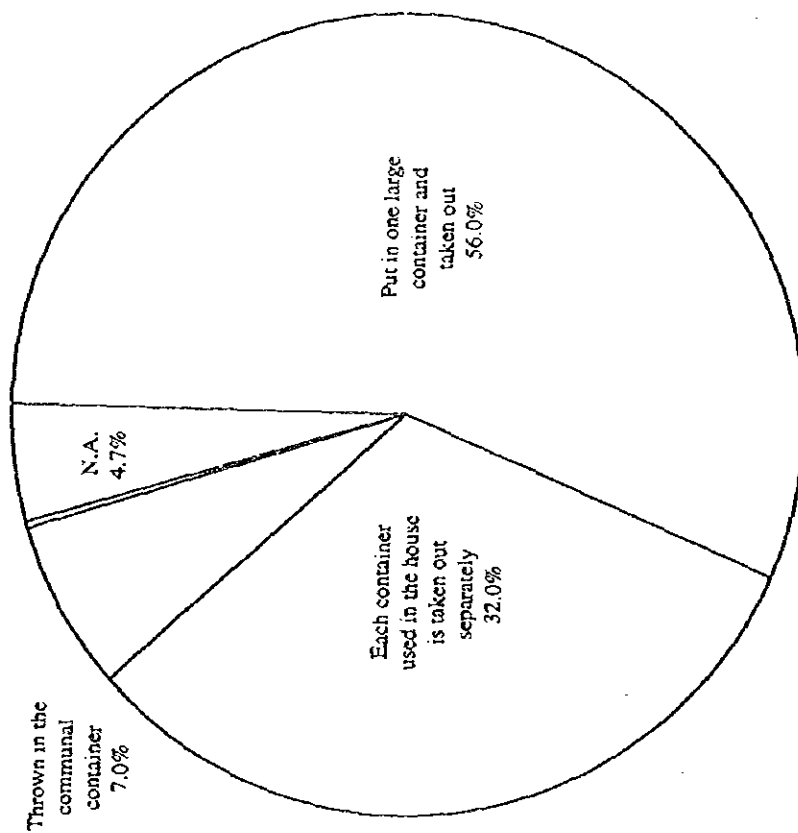
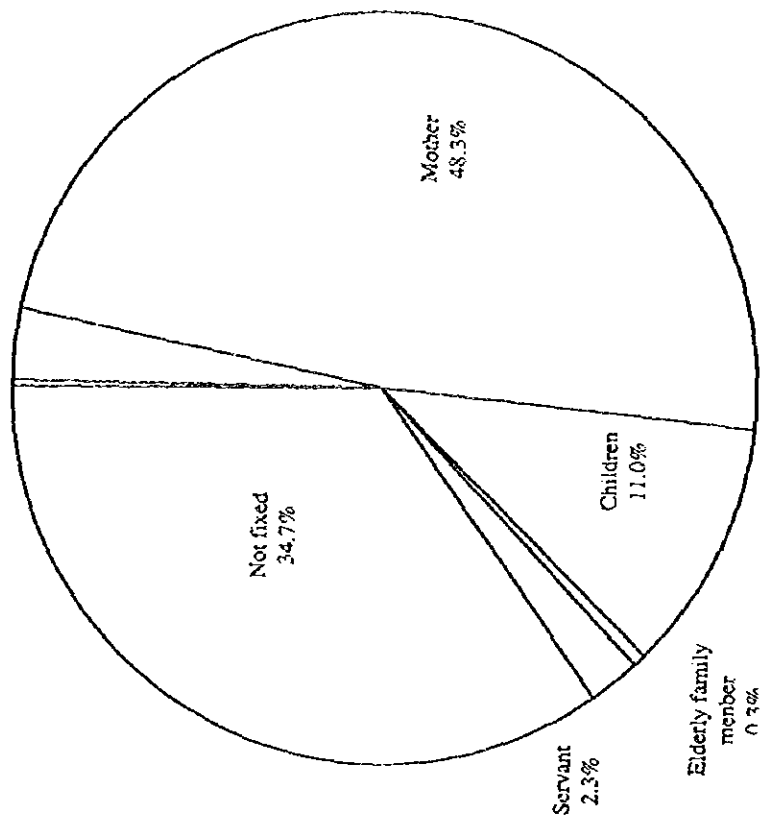


Fig. C2 Discharge Practice

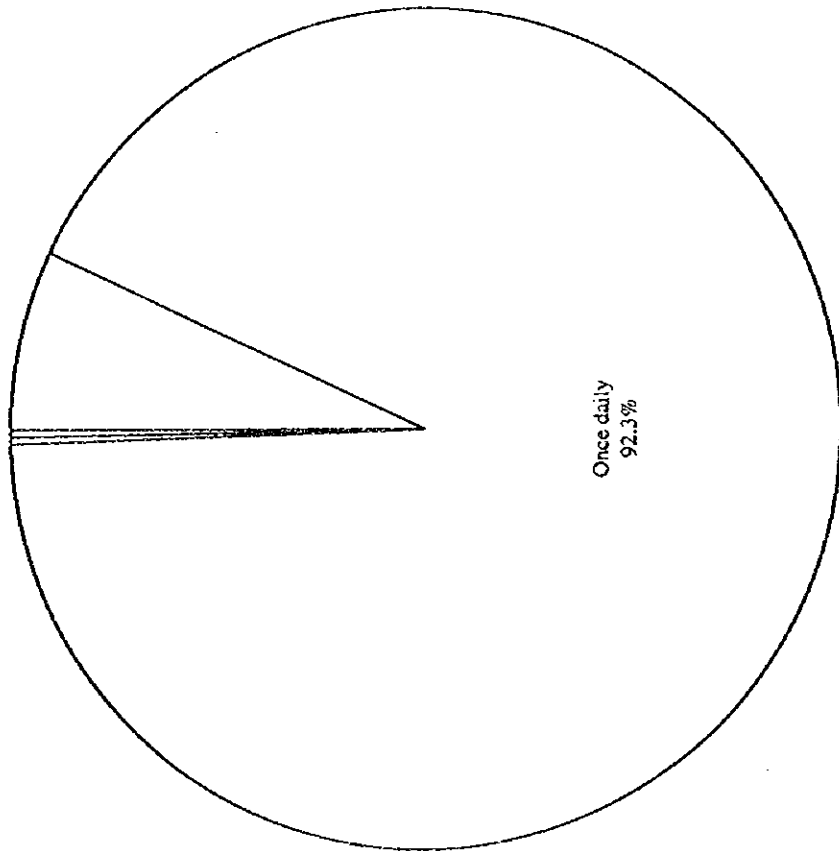
(1) How is the waste discharged from the house ?



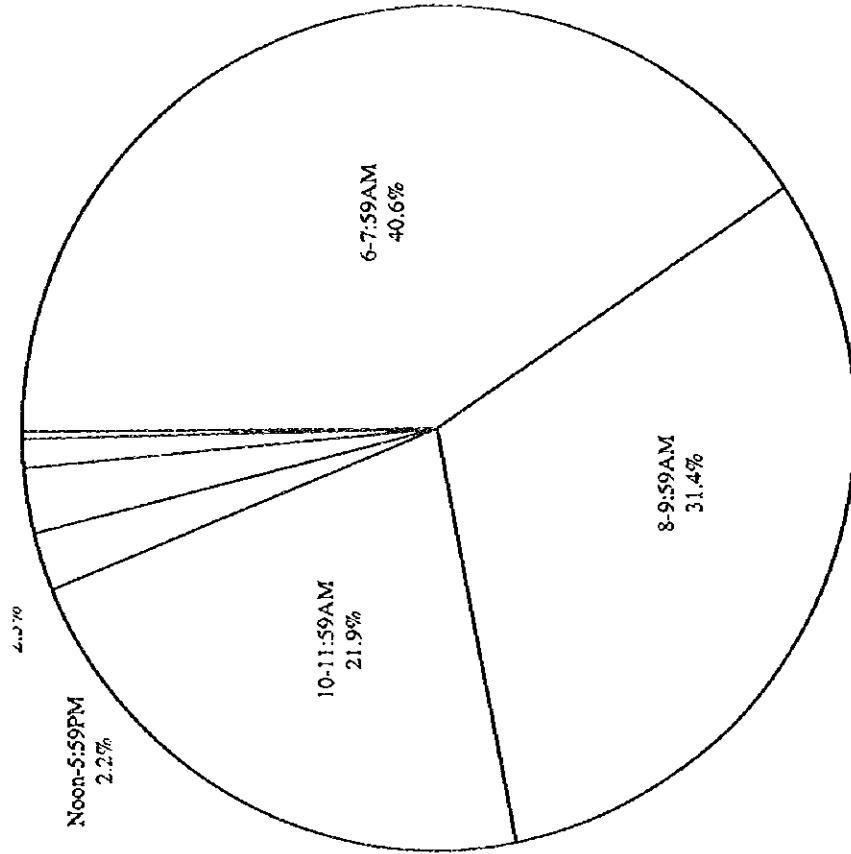
(2) Who mainly discharges the waste outside the house ?



(3) How often do you discharge the waste from your house ?



(4) During what time do you discharge the waste from your house ?



(5) Do you have any problems with the waste while it is kept inside the house ?

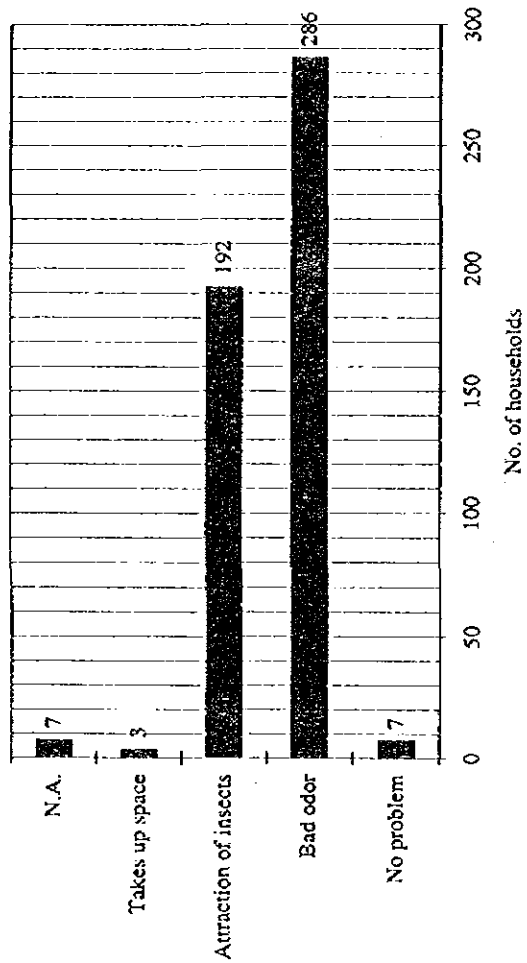
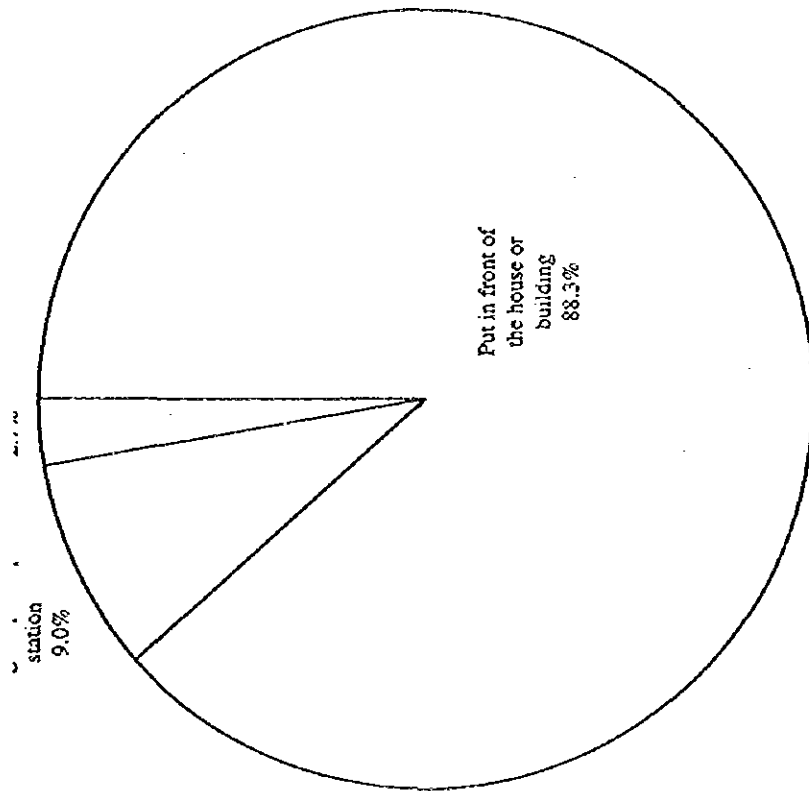
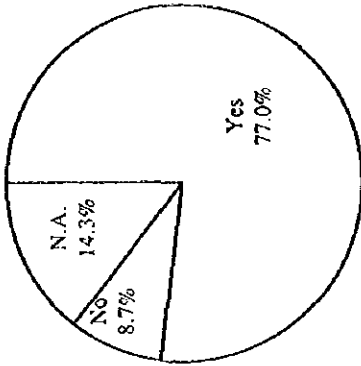


Fig. C3 Collection Service

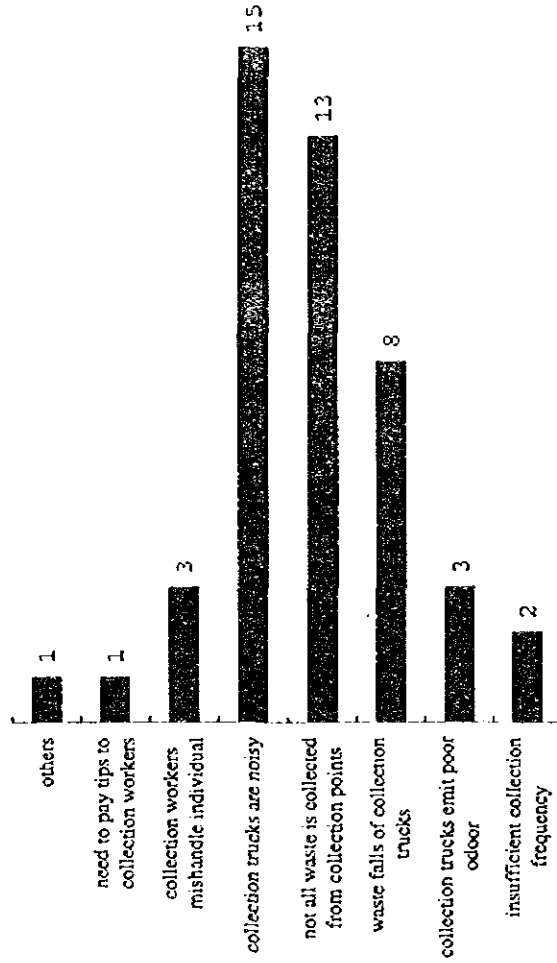
(1) Where is the waste put outside the house for collection ?



(3) Is the collection service provided satisfactory ?



the reasons for not being satisfied with the service



Is the collection service provided satisfactory ?

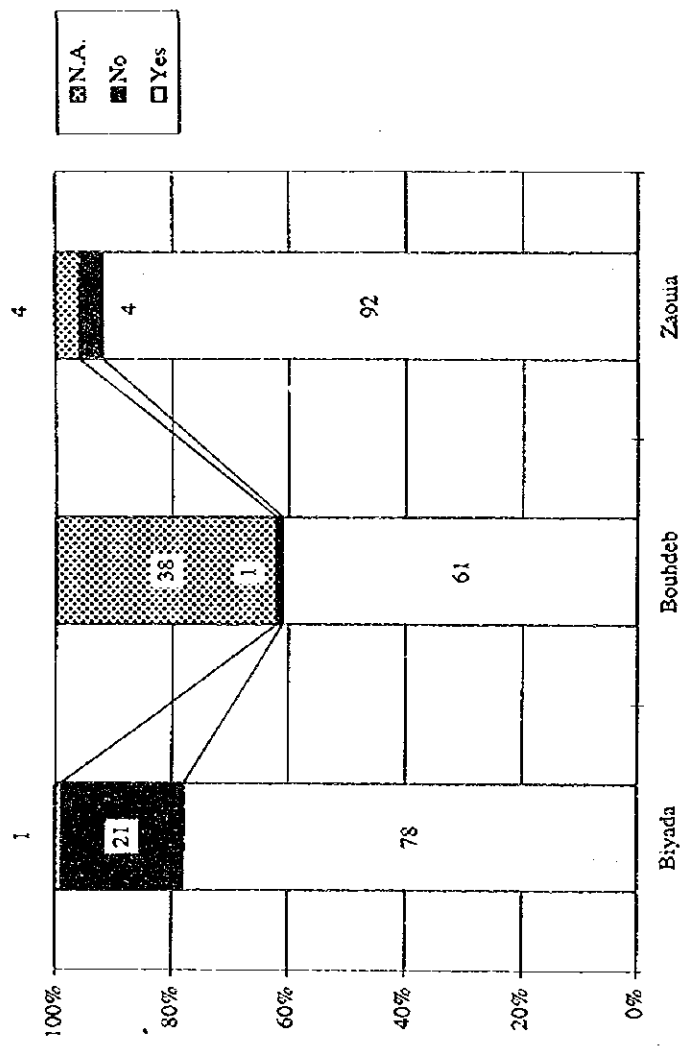


Fig. C4 Willingness to assist in effortst to improve SWM

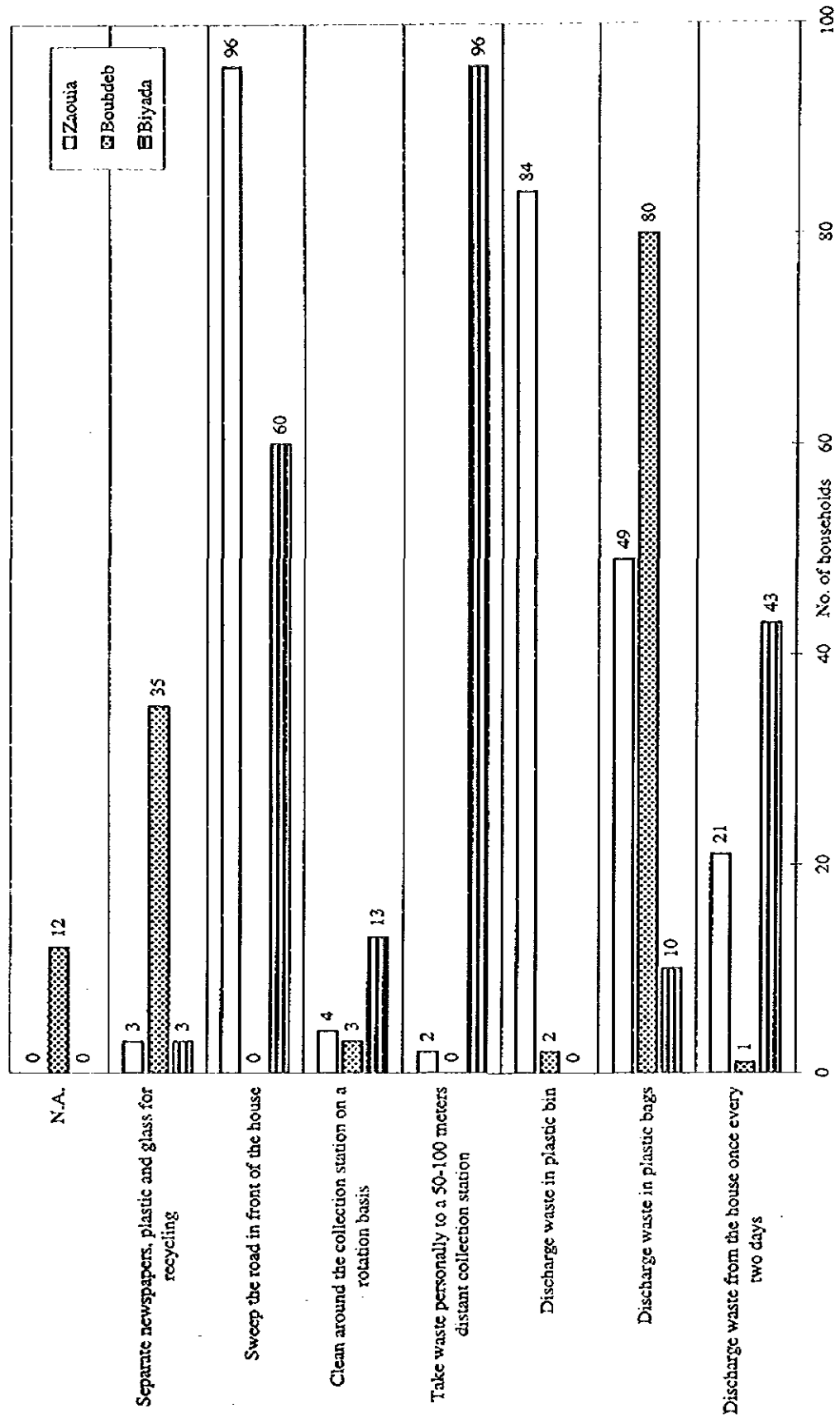
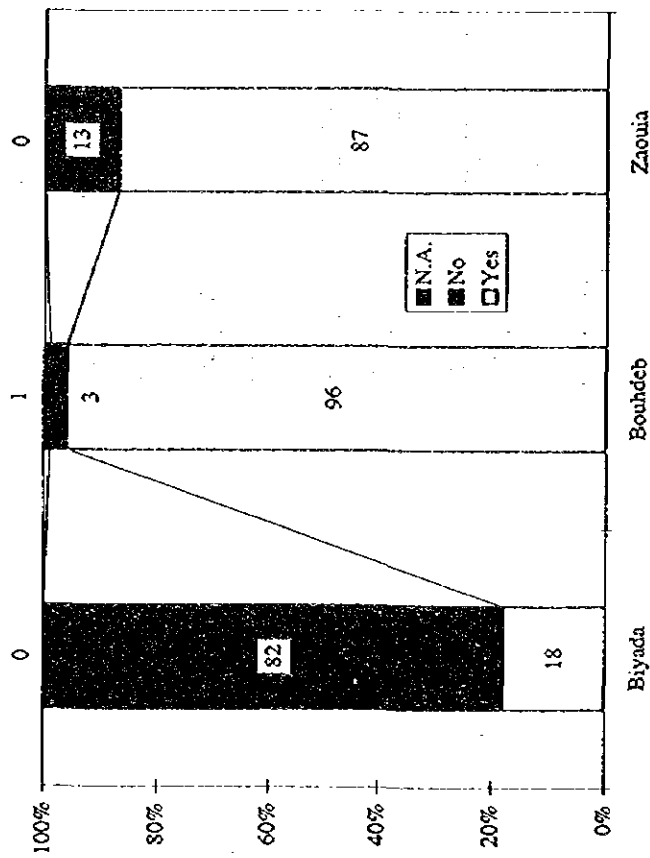
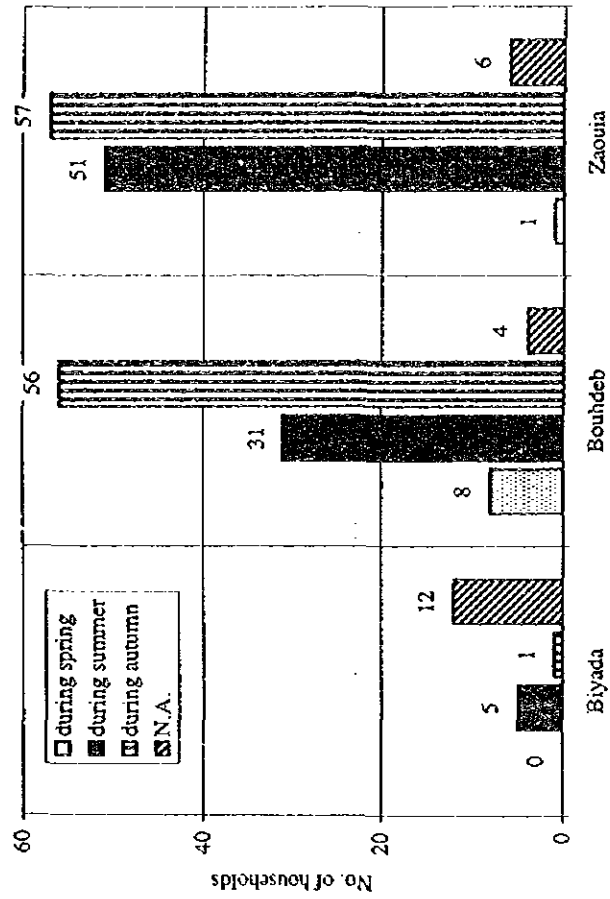


Fig. D Cleanliness Campaign

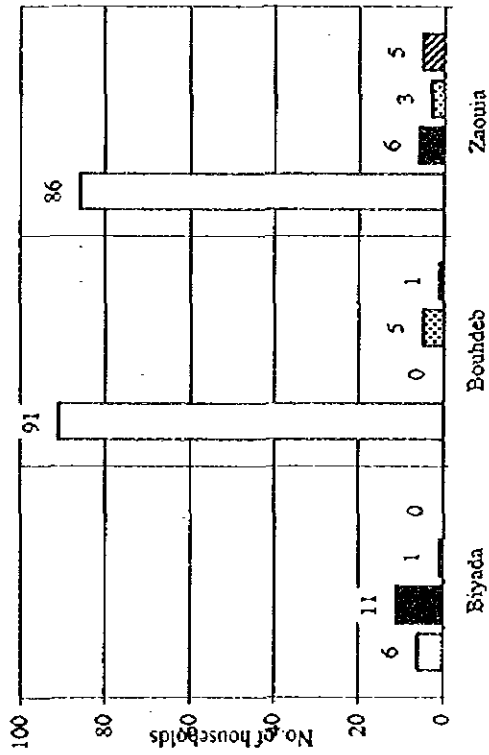
(1) Do you remember when any cleanliness campaigns that have taken place in your neighborhood in 1996 ?



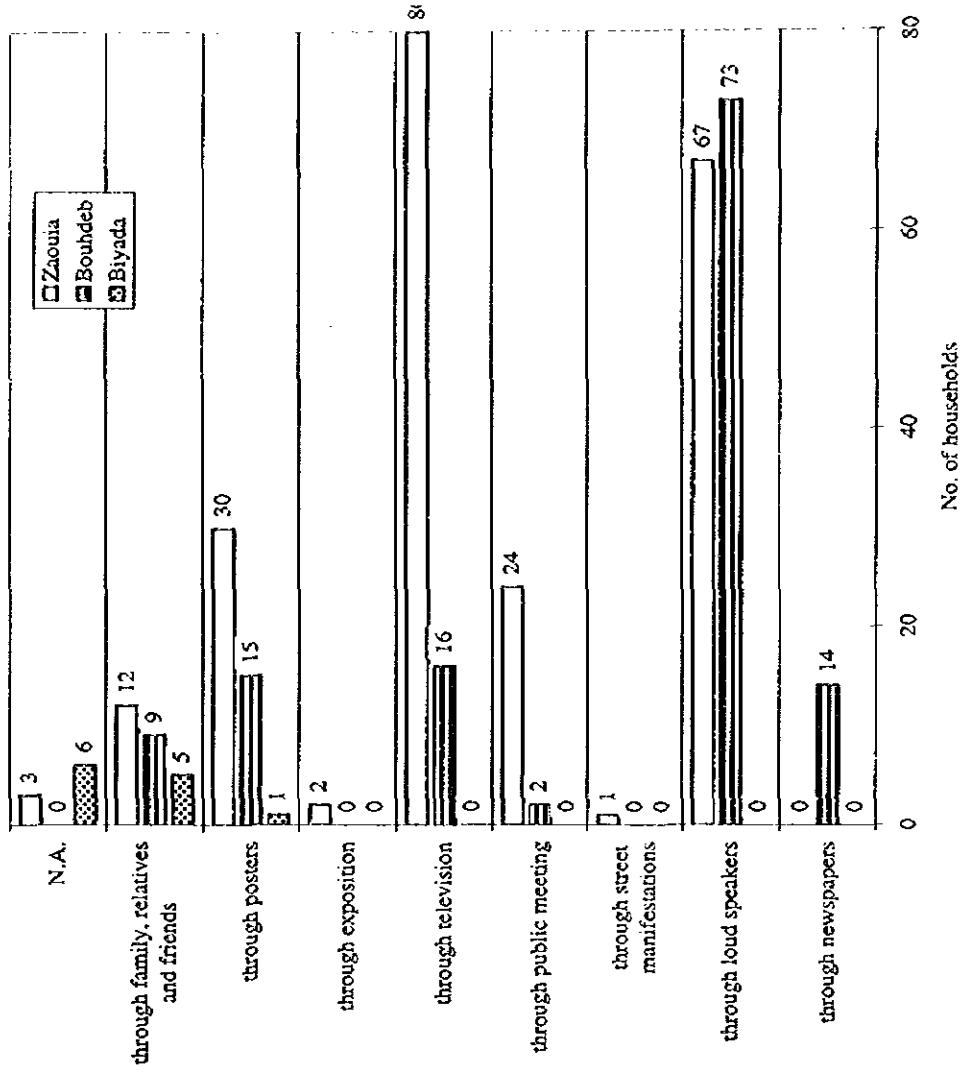
(2) Do you remember when it took place ?



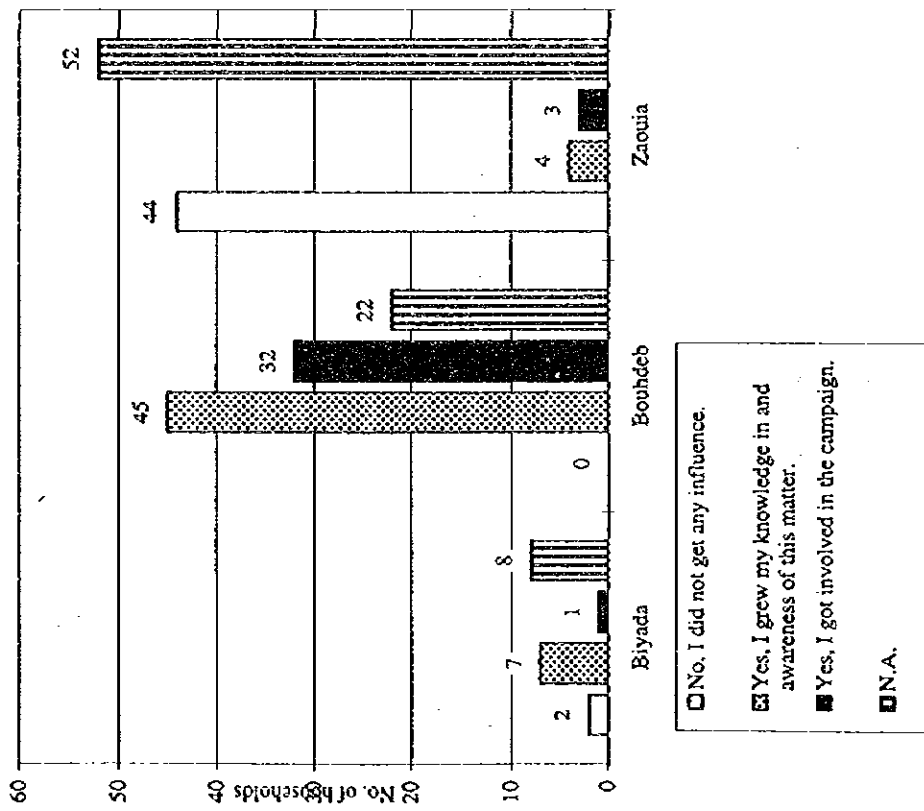
(3) Do you know the campaign message or purpose ?



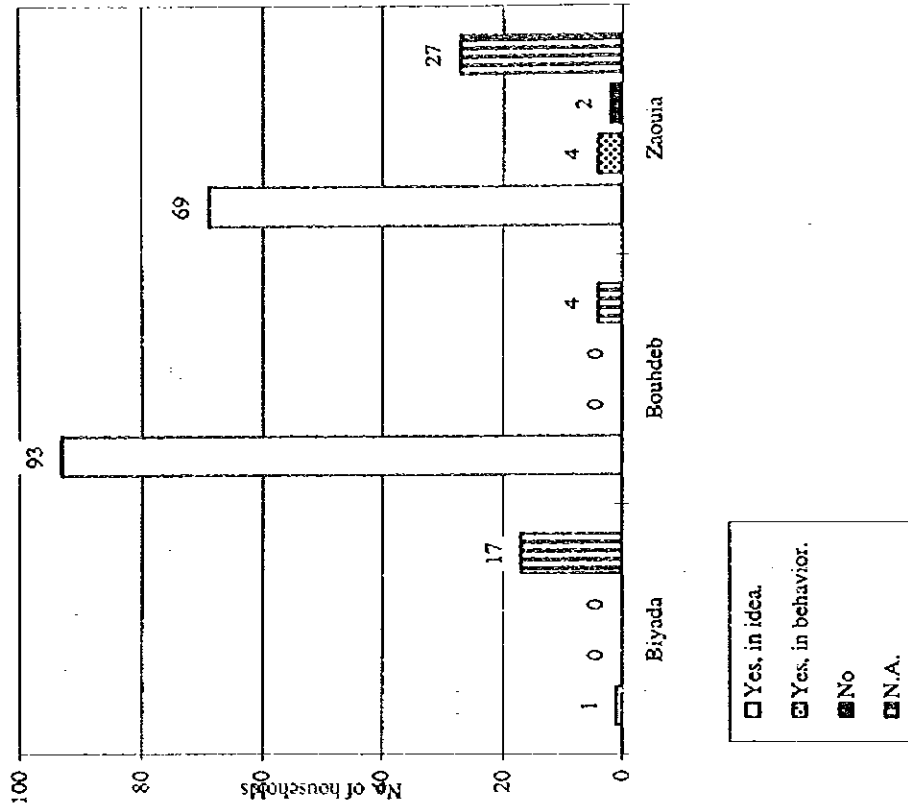
(4) How have you been informed about the campaign ?



(5) Did the campaign bring any influence to you ?



(6) Did you change your idea or behavior after the campaign ?



(7) Do you think the city has improved in cleanliness ?

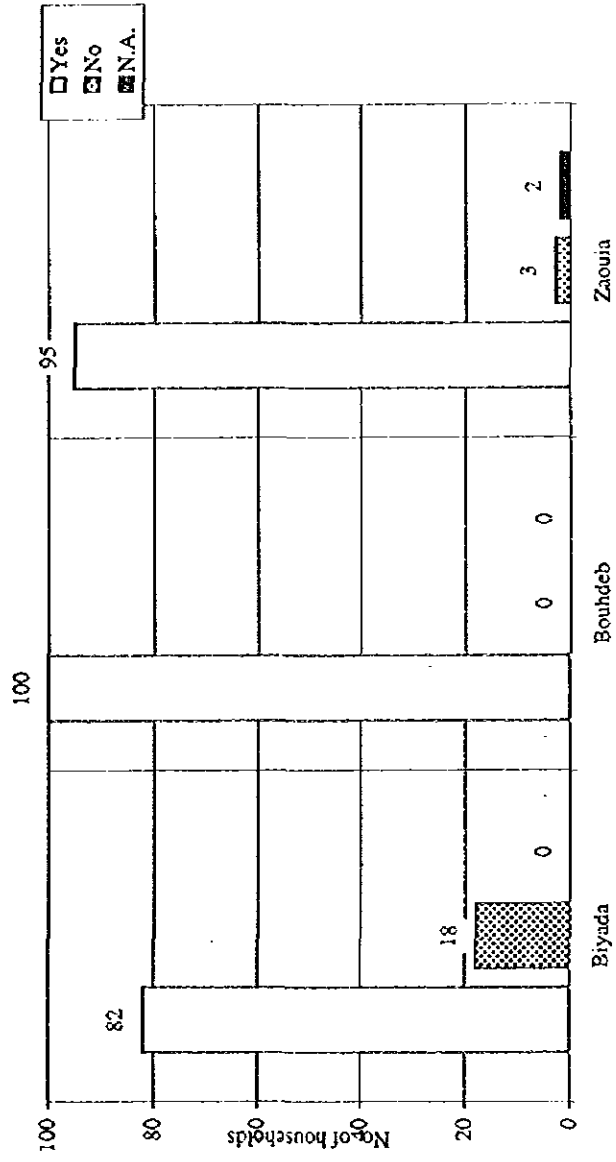
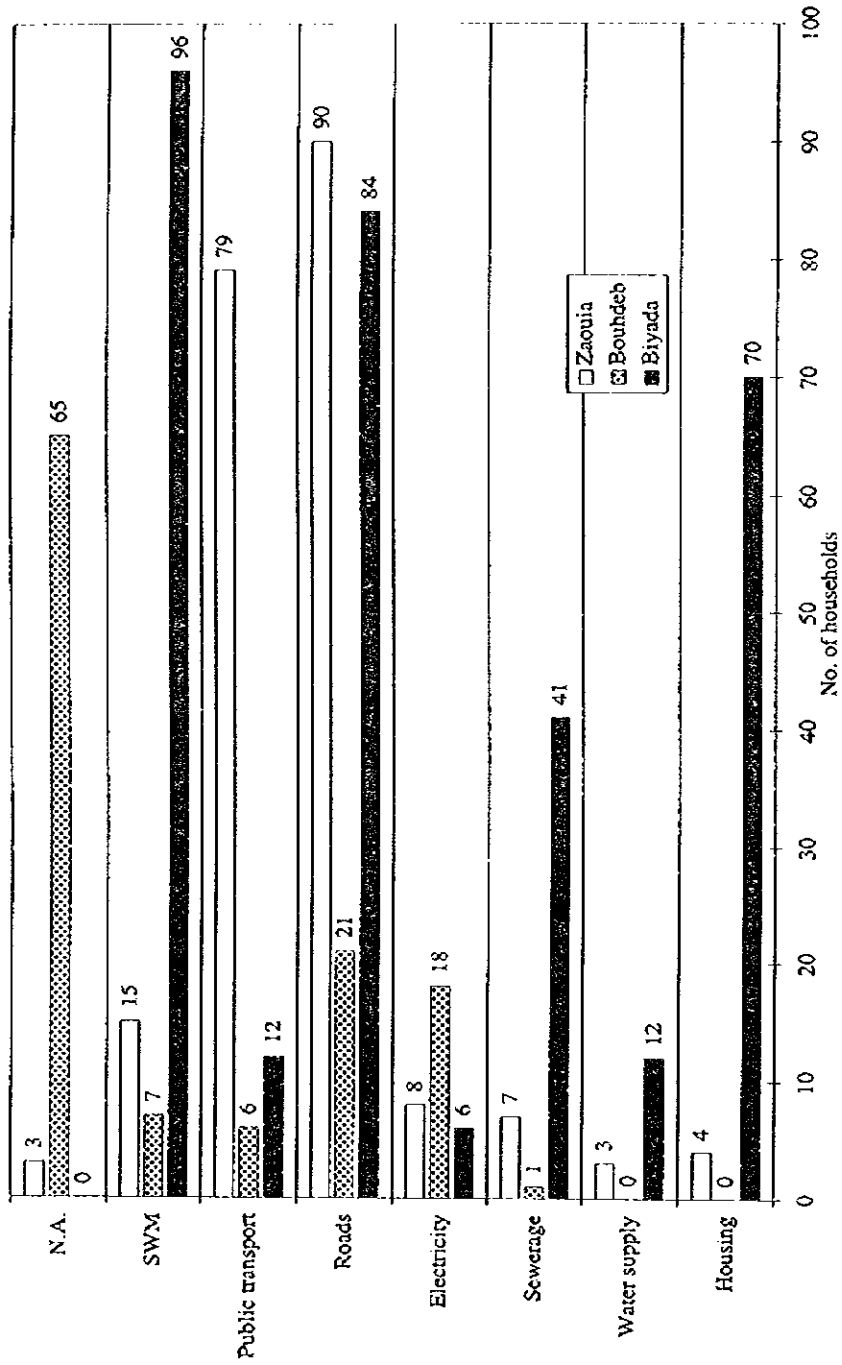


Fig. E Others

In your opinion what are the most serious infrastructures problems facing the city ?



Citizens' Awareness Survey Summary List

Summary No.	Summary Name	Number of Interviewees
1.	Grand Total	300
2.	Boudheb Total	100
3.	Zaouia Total	100
4.	Biada Total	100
5.	Total of Income Category Low	120
6.	Total of Income Category Middle	120
7.	Total of Income Category High	60
8.	Boudheb Income Category Low	40
9.	Boudheb Income Category Middle	40
10.	Boudheb Income Category High	20
11.	Zaouia Income Category Low	40
12.	Zaouia Income Category Middle	40
13.	Zaouia Income Category High	20
14.	Biada Income Category Low	40
15.	Biada Income Category Middle	40
16.	Biada Income Category High	20



Grand Total

Three Communes

Income Category **LOW, MIDDLE, HIGH**

Number of interviewees : 300



Summation of Citizen Awareness Survey

Name of Urban Commune: 3 communes

Income Category: Low, middle and high

Write numbers (of household which answered yes) on the 1st row. Write percentage (%) in the 2nd row unless otherwise indicated. Percentage should be calculated through dividing by number of households surveyed, i.e., either 40 or 20. In some questions, addition of respective percentage may not be 100 %.

Part A - General Condition

1. Interviewee:

a)	b)	c)	d)	e)	f)	Total
128	89	53	8	2	10	290
42.7%	29.7%	17.7%	2.7%	0.7%	3.3%	96.7%

- a) Housewife
- b) Master of the house
- c) Child
- d) Grand parent
- e) Servant
- f) Other

3. Residence type:

a)	b)	c)	d)	e)	Total
40	0	171	86	1	297
13.3%	0.0%	57.0%	28.7%	0.3%	99%

- a) Residential area: Villa
- b) Apartment building
- c) Economical Housing/middle density
- d) Economical Housing/high density
- 4. Cleanliness conditions:

	a)			b)			c)					
	Good	Middle	Low	Total	Good	Middle	Low	Total	Good	Middle	Low	Total
	50	238	8	296	5	226	59	290	3	52	0	55
	16.7%	79.3%	2.7%	98.7%	1.7%	75.3%	19.7%	96.7%	1.0%	17.3%		18.3%

- a) in front of the house
- b) on the street
- c) at the collection station serving the house

Part B - Household Attributes

1. Number of persons living in the household

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 or more	Total
3	14	24	40	62	52	42	26	16	21	300
1.0%	4.7%	8.0%	13.3%	20.7%	17.3%	14.0%	8.7%	5.3%	7.0%	100%

2. Status of house

a)	b)	c)	Total
198	78	24	300
66.0%	26.0%	8.0%	100%

- a) Owner
- b) Tenant
- c) Others

3. Number of years living in the house

	Years			Total		
	0-4.9	5-9.9	10-14.9		15-19.9	20 or more
	61	83	41	39	76	300
	20.3%	27.7%	13.7%	13.0%	25.3%	100%

4. Income earners and total family income

	a) (persons)					Total
	0	1	2	3	4	
	0	236	40	12	0	292
	0.7%	78.7%	13.3%	4.0%	0.0%	0.7%
	b) (thousand DH / month)					
	<2	2-5	5-10	10-15	15-20	20 +
	90	88	16	5	0	0
	30.0%	29.3%	5.3%	1.7%	0.0%	66.3%

5. Share of household income used by category (Calculate the averages for each item)

a)	b)	c)	d)	e)		
				(1)	(2)	(3)
750	1524	220	794	108	136	58
250.0%	508.0%	73.3%	264.7%	36.0%	45.3%	19.3%
						1197%

- a) House rent or housing loan repayment
- b) Food, clothing
- c) Education
- d) Transportation or loan repayment
- e) Servis (1) water consumption
(2) electricity consumption
(3) Cleansing tax

Part C - Household Solid Waste Management Practice

1. Dust bins in the house

(1) Dust bins used in inside the house for storage of waste Type:

a)	b)	c)	d)	e)	f)	g)	Total
249	0	0	0	4	46	1	300
83.0%				1.3%	15.3%	0.3%	100%

- a) Plastic bin
- b) Wood bin
- c) Cardboard box
- d) Paper bag
- e) Plastic bag
- f) Tin container
- g) Other

Size (irrespective of bin type):

1-10 lit	11-20 lit	21-30 lit	31-40 lit	40 lit <	Total
127	164	8	0	1	300
42.3%	54.7%	2.7%		0.3%	100%

Number

1	2	3	4	5 or more	Total
296	4	0	0	0	300
0.9867	0.01333				100%

Location (irrespective of bin type):

Kitchen	Balcony	Rooms	Others	Total
200	46	4	46	296
66.7%	15.3%	1.3%	15.3%	98.7%

(2) Are plastic bags used for lining of the containers ?

Yes	No	Total
240	55	295
80.0%	18.3%	98.3%

2. Discharge Practice

(1) How is the waste discharged from the house ?

a)	b)	c)	d)	e)	Total
168	96	0	21	1	286
56.0%	32.0%		7.0%	0.3%	95.3%

- a) Waste put in one large dustbin and taken out
- b) Each dustbin used in the house is taken out separately
- c) Waste thrown in the garbage chute
- d) Waste thrown in the communal container
- e) Waste is taken out and burnt

(2) Who mainly discharges the waste outside the house ?

a)	b)	c)	d)	e)	f)	g)	h)	Total
9	145	53	1	7	0	0	104	299
3.0%	48.3%	11.0%	0.3%	2.3%			34.7%	99.7%

- a) Father
- b) Mother
- c) Children
- d) Elderly family member

- e) Servant
- f) Doorman/custodian
- g) Collection worker comes to the door to collect the waste
- h) Not fixed

(3) How often do you discharge the waste from your house ?

a)	b)	c)	d)	Total
21	277	1	0	299
7.0%	92.3%	0.3%		99.7%

- a) At least twice daily
- b) Once daily
- c) Every 2 or 3 days
- d) Once a week

(4) During what time do you discharge the waste from your house ?

a)	b)	c)	d)	e)	f)	g)	Total
128	99	69	7	8	3	0	314
42.7%	33.0%	23.0%	2.3%	2.7%	1.0%		104.7%

- a) 6 - 7:59 AM
- b) 8 - 9:59 AM
- c) 10 - 11:59 Noon
- d) 12 - 5:59 PM
- e) 6 - 7:59 PM
- f) 8 - 9:59 PM
- g) 10 PM - 5:59 AM

(5) Do you have any problems with the waste while it is kept inside the house ?

a)	b)	c)	d)	e)	f)	Total
7	286	192	0	3	0	488
2.3%	95.3%	64.0%	0.0%	1.0%		162.7%

- a) No problems
- b) Bad odor
- c) Attraction of insects
- d) Attraction of rats
- e) Takes up space
- f) Other

(6) Do you separate any waste items for recycling ?

a)		
No	Yes	Total
286	0	286
95.3%	0.0%	95.3%

b) In case of "yes" reply, then ask the following questions ?

(i) The following materials are separated from the waste to be discharged:

1	2	3	4	5	6	7	Total

- 1. Plastic bottles
- 2. Glass bottles
- 3. Newspapers, books, etc.
- 4. Magazines
- 5. Kitchen waste
- 6. Old clothes
- 7. Others, specify

(ii) What is done with the separated materials? (Indicate number of household who answered "yes" in each item.

Materials	Disposal method			Transport		
	Sold	Given away	Composted		Other	by resident
1						
2						
3						
4						
5						
6						
7						

1. Plastic bottles
2. Glass bottles
3. Newspapers, books, etc.,
4. Magazines
5. Kitchen waste
6. Old clothes
7. Others

3. Collection service

(1) Where is the waste put outside the house for collection ?

a)	b)	Total
265	27	292
88.3%	9.0%	97.3%

- a) Put in front of the house or building
- b) Taken to a designed pick up station

If reply is "yes" in "b)" describe conditions at the pick up station

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
200	1	7	0	3	0	0	0	211
-	0.3%	2.3%		1.0%				70.3%

- ii) open area
- iii) communal container
- iv) station space, container capacity insufficient
- v) bad odor at the station
- vi) insects, etc. at the station
- vii) incomplete removal of waste from station
- viii) station designed by signboard or poster

(2) Who collects the waste from the frontage of the house, or the designated station ?

a)	b)	c)	Total
294	0	0	294
98.0%			98.0%

- a) Urban commune
- b) Private company
- c) Scavengers

(3) Is the collection service provided satisfactory ?

a)		No	Total
Yes	No	26	257
77.0%	8.7%		85.7%

- a) In general satisfactory

b) For those who replied "No", what are the reasons for not being satisfied with the service?

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
2	3	8	13	15	3	1	1	46
0.7%	1.0%	2.7%	4.3%	5.0%	1.0%	0.3%	0.3%	15.3%

- i) insufficient collection frequency (days/week)
- ii) collection trucks emit poor odor
- iii) waste falls of collection trucks
- iv) not all waste is collected from collection points
- v) collection trucks are noisy
- vi) collection workers mishandle individual containers
- vii) need to pay tips to collection workers
- ix) others

(4) For those who replied "No" in (3) a) above, how much extra money are they willing to pay to improve the service extended to them?

Calculate the average:DH/month

a)	b)	c)	d)	e)	f)	Total
14	7	2	0	0	0	23
4.7%	2.3%	0.7%				7.7%

- a) not willing to pay anything
- b) less than 50 DH/month
- c) - 59 DH/month
- d) - 89 DH/month
- e) - 119 DH/month
- f) more than 120 DH/month

(5) Is there any communication between you and the collection service organization ?

a)		
Yes	No	Total
19	273	292
6.3%	91.0%	97.3%

b) If YES, then in case of service organization to you, in which aspects:

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	ix)	x)	xi)	Total
8	0	2	0	0	1	2	1	0	0	0	14
2.7%		0.7%			0.3%	0.7%	0.3%				4.7%

- i) organization informs on the collection times
- ii) organization informs on suitable container which should be used
- iii) organization implements public education campaigns
- iv) organization encourages recycling activity
- v) organization requests additional fees
- vi) organization contacted you for other reasons
- vii) you requested information on collection times
- viii) you requested information on suitable container
- ix) you requested information on recycling activity
- x) you complained about the service provided
- xi) you contacted the service for other reasons

4. Willingness to assist in efforts to improve SWM

a)	b)	c)	d)	e)	f)	g)	h)	Total
65	139	86	98	20	156	41	0	605
21.7%	46.3%	28.7%	32.7%	6.7%	52.0%	13.7%		201.7%

- a) Discharge waste from the house every two days
- b) Discharge waste in plastic bags
- c) Discharge waste in plastic bin
- d) Take waste personally to a 50 - 100 meters distant collection station
- e) Clean around the collection station on a rotation basis
- f) Sweep the road in front of the house
- g) Separate newspapers, plastic and glass for recycling
- h) Not willing to do anything

Part D - Cleanliness Campaigns

1. Do you remember when any cleanliness campaigns that have taken place in your neighborhood in 1996 ?

Yes	No	Total
201	98	299
67.0%	32.7%	99.7%

2. Do you remember when it took place ?

a)	b)	c)	Total
9	87	114	210
3.0%	29.0%	58.0%	70.0%

- a) during spring
- b) during summer
- c) during autumn

3. Do you know the campaign message or purpose ?

a)	b)	c)	Total
183	17	9	209
61.0%	5.7%	3.0%	69.7%

- a) Yes, I know.
- b) No, I don't know.
- c) No, I have forgot.

4. How have you been informed about the campaign ?

a)	b)	c)	d)	e)	f)	g)	h)	i)	Total
14	140	1	26	96	0	2	46	26	351
4.7%	46.7%	0.3%	8.7%	32.0%		0.7%	15.3%	8.7%	117%

- a) through newspapers
- b) through loud speaker
- c) through street manifestations
- d) through public meetings
- e) through television
- f) through video or transparency projections
- g) through exposition
- h) through posters
- i) through family, relatives, and friends

5. Did the campaign bring any influence to you ?

a)	b)	c)	Total
43	56	36	135
14.3%	18.7%	12.0%	45.0%

- a) No, I did not get any influence.
- b) Yes, I grew my knowledge in and awareness of this matter.
- c) Yes, I got involved in the campaign.

6. Did you change your idea or behavior after the campaign ?

a)	b)	c)	Total
163	4	2	169
54.3%	1.3%	0.7%	56.3%

- a) Yes in idea
- b) Yes in behavior
- c) No

7. Do you think the city has improved in cleanliness ?

Yes	No	Total
277	21	298
92.3%	7.0%	99.3%

Part E - Others

In your opinion what are the most serious infrastructures problems facing the city ?

I)	ii)	iii)	iv)	v)	vi)	vii)	Total
74	15	49	32	195	97	118	580
24.7%	5.0%	16.3%	10.7%	65.0%	32.3%	39.3%	193.3%

- i) housing
- ii) water supply
- iii) sewerage
- iv) electricity
- v) roads
- vi) public transport
- vii) SWM



Boudheb

Income Category LOW, MIDDLE, HIGH

Number of interviewees: 100



Summation of Citizen Awareness Survey

Name of Urban Commune: Asfi Boucheb

Income Category: Low, Middle, High

Write numbers (of household which answered yes) on the 1st row. Write percentage (%) in the 2nd row unless otherwise indicated. Percentage should be calculated through dividing by number of households surveyed, i.e., either 40 or 20. In some questions, addition of respective percentage may not be 100 %.

Part A - General Condition

1. Interviewee:

a)	b)	c)	d)	e)	f)	Total
52	32	7	2	1	1	95
52.0%	32.0%	7.0%	2.0%	1.0%	1.0%	95%

- a) Housewife
- b) Master of the house
- c) Child
- d) Grand parent
- e) Servant
- f) Other

3. Residence type:

a)	b)	c)	d)	e)	Total
20	0	40	40	0	100
20%	0%	40%	40%	0%	100%

- a) Residential area: Villa
- b) Apartment building
- c) Economical Housing/middle density
- d) Economical Housing/high density
- 4. Cleanliness conditions:

a)			b)			c)					
Good	Middle	Low	Total	Good	Middle	Low	Total	Good	Middle	Low	Total
19	80	0	99	0	84	15	99	2	19	0	21
19%	80%	0%	99%	0%	84%	15%	99%	2%	19%	0	21%

- a) in front of the house
- b) on the street
- c) at the collection station serving the house

Part B - Household Attributes

1. Number of persons living in the household

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 or more	Total
0	8	6	17	29	20	7	6	1	6	100
0%	8%	6%	17%	29%	20%	7%	6%	1%	6%	100%

2. Status of house

a)	b)	c)	Total
64	35	1	100
64%	35%	1%	100%

- a) Owner
- b) Tenant
- c) Others

3. Number of years living in the house

Years				Total
0-4.9	5-9.9	10-14.9	15-19.9	20 or more
5	34	13	22	26
5%	34%	13%	22%	26%
				100%

4. Income earners and total family income

		a) (persons)					Total
		1	2	3	4	5 or more	Total
0		1	2	3	4	5 or more	97
1		85	8	2	0	1	97
1%		85%	8%	2%	0%	1%	97%
		b) (thousand DH / month)					Total
		<2	2-5	5-10	10-15	15-20	20 +
11		0	0	0	0	0	0
11%		0%	0%	0%	0%	0%	11%

5. Share of household income used by category (Calculate the averages for each item)

a)	b)	c)	d)	e)		
				(1)	(2)	(3)
257	709	néant	néant	57	136	50
257%	709%			57%	136%	50%
						1209
						100%

- a) House rent or housing loan repayment
- b) Food, clothing
- c) Education
- d) Transportation or loan repayment
- e) Service (1) water consumption
 (2) electricity consumption
 (3) Cleansing tax

Part C - Household Solid Waste Management Practice

1. Dust bins in the house

(1) Dust bins used in inside the house for storage of waste

Type:

a)	b)	c)	d)	e)	f)	g)	Total
100	0	0	0	0	0	0	100
100%				0%	0%	0%	100%

- a) Plastic bin
- b) Wood bin
- c) Cardboard box
- d) Paper bag
- e) Plastic bag
- f) Tin container
- g) Other

Size (irrespective of bin type):

1-10 lit	11-20 lit	21-30 lit	31-40 lit	40 lit <	Total
0	99	1	0	0	100
0.0%	99.0%	1.0%		0.0%	100%

Number

1	2	3	4	5 or more	Total
100	0	0	0	0	100
100%	0%				100%

Location (irrespective of bin type):

Kitchen	Balcony	Rooms	Others	Total
90	7	0	0	97
90%	7%	0%	0%	97%

(2) Are plastic bags used for lining of the containers ?

Yes	No	Total
97	2	99
97%	2%	99%

2. Discharge Practice

(1) How is the waste discharged from the house ?

a)	b)	c)	d)	Total
72	3	0	18	93
72%	3%		18%	93%

- a) Waste put in one large dustbin and taken out
- b) Each dustbin used in the house is taken out separately
- c) Waste thrown in the garbage chute
- d) Waste thrown in the communal container
- e) Waste is taken out and burnt

(2) Who mainly discharges the waste outside the house ?

a)	b)	c)	d)	e)	f)	g)	h)	Total
2	82	14	0	1	0	0	0	99
2%	82%	14%	0%	1%			0%	99%

- a) Father
- b) Mother
- c) Children
- d) Elderly family member

- e) Servant
- f) Doorman/custodian
- g) Collection worker comes to the door to collect the waste
- h) Not fixed

(3) How often do you discharge the waste from your house ?

a)	b)	c)	d)	Total
14	85	0	0	99
14%	85%	0%		99%

- a) At least twice daily
- b) Once daily
- c) Every 2 or 3 days
- d) Once a week

(4) During what time do you discharge the waste from your house ?

a)	b)	c)	d)	e)	f)	g)	Total
92	6	0	5	8	3	0	114
92%	6%	0%	5%	8%	3%		114%

- a) 6 - 7:59 AM
- b) 8 - 9:59 AM
- c) 10 - 11:59 Noon
- d) 12 - 5:59 PM
- e) 6 - 7:59 PM
- f) 8 - 9:59 PM
- g) 10 PM - 5:59 AM

(5) Do you have any problems with the waste while it is kept inside the house ?

a)	b)	c)	d)	e)	f)	Total
0	99	32	0	0	0	131
0.0%	99.0%	52.0%	0.0%	0.0%		131%

- a) No problems
- b) Bad odor
- c) Attraction of insects
- d) Attraction of rats
- e) Takes up space
- f) Other

(6) Do you separate any waste items for recycling ?

a)		
No	Yes	Total
100	0	100
100%	0%	100%

b) In case of "yes" reply, then ask the following questions ?

(i) The following materials are separated from the waste to be discharged:

1	2	3	4	5	6	7	Total

- 1. Plastic bottles
- 2. Glass bottles
- 3. Newspapers, books, etc.
- 4. Magazines
- 5. Kitchen waste
- 6. Old clothes
- 7. Others, specify

(ii) What is done with the separated materials? (Indicate number of household who answered "yes" in each item.

Materials	Disposal method			Transport by others
	Sold	Given away	Other	
1				
2				
3				
4				
5				
6				
7				

1. Plastic bottles
2. Glass bottles
3. Newspapers, books, etc.,
4. Magazines
5. Kitchen waste
6. Old clothes
7. Others

3. Collection service

(1) Where is the waste put outside the house for collection ?

a)	b)	Total
80	20	100
80%	20%	100%

- a) Put in front of the house or building
- b) Taken to a designed pick up station



If reply is "yes" in "b)" describe conditions at the pick up station

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
	0	0	0	0	0	0	0	0
-	0%							0%

- ii) open area
- iii) communal container
- iv) station space, container capacity insufficient
- v) bad odor at the station
- vi) insects, etc. at the station
- vii) incomplete removal of waste from station
- viii) station designed by signboard or poster

(2) Who collects the waste from the frontage of the house, or the designated station ?

a)	b)	c)	Total
100	0	0	100
100%			100%

- a) Urban commune
- b) Private company
- c) Scavengers

(3) Is the collection service provided satisfactory ?

a)		No	Total
Yes		1	62
61%	1%		62%

- a) In general satisfactory

b) For those who replied "No", what are the reasons for not being satisfied with the service?

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
1	0	0	0	1	0	0	0	2
1%	0%	0%	0%	1%	0%	0%	0%	2%

- i) insufficient collection frequency (days/week)
- ii) collection trucks emit poor odor
- iii) waste falls of collection trucks
- iv) not all waste is collected from collection points
- v) collection trucks are noisy
- vi) collection workers mishandle individual containers
- vii) need to pay tips to collection workers
- ix) others

(4) For those who replied "No" in (3) a) above, how much extra money are they willing to pay to improve the service extended to them ?

Calculate the average:DH/month

a)	b)	c)	d)	e)	f)	Total
0	0	0	0	0	0	0
0%	0%	0%				0%

- a) not willing to pay anything
- b) less than 30 DH/month
- c) - 59 DH/month
- d) - 89 DH/month
- e) - 119 DH/month
- f) more than 120 DH/month

(5) Is there any communication between you and the collection service organization ?

a)		
Yes	No	Total
7	92	99
7%	92%	99%

b) If YES, then in case of service organization to you, in which aspects:

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	ix)	x)	xi)	Total
1	0	1	0	0	0	0	0	0	0	0	2
1%		1%			0%	0%	0%				2%

- i) organization informs on the collection times
- ii) organization informs on suitable container which should be used
- iii) organization implements public education campaigns
- iv) organization encourages recycling activity
- v) organization requests additional fees
- vi) organization contacted you for other reasons
- vii) you requested information on collection times
- viii) you requested information on suitable container
- ix) you requested information on recycling activity
- x) you complained about the service provided
- xi) you contacted the service for other reasons

4. Willingness to assist in efforts to improve SWM

a)	b)	c)	d)	e)	f)	g)	h)	Total
1	80	2	0	3	0	35	0	121
1%	80%	2%	0%	3%	0%	55%		121%

- a) Discharge waste from the house every two days
- b) Discharge waste in plastic bags
- c) Discharge waste in plastic bin
- d) Take waste personally to a 50 - 100 meters distant collection station
- e) Clean around the collection station on a rotation basis
- f) Sweep the road in front of the house
- g) Separate newspapers, plastic and glass for recycling
- h) Not willing to do anything

Part D - Cleanliness Campaigns

1. Do you remember when any cleanliness campaigns that have taken place in your neighborhood in 1996 ?

Yes	No	Total
96	3	99
96%	3%	99%

2. Do you remember when it took place ?

a)	b)	c)	Total
8	31	56	95
8%	31%	56%	95%

- a) during spring
- b) during summer
- c) during autumn

3. Do you know the campaign message or purpose ?

a)	b)	c)	Total
91	0	5	96
91%	0%	5%	96%

- a) Yes, I know.
- b) No, I don't know.
- c) No, I have forgot.

4. How have you been informed about the campaign ?

a)	b)	c)	d)	e)	f)	g)	h)	i)	Total
14	73	0	2	16	0	0	15	9	129
14%	73%	0%	2%	16%		0%	15%	9%	129%

- a) through newspapers
- b) through loud speaker
- c) through street manifestations
- d) through public meetings
- e) through television
- f) through video or transparency projections
- g) through exposition
- h) through posters
- i) through family, relatives, and friends

5. Did the campaign bring any influence to you ?

a)	b)	c)	Total
0	45	32	77
0%	45%	32%	77%

- a) No, I did not get any influence.
- b) Yes, I grew my knowledge in and awareness of this matter.
- c) Yes, I got involved in the campaign.

6. Did you change your idea or behavior after the campaign ?

a)	b)	c)	Total
93	0	0	93
93.0%	0.0%	0.0%	93%

- a) Yes in idea
- b) Yes in behavior
- c) No

7. Do you think the city has improved in cleanliness ?

Yes	No	Total
100	0	100
100%	0%	100%

Part E - Others

In your opinion what are the most serious infrastructures problems facing the city ?

I)	ii)	iii)	iv)	v)	vi)	vii)	Total
0	0	1	18	21	6	7	53
0%	0%	1%	18%	21%	6%	7%	53%

- i) housing
- ii) water supply
- iii) sewerage
- iv) electricity
- v) roads
- vi) public transport
- vii) SWM



Zaouia

Income Category LOW, MIDDLE, HIGH

Number of interviewees: 100



Summation of Citizen Awareness Survey

Name of Urban Commune: Asfi Zaouia

Income Category: Low, Middle, High

Write numbers (of household which answered yes) on the 1st row. Write percentage (%) in the 2nd row unless otherwise indicated. Percentage should be calculated through dividing by number of households surveyed, i.e., either 40 or 20. In some questions, addition of respective percentage may not be 100 %.

Part A - General Condition

1. Interviewee:

a)	b)	c)	d)	e)	f)	Total
39	34	20	4	0	3	100
39%	34%	20%	4%	0%	3%	100%

- a) Housewife
- b) Master of the house
- c) Child
- d) Grand parent
- e) Servant
- f) Other

3. Residence type:

a)	b)	c)	d)	e)	Total
0	0	100	0	0	100
0%	0%	100%	0%	0%	100%

- a) Residential area: Villa
- b) Apartment building
- c) Economical Housing/middle density
- d) Economical Housing/high density
- 4. Cleanliness conditions:

a)			b)			c)					
Good	Middle	Low	Total	Good	Middle	Low	Total	Good	Middle	Low	Total
28	63	8	99	1	53	44	98	1	0	0	1
28%	63%	8%	99%	1%	53%	44%	98%	1%	0%		1%

a) in front of the house

b) on the street

c) at the collection station serving the house

Part B - Household Attributes

1. Number of persons living in the household

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 or more	Total
2	2	9	12	17	14	18	14	3	9	100
2%	2%	9%	12%	17%	14%	18%	14%	3%	9%	100%

2. Status of house

a)	b)	c)	Total
69	22	9	100
69%	22%	9%	100%

a) Owner

b) Tenant

c) Others

3. Number of years living in the house

		Years			Total	
		0-4.9	5-9.9	10-14.9	15-19.9	20 or more
25	25%	20	7	4	44	100
		20%	7%	4%	44%	100%

4. Income earners and total family income

		a) (persons)					Total
		1	2	3	4	5 or more	Total
0							
1	73%	16	4	0	1	1	95
1%	73%	16%	4%	0%	1%	1%	95%
		b) (thousand DH / month)					Total
		< 2	2-5	5-10	10-15	15-20	20 +
38	35%	11	4	0	0	0	88
38%	35%	11%	4%	0%	0%	0%	88%

5. Share of household income used by category (Calculate the averages for each item)

a)	b)	c)	d)	e)		Total
				(1)	(2)	(3)
791	1519	279	2043	122	140	61
791%	1519%	279%		122%	140%	61%
						4955
						100%

- a) House rent or housing loan repayment
- b) Food, clothing
- c) Education
- d) Transportation or loan repayment
- e) Service (1) water consumption
(2) electricity consumption
(3) Cleansing tax

Part C - Household Solid Waste Management Practice

1. Dust bins in the house

(1) Dust bins used in inside the house for storage of waste

Type:

a)	b)	c)	d)	e)	f)	g)	Total
65	0	0	0	2	32	1	100
65%				2%	32%	1%	100%

- a) Plastic bin
- b) Wood bin
- c) Cardboard box
- d) Paper bag
- e) Plastic bag
- f) Tin container
- g) Other

Size (irrespective of bin type):

1-10 lit	11-20 lit	21-30 lit	31-40 lit	40 lit <	Total
35	59	5	0	1	100
35.0%	59.0%	5.0%		1.0%	100%

Number

1	2	3	4	5 or more	Total
97	3	0	0	0	100
97%	3%				100%

Location (irrespective of bin type):

Kitchen	Balcony	Rooms	Others	Total
73	15	4	7	99
73%	15%	4%	7%	99%

(2) Are plastic bags used for lining of the containers ?

Yes	No	Total
46	50	96
46%	50%	96%

2. Discharge Practice

(1) How is the waste discharged from the house ?

a)	b)	c)	d)	Total
5	88	0	0	93
5%	88%	0%	0%	93%

- a) Waste put in one large dustbin and taken out
- b) Each dustbin used in the house is taken out separately
- c) Waste thrown in the garbage chute
- d) Waste thrown in the communal container
- e) Waste is taken out and burnt

(2) Who mainly discharges the waste outside the house ?

a)	b)	c)	d)	e)	f)	g)	h)	Total
1	24	1	0	6	0	0	68	100
1%	24%	1%	0%	6%	0%	0%	68%	100%

- a) Father
- b) Mother
- c) Children
- d) Elderly family member

- e) Servant
- f) Doorman/custodian
- g) Collection worker comes to the door to collect the waste
- h) Not fixed

(3) How often do you discharge the waste from your house ?

a)	b)	c)	d)	Total
2	97	1	0	100
2%	97%	1%		100%

- a) At least twice daily
- b) Once daily
- c) Every 2 or 3 days
- d) Once a week

(4) During what time do you discharge the waste from your house ?

a)	b)	c)	d)	e)	f)	g)	Total
31	39	29	1	0	0	0	100
31%	39%	29%	1%	0%	0%	0%	100%

- a) 6 - 7:59 AM
- b) 8 - 9:59 AM
- c) 10 - 11:59 Noon
- d) 12 - 5:59 PM
- e) 6 - 7:59 PM
- f) 8 - 9:59 PM
- g) 10 PM - 5:59 AM

(5) Do you have any problems with the waste while it is kept inside the house ?

a)	b)	c)	d)	e)	f)	Total
3	94	73	0	3	0	173
3.0%	94.0%	73.0%	0.0%	3.0%		173%

- a) No problems
- b) Bad odor
- c) Attraction of insects
- d) Attraction of rats
- e) Takes up space
- f) Other

(6) Do you separate any waste items for recycling ?

a)		
No	Yes	Total
86	0	86
86%	0%	86%

b) In case of "yes" reply, then ask the following questions ?

(i) The following materials are separated from the waste to be discharged:

1	2	3	4	5	6	7	Total

- 1. Plastic bottles
- 2. Glass bottles
- 3. Newspapers, books, etc.
- 4. Magazines
- 5. Kitchen waste
- 6. Old clothes
- 7. Others, specify

(ii) What is done with the separated materials? (Indicate number of household who answered "yes" in each item.

Materials	Disposal method			Transport by others
	Sold	Given away	Composte	
1				
2				
3				
4				
5				
6				
7				

1. Plastic bottles
2. Glass bottles
3. Newspapers, books, etc.,
4. Magazines
5. Kitchen waste
6. Old clothes
7. Others

3. Collection service

(1) Where is the waste put outside the house for collection ?

a)	b)	Total
96	4	100
96%	4%	100%

- a) Put in front of the house or building
- b) Taken to a designed pick up station

If reply is "yes" in "b)" describe conditions at the pick up station

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
	1	0	0	0	0	0	0	1
	1%							1%

- ii) open area
- iii) communal container
- iv) station space, container capacity insufficient
- v) bad odor at the station
- vi) insects, etc. at the station
- vii) incomplete removal of waste from station
- viii) station designed by signboard or poster

(2) Who collects the waste from the frontage of the house, or the designated station ?

a)	b)	c)	Total
96	0	0	96
96%			96%

- a) Urban commune
- b) Private company
- c) Scavengers

(3) Is the collection service provided satisfactory ?

a)		No	Total
Yes	78	21	99
	78%	21%	99%

- a) In general satisfactory

b) For those who replied "No", what are the reasons for not being satisfied with the service?

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
0	0	5	11	12	1	1	1	31
0%	0%	5%	11%	12%	1%	1%	1%	31%

- i) insufficient collection frequency (days/week)
- ii) collection trucks emit poor odor
- iii) waste falls of collection trucks
- iv) not all waste is collected from collection points
- v) collection trucks are noisy
- vi) collection workers mishandle individual containers
- vii) need to pay tips to collection workers
- ix) others

(4) For those who replied "No" in (3) a) above, how much extra money are they willing to pay to improve the service extended to them ?

Calculate the average:DH/month

a)	b)	c)	d)	e)	f)	Total
10	7	2	0	0	0	19
10%	7%	2%				19%

- a) not willing to pay anything
- b) less than 30 DH/month
- c) - 59 DH/month
- d) - 89 DH/month
- e) - 119 DH/month
- f) more than 120 DH/month

(5) Is there any communication between you and the collection service organization ?

a)		
Yes	No	Total
4	91	95
4%	91%	95%

b) If YES, then in case of service organization to you, in which aspects:

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	ix)	x)	xi)	Total
1	0	0	0	0	0	1	0	0	0	0	2
1%		0%			0%	1%	0%				2%

- i) organization informs on the collection times
- ii) organization informs on suitable container which should be used
- iii) organization implements public education campaigns
- iv) organization encourages recycling activity
- v) organization requests additional fees
- vi) organization contacted you for other reasons
- vii) you requested information on collection times
- viii) you requested information on suitable container
- ix) you requested information on recycling activity
- x) you complained about the service provided
- xi) you contacted the service for other reasons

4. Willingness to assist in efforts to improve SWM

a)	b)	c)	d)	e)	f)	g)	h)	Total
43	10	0	96	13	60	3	0	225
43%	10%	0%	96%	13%	60%	3%		225%

- a) Discharge waste from the house every two days
- b) Discharge waste in plastic bags
- c) Discharge waste in plastic bin
- d) Take waste personally to a 50 - 100 meters distant collection station
- e) Clean around the collection station on a rotation basis
- f) Sweep the road in front of the house
- g) Separate newspapers, plastic and glass for recycling
- h) Not willing to do anything

Part D - Cleanliness Campaigns

1. Do you remember when any cleanliness campaigns that have taken place in your neighborhood in 1996 ?

Yes	No	Total
18	82	100
18%	82%	100%

2. Do you remember when it took place ?

a)	b)	c)	Total
0	5	1	6
0%	5%	1%	6%

- a) during spring
- b) during summer
- c) during autumn

3. Do you know the campaign message or purpose ?

a)	b)	c)	Total
6	11	1	18
6%	11%	1%	18%

- a) Yes, I know.
- b) No, I don't know.
- c) No, I have forgot.

4. How have you been informed about the campaign ?

a)	b)	c)	d)	e)	f)	g)	h)	i)	Total
0	0	0	0	0	0	0	1	5	6
0%	0%	0%	0%	0%	0%	0%	1%	5%	6%

- a) through newspapers
- b) through loud speaker
- c) through street manifestations
- d) through public meetings
- e) through television
- f) through video or transparency projections
- g) through exposition
- h) through posters
- i) through family, relatives, and friends

5. Did the campaign bring any influence to you ?

a)	b)	c)	Total
2	7	1	10
2%	7%	1%	10%

- a) No, I did not get any influence.
- b) Yes, I grew my knowledge in and awareness of this matter.
- c) Yes, I got involved in the campaign.

6. Did you change your idea or behavior after the campaign ?

a)	b)	c)	Total
1	0	0	1
1.0%	0.0%	0.0%	1%

- a) Yes in idea
- b) Yes in behavior
- c) No

7. Do you think the city has improved in cleanliness ?

Yes	No	Total
82	18	100
82%	18%	100%

Part E - Others

In your opinion what are the most serious infrastructures problems facing the city ?

I)	ii)	iii)	iv)	v)	vi)	vii	Total
70	12	41	6	84	12	96	321
70%	12%	41%	6%	84%	12%	96%	321%

- i) housing
- ii) water supply
- iii) sewerage
- iv) electricity
- v) roads
- vi) public transport
- vii) SWM



Biada

Income Category LOW, MIDDLE, HIGH

Number of interviewees: 100



Summation of Citizen Awareness Survey

Name of Urban Commune: Asfi Biada

Income Category: Low, Middle, High

Write numbers (of household which answered yes) on the 1st row. Write percentage (%) in the 2nd row unless otherwise indicated. Percentage should be calculated through dividing by number of households surveyed, i.e., either 40 or 20. In some questions, addition of respective percentage may not be 100 %.

Part A - General Condition

1. Interviewee:

a)	b)	c)	d)	e)	f)	Total
37	23	26	2	1	6	95
37.0%	7.7%	26.0%	2.0%	1.0%	6.0%	95%

- a) Housewife
- b) Master of the house
- c) Child
- d) Grand parent
- e) Servant
- f) Other

3. Residence type:

a)	b)	c)	d)	e)	Total
20	0	31	46	1	98
20%	0%	31%	46%	1%	98%

- a) Residential area: Villa
- b) Apartment building
- c) Economical Housing/middle density
- d) Economical Housing/high density
- 4. Cleanliness conditions:

a)			b)			c)					
Good	Middle	Low	Total	Good	Middle	Low	Total	Good	Middle	Low	Total
3	95	0	98	4	89	0	93	0	33	0	33
3%	95%	0%	98%	4%	89%	0%	93%	0%	33%		33%

a) in front of the house

b) on the street

c) at the collection station serving the house

Part B - Household Attributes

1. Number of persons living in the household

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 or more	Total
1	4	9	11	16	18	17	6	12	6	100
1%	4%	9%	11%	16%	18%	17%	6%	12%	6%	100%

2. Status of house

a)	b)	c)	Total
65	21	14	100
65%	21%	14%	100%

a) Owner

b) Tenant

c) Others

3. Number of years living in the house

Years				Total
0-4.9	5-9.9	10-14.9	15-19.9	10 or more
31	29	21	13	6
31%	29%	21%	13%	6%
				100%

4. Income earners and total family income

		a) (persons)					Total	
		1	2	3	4	5 or more	Total	
0		68	16	6	0	0	90	
0%		68%	16%	6%	0%	0%	90%	
		b) (thousand DH / month)					Total	
		<2	2-5	5-10	10-15	15-20	20 +	Total
41		53	5	1	0	0	0	100
41%		53%	5%	1%	0%	0%	0%	100%

5. Share of household income used by category (Calculate the averages for each item)

a)	b)	c)	d)	e)		
				(1)	(2)	(3)
767	1524	160	426	95	116	155
767%	1524%	160%		95%	116%	155%
						3243
						100%

- a) House rent or housing loan repayment
- b) Food, clothing
- c) Education
- d) Transportation or loan repayment
- e) Service (1) water consumption
 (2) electricity consumption
 (3) Cleansing tax

Part C - Household Solid Waste Management Practice

1. Dust bins in the house

(1) Dust bins used in inside the house for storage of waste

Type:

a)	b)	c)	d)	e)	f)	g)	Total
84	0	0	0	2	14	0	100
84%				2%	14%	0%	100%

- a) Plastic bin
- b) Wood bin
- c) Cardboard box
- d) Paper bag
- e) Plastic bag
- f) Tin container
- g) Other

Size (irrespective of bin type):

1-10 lit	11-20 lit	21-30 lit	31-40 lit	40 lit <	Total
92	6	2	0	0	100
92.0%	6.0%	2.0%		0.0%	100%

Number

1	2	3	4	5 or more	Total
99	1	0	0	0	100
99%	1%				100%

Location (irrespective of bin type):

Kitchen	Balcony	Rooms	Others	Total
37	24	0	39	100
37%	24%	0%	39%	100%

(2) Are plastic bags used for lining of the containers ?

Yes	No	Total
97	3	100
97%	3%	100%

2. Discharge Practice

(1) How is the waste discharged from the house ?

a)	b)	c)	d)	e)	Total
91	5	0	3	1	100
91%	5%	0%	3%	1%	100%

- a) Waste put in one large dustbin and taken out
- b) Each dustbin used in the house is taken out separately
- c) Waste thrown in the garbage chute
- d) Waste thrown in the communal container
- e) Waste is taken out and burnt

(2) Who mainly discharges the waste outside the house ?

a)	b)	c)	d)	e)	f)	g)	h)	Total
6	39	18	1	0	0	0	36	100
6%	39%	18%	1%	0%	0%	0%	36%	100%

- a) Father
- b) Mother
- c) Children
- d) Elderly family member

- e) Servant
- f) Doorman/custodian
- g) Collection worker comes to the door to collect the waste
- h) Not fixed

(3) How often do you discharge the waste from your house ?

a)	b)	c)	d)	Total
5	95	0	0	100
5%	95%	0%		100%

- a) At least twice daily
- b) Once daily
- c) Every 2 or 3 days
- d) Once a week

(4) During what time do you discharge the waste from your house ?

a)	b)	c)	d)	e)	f)	g)	Total
5	54	40	1	0	0	0	100
5%	54%	40%	1%	0%	0%	0%	100%

- a) 6 - 7:59 AM
- b) 8 - 9:59 AM
- c) 10 - 11:59 Noon
- d) 12 - 5:59 PM
- e) 6 - 7:59 PM
- f) 8 - 9:59 PM
- g) 10 PM - 5:59 AM

(5) Do you have any problems with the waste while it is kept inside the house ?

a)	b)	c)	d)	e)	f)	Total
4	93	87	0	0	0	184
4.0%	93.0%	87.0%	0.0%	0.0%	0.0%	184%

- a) No problems
- b) Bad odor
- c) Attraction of insects
- d) Attraction of rats
- e) Takes up space
- f) Other

(6) Do you separate any waste items for recycling ?

a)		
No	Yes	Total
100	0	100
100%	0%	100%

b) In case of "yes" reply, then ask the following questions ?

(i) The following materials are separated from the waste to be discharged:

1	2	3	4	5	6	7	Total

- 1. Plastic bottles
- 2. Glass bottles
- 3. Newspapers, books, etc.
- 4. Magazines
- 5. Kitchen waste
- 6. Old clothes
- 7. Others, specify

(ii) What is done with the separated materials? (Indicate number of household who answered "yes" in each item.

Materials	Disposal method			Transport by others
	Sold	Given away	Composte	
1				
2				
3				
4				
5				
6				
7				

1. Plastic bottles
2. Glass bottles
3. Newspapers, books, etc.,
4. Magazines
5. Kitchen waste
6. Old clothes
7. Others

3. Collection service

(1) Where is the waste put outside the house for collection ?

a)	b)	Total
89	3	92
89%	3%	92%

- a) Put in front of the house or building
- b) Taken to a designed pick up station

If reply is "yes" in "b)" describe conditions at the pick up station

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
	0	1	0	0	0	0	0	1
-	0%							1%

- ii) open area
- iii) communal container
- iv) station space, container capacity insufficient
- v) bad odor at the station
- vi) insects, etc. at the station
- vii) incomplete removal of waste from station
- viii) station designed by signboard or poster

(2) Who collects the waste from the frontage of the house, or the designated station ?

a)	b)	c)	Total
98	0	0	98
98%			98%

- a) Urban commune
- b) Private company
- c) Scavengers

(3) Is the collection service provided satisfactory ?

a)		No	Total
Yes	92	4	96
92%	4%	4%	96%

- a) In general satisfactory

b) For those who replied "No", what are the reasons for not being satisfied with the service?

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
2	3	3	2	2	1	1	1	15
2%	3%	3%	2%	2%	1%	1%	1%	15%

- i) insufficient collection frequency (days/week)
- ii) collection trucks emit poor odor
- iii) waste falls of collection trucks
- iv) not all waste is collected from collection points
- v) collection trucks are noisy
- vi) collection workers mishandle individual containers
- vii) need to pay tips to collection workers
- ix) others

(4) For those who replied "No" in (3) a) above, how much extra money are they willing to pay to improve the service extended to them ?

Calculate the average:DH/month

a)	b)	c)	d)	e)	f)	Total
4	0	0	0	0	0	4
4%	0%	0%				4%

- a) not willing to pay anything
- b) less than 30 DH/month
- c) - 59 DH/month
- d) - 89 DH/month
- e) - 119 DH/month
- f) more than 120 DH/month

(5) Is there any communication between you and the collection service organization ?

a)		
Yes	No	Total
8	90	98
8%	90%	98%

b) If, YES, then in case of service organization to you, in which aspects:

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	ix)	x)	xi)	Total
6	0	1	0	0	1	1	1	0	0	0	10
6%		1%			1%	1%	1%				10%

- i) organization informs on the collection times
- ii) organization informs on suitable container which should be used
- iii) organization implements public education campaigns
- iv) organization encourages recycling activity
- v) organization requests additional fees
- vi) organization contacted you for other reasons
- vii) you requested information on collection times
- viii) you requested information on suitable container
- ix) you requested information on recycling activity
- x) you complained about the service provided
- xi) you contacted the service for other reasons

4. Willingness to assist in efforts to improve SWM

a)	b)	c)	d)	e)	f)	g)	h)	Total
21	49	84	2	4	96	3	0	259
21%	49%	84%	2%	4%	96%	3%		259%

- a) Discharge waste from the house every two days
- b) Discharge waste in plastic bags
- c) Discharge waste in plastic bin
- d) Take waste personally to a 50 - 100 meters distant collection station
- e) Clean around the collection station on a rotation basis
- f) Sweep the road in front of the house
- g) Separate newspapers, plastic and glass for recycling
- h) Not willing to do anything

Part D - Cleanliness Campaigns

1. Do you remember when any cleanliness campaigns that have taken place in your neighborhood in 1996 ?

Yes	No	Total
87	13	100
87%	13%	100%

2. Do you remember when it took place ?

a)	b)	c)	Total
1	51	57	109
1%	51%	57%	109%

- a) during spring
- b) during summer
- c) during autumn

3. Do you know the campaign message or purpose ?

a)	b)	c)	Total
86	6	3	95
86%	6%	3%	95%

- a) Yes, I know.
- b) No, I don't know.
- c) No, I have forgot.

4. How have you been informed about the campaign ?

a)	b)	c)	d)	e)	f)	g)	h)	i)	Total
0	67	1	24	80	0	2	30	12	216
0%	67%	1%	24%	80%		2%	30%	12%	216%

- a) through newspapers
- b) through loud speaker
- c) through street manifestations
- d) through public meetings
- e) through television
- f) through video or transparency projections
- g) through exposition
- h) through posters
- i) through family, relatives, and friends

5. Did the campaign bring any influence to you ?

a)	b)	c)	Total
41	4	3	48
41%	4%	3%	48%

- a) No, I did not get any influence.
- b) Yes, I grew my knowledge in and awareness of this matter.
- c) Yes, I got involved in the campaign.

6. Did you change your idea or behavior after the campaign ?

a)	b)	c)	Total
69	4	2	75
69.0%	4.0%	2.0%	75%

- a) Yes in idea
- b) Yes in behavior
- c) No

7. Do you think the city has improved in cleanliness ?

Yes	No	Total
95	3	98
95.0%	3.0%	98%

Part E - Others

In your opinion what are the most serious infrastructures problems facing the city ?

I)	ii)	iii)	iv)	v)	vi)	vii)	Total
4	3	7	8	90	79	15	206
4%	3%	7%	8%	90%	79%	15%	206%

- i) housing
- ii) water supply
- iii) sewerage
- iv) electricity
- v) roads
- vi) public transport
- vii) SWM



Income Category **LOW**
Boudheb, Zaouia, Biada
Number of interviewees: 120



Summation of Citizen Awareness Survey

Name of Urban Commune: Asfi Boudheh, Zaouia, Biada Income Category: Low

Write numbers (of household which answered yes) on the 1st row. Write percentage (%) in the 2nd row unless otherwise indicated. Percentage should be calculated through dividing by number of households surveyed, i.e., either 40 or 20. In some questions, addition of respective percentages may not be 100 %.

Part A - General Condition

1. Interviewee:

a)	b)	c)	d)	e)	f)	Total
49	37	19	5	0	4	114
40.8%	30.8%	15.8%	4.2%	0.0%	3.3%	95%

- a) Housewife
- b) Master of the house
- c) Child
- d) Grand parent
- e) Servant
- f) Other

3. Residence type:

a)	b)	c)	d)	e)	Total
0	0	46	72	1	119
0.0%	0.0%	38.3%	60.0%	0.8%	99.2%

- a) Residential area: Villa
- b) Apartment building
- c) Economical Housing/middle density
- d) Economical Housing/high density
- 4. Cleanliness conditions:

a)			b)			c)					
Good	Middle	Low	Total	Good	Middle	Low	Total	Good	Middle	Low	Total
0	111	8	119	1	75	38	114	0	29	0	29
0.0%	92.5%	6.7%	99.2%	0.8%	62.5%	31.7%	95.0%	0.0%	24.2%		24.2%

a) in front of the house

b) on the street

c) at the collection station serving the house

Part B - Household Attributes

1. Number of persons living in the household

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 or more	Total
3	7	11	14	15	22	21	10	6	11	120
2.5%	5.8%	9.2%	11.7%	12.5%	18.3%	17.5%	8.3%	5.0%	9%	100%

2. Status of house

a)	b)	c)	Total
70	37	13	120
58.3%	30.8%	10.8%	100%

a) Owner

b) Tenant

c) Others

3. Number of years living in the house

		Years			Total
0-4.9	5-9.9	10-14.9	15-19.9	20 or more	Total
17	14	20	49	120	120
14.2%	11.7%	16.7%	40.8%	100%	100%

4. Income earners and total family income

		a) (persons)					Total
	0	1	2	3	4	5 or more	Total
	2	98	14	2	0	0	116
	1.7%	81.7%	11.7%	1.7%	0.0%	0.0%	96.7%
		b) (thousand DH / month)					Total
	<2	2-5	5-10	10-15	15-20	20 +	Total
	76	5	0	1	0	0	82
	63.3%	4.2%	0.0%	0.8%	0.0%	0	68.3%

5. Share of household income used by category (Calculate the averages for each item)

a)	b)	c)	d)	e)		Total
				(1)	(2)	
450	696	113	néant	60	90	1428
358.3%	580.0%	94.2%		50.0%	75.0%	32.5%
						100%

- a) House rent or housing loan repayment
- b) Food, clothing
- c) Education
- d) Transportation or loan repayment
- e) Service (1) water consumption
 (2) electricity consumption
 (3) Cleansing tax

Part C - Household Solid Waste Management Practice

1. Dust bins in the house

(1) Dust bins used in inside the house for storage of waste

Type:

a)	b)	c)	d)	e)	f)	g)	Total
97	0	0	0	0	22	1	120
80.8%				0.0%	18.3%	0.8%	100%

- a) Plastic bin
- b) Wood bin
- c) Cardboard box
- d) Paper bag
- e) Plastic bag
- f) Tin container
- g) Other

Size (irrespective of bin type):

1-10 lit	11-20 lit	21-30 lit	31-40 lit	40 lit <	Total
60	58	2	0	0	120
50.0%	48.3%	1.7%		0.0%	100%

Number

1	2	3	4	5 or more	Total
120	0	0	0	0	120
100%	0.0%				100%

Location (irrespective of bin type):

Kitchen	Balcony	Rooms	Others	Total
84	13	4	16	117
70.0%	10.8%	3.3%	13.3%	98%

(2) Are plastic bags used for lining of the containers ?

Yes	No	Total
85	32	117
70.8%	26.7%	97.5%

2. Discharge Practice

(1) How is the waste discharged from the house ?

a)	b)	c)	d)	e)	Total
70	41	0	3	1	45
58.3%	34.2%		2.5%	0.8%	37.5%

- a) Waste put in one large dustbin and taken out
- b) Each dustbin used in the house is taken out separately
- c) Waste thrown in the garbage chute
- d) Waste thrown in the communal container
- e) Waste is taken out and burnt

(2) Who mainly discharges the waste outside the house ?

a)	b)	c)	d)	e)	f)	g)	h)	Total
7	63	12	0	0	0	0	37	119
5.8%	52.5%	10%	0.0%	0.0%	0.0%		30.8%	99.2%

- a) Father
- b) Mother
- c) Children
- d) Elderly family member

- e) Servant
- f) Doorman/custodian
- g) Collection worker comes to the door to collect the waste
- h) Not fixed

(3) How often do you discharge the waste from your house ?

a)	b)	c)	d)	Total
5	113	1	0	119
4%	94%	1%		99%

- a) At least twice daily
- b) Once daily
- c) Every 2 or 3 days
- d) Once a week

(4) During what time do you discharge the waste from your house ?

a)	b)	c)	d)	e)	f)	g)	Total
66	32	21	0	0	0	0	119
55.0%	26.7%	17.5%	0.0%	0.0%	0.0%	0.0%	99%

- a) 6 - 7:59 AM
- b) 8 - 9:59 AM
- c) 10 - 11:59 Noon
- d) 12 - 5:59 PM
- e) 6 - 7:59 PM
- f) 8 - 9:59 PM
- g) 10 PM - 5:59 AM

(5) Do you have any problems with the waste while it is kept inside the house ?

a)	b)	c)	d)	e)	f)	Total
4	115	88	0	0	0	207
3.3%	95.8%	73.3%	0.0%	0.0%		173%

- a) No problems
- b) Bad odor
- c) Attraction of insects
- d) Attraction of rats
- e) Takes up space
- f) Other

(6) Do you separate any waste items for recycling ?

a)		
No	Yes	Total
114	0	114
95%	0%	95%

b) In case of "yes" reply, then ask the following questions ?

(i) The following materials are separated from the waste to be discharged:

1	2	3	4	5	6	7	Total

- 1. Plastic bottles
- 2. Glass bottles
- 3. Newspapers, books, etc.
- 4. Magazines
- 5. Kitchen waste
- 6. Old clothes
- 7. Others, specify

(ii) What is done with the separated materials? (Indicate number of household who answered "yes" in each item.

Materials	Disposal method			Transport by others
	Sold	Given away	Other	
1				
2				
3				
4				
5				
6				
7				

1. Plastic bottles
2. Glass bottles
3. Newspapers, books, etc.,
4. Magazines
5. Kitchen waste
6. Old clothes
7. Others

3. Collection service

(1) Where is the waste put outside the house for collection ?

a)	b)	Total
109	3	112
91%	3%	93%

- a) Put in front of the house or building
- b) Taken to a designed pick up station

If reply is "yes" in "b)" describe conditions at the pick up station

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total

- ii) open area
- iii) communal container
- iv) station space, container capacity insufficient
- v) bad odor at the station
- vi) insects, etc. at the station
- vii) incomplete removal of waste from station
- viii) station designed by signboard or poster

(2) Who collects the waste from the frontage of the house, or the designated station ?

a)	b)	c)	Total
118	0	0	118
98.3%			98.3%

- a) Urban commune
- b) Private company
- c) Scavengers

(3) Is the collection service provided satisfactory ?

a)		Total
Yes	No	Total
87	10	97
72.5%	8.3%	81%

- a) In general satisfactory

b) For those who replied "No", what are the reasons for not being satisfied with the service?

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
1	12	4	6	1	1	1	0	26
1%	10%	3%	5%	1%	1%	1%	0%	22%

- i) insufficient collection frequency (days/week)
- ii) collection trucks emit poor odor
- iii) waste falls of collection trucks
- iv) not all waste is collected from collection points
- v) collection trucks are noisy
- vi) collection workers mishandle individual containers
- vii) need to pay tips to collection workers
- ix) others

(4) For those who replied "No" in (3) a) above, how much extra money are they willing to pay to improve the service extended to them ?

Calculate the average:DH/month

a)	b)	c)	d)	e)	f)	Total
8	0	0	0	0	0	8
6.7%	0.0%	0.0%				7%

- a) not willing to pay anything
- b) less than 30 DH/month
- c) - 59 DH/month
- d) - 89 DH/month
- e) - 119 DH/month
- f) more than 120 DH/month

(5) Is there any communication between you and the collection service organization ?

a)		
Yes	No	Total
10	107	117
8.3%	89.2%	97.5%

b) If YES, then in case of service organization to you, in which aspects:

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	ix)	x)	xi)	Total
6	0	1	0	0	0	0	0	0	0	0	7
5.0%		0.8%			0.0%	0.0%	0.0%				5.8%

- i) organization informs on the collection times
- ii) organization informs on suitable container which should be used
- iii) organization implements public education campaigns
- iv) organization encourages recycling activity
- v) organization requests additional fees
- vi) organization contacted you for other reasons
- vii) you requested information on collection times
- viii) you requested information on suitable container
- ix) you requested information on recycling activity
- x) you complained about the service provided
- xi) you contacted the service for other reasons

4. Willingness to assist in efforts to improve SWM

a)	b)	c)	d)	e)	f)	g)	h)	Total
40	67	36	39	15	67	3	0	267
33.3%	55.8%	30.0%	32.5%	12.5%	55.8%	2.5%		222.5%

- a) Discharge waste from the house every two days
- b) Discharge waste in plastic bags
- c) Discharge waste in plastic bin
- d) Take waste personally to a 50 - 100 meters distant collection station
- e) Clean around the collection station on a rotation basis
- f) Sweep the road in front of the house
- g) Separate newspapers, plastic and glass for recycling
- h) Not willing to do anything

Part D - Cleanliness Campaigns

1. Do you remember when any cleanliness campaigns that have taken place in your neighborhood in 1996 ?

Yes	No	Total
74	46	120
61.7%	38.3%	100%

2. Do you remember when it took place ?

a)	b)	c)	Total
2	42	36	80
1.7%	35.0%	30.0%	66.7%

- a) during spring
- b) during summer
- c) during autumn

3. Do you know the campaign message or purpose ?

a)	b)	c)	Total
65	11	8	84
54.2%	9.2%	6.7%	70%

- a) Yes, I know.
- b) No, I don't know.
- c) No, I have forgot.

4. How have you been informed about the campaign ?

a)	b)	c)	d)	e)	f)	g)	h)	i)	Total
0	75	0	12	26	0	2	18	5	136
0.0%	62.5%	0.0%	10.0%	21.7%		1.7%	15.0%	2.5%	113.3%

- a) through newspapers
- b) through loud speaker
- c) through street manifestations
- d) through public meetings
- e) through television
- f) through video or transparency projections
- g) through exposition
- h) through posters
- i) through family, relatives, and friends

5. Did the campaign bring any influence to you ?

a)	b)	c)	Total
20	21	6	47
16.7%	17.5%	5.0%	39.2%

- a) No, I did not get any influence.
- b) Yes, I grew my knowledge in and awareness of this matter.
- c) Yes, I got involved in the campaign.

6. Did you change your idea or behavior after the campaign ?

a)	b)	c)	Total
69	4	1	74
57.5%	3.3%	0.8%	62%

- a) Yes in idea
- b) Yes in behavior
- c) No

7. Do you think the city has improved in cleanliness ?

Yes	No	Total
107	11	118
89.2%	9.2%	98%

Part E - Others

In your opinion what are the most serious infrastructures problems facing the city ?

I)	ii)	iii)	iv)	v)	vi)	vii)	Total
38	14	25	11	73	47	40	248
31.7%	11.7%	20.8%	9.2%	60.8%	39.2%	33.3%	206.7%

- i) housing
- ii) water supply
- iii) sewerage
- iv) electricity
- v) roads
- vi) public transport
- vii) SWM



Income Category **MIDDLE**

Boudheb, Zaouia, Biada

Number of interviewees: **120**



Summation of Citizen Awareness Survey

Name of Urban Commune: Asfi Boudheb, Zaouia, Biada

Income Category: Middle

Write numbers (of household which answered yes) on the 1st row. Write percentage (%) in the 2nd row unless otherwise indicated. Percentage should be calculated through dividing by number of households surveyed, i.e., either 40 or 20. In some questions, addition of respective percentage may not be 100 %.

Part A - General Condition

1. Interviewee:

a)	b)	c)	d)	e)	f)	Total
50	33	23	3	2	5	116
41.67%	11.00%	7.67%	2.50%	1.67%	4.17%	96.67%

- a) Housewife
- b) Master of the house
- c) Child
- d) Grand parent
- e) Servant
- f) Other

3. Residence type:

a)	b)	c)	d)	e)	Total
0	0	105	14	0	119
0.0%	0.0%	87.5%	11.7%	0.0%	99.2%

- a) Residential area: Villa
- b) Apartment building
- c) Economical Housing/middle density
- d) Economical Housing/high density
- 4. Cleanliness conditions:

a)			b)			c)					
Good	Middle	Low	Total	Good	Middle	Low	Total	Good	Middle	Low	Total
11	106	0	117	4	91	21	116	1	5	0	6
9.2%	88.3%	0.0%	97.5%	3.3%	75.8%	17.5%	96.7%	0.8%	4.2%		5.0%

- a) in front of the house
- b) on the street
- c) at the collection station serving the house

Part B - Household Attributes

1. Number of persons living in the household

1 person	2 persons	3 persons	4 persons	5 persons	6 persons	7 persons	8 persons	9 persons	10 or more	Total
0	5	8	18	33	17	11	15	9	4	120
0.0%	4.2%	6.7%	15.0%	27.5%	14.2%	9.2%	12.5%	7.5%	3%	100%

2. Status of house

a)	b)	c)	Total
85	29	6	120
70.8%	24.2%	5.0%	100%

- a) Owner
- b) Tenant
- c) Others

3. Number of years living in the house

Years					
0-4.9	5-9.9	10-14.9	15-19.9	20 or more	Total
26	37	14	16	27	120
21.7%	30.8%	11.7%	13.3%	22.5%	100%

4. Income earners and total family income

		a) (persons)					Total
0	1	2	3	4	5 or more	Total	
0	99	13	6	0	0	118	
0.0%	82.5%	10.8%	5.0%	0.0%	0.0%	98.3%	
		b) (thousand DH / month)					Total
<2	2-5	5-10	10-15	15-20	20+	Total	
12	62	5	1	0	0	80	
10.0%	51.7%	4.2%	0.8%	0.0%		66.7%	

5. Share of household income used by category (Calculate the averages for each item)

a)	b)	c)	d)	e)			Total
				(1)	(2)	(3)	
628	1498	221	278	112	141	51	2929
523.3%	1248.3%	184.2%	231.7%	93.3%	117.5%	42.5%	100%

- a) House rent or housing loan repayment
- b) Food, clothing
- c) Education
- d) Transportation or loan repayment
- e) Service (1) water consumption
(2) electricity consumption
(3) Cleansing tax

Part C - Household Solid Waste Management Practice

1. Dust bins in the house

(1) Dust bins used in inside the house for storage of waste

Type:

a)	b)	c)	d)	e)	f)	g)	Total
97	0	0	0	2	21	0	120
80.8%				1.7%	17.5%	0.0%	100%

- a) Plastic bin
- b) Wood bin
- c) Cardboard box
- d) Paper bag
- e) Plastic bag
- f) Tin container
- g) Other

Size (irrespective of bin type):

1-10 lit	11-20 lit	21-30 lit	31-40 lit	40 lit <	Total
43	75	2	0	0	120
35.8%	62.5%	1.7%		0.0%	100%

Number

1	2	3	4	5 or more	Total
118	2	0	0	0	120
98.3%	1.7%				100%

Location (irrespective of bin type):

Kitchen	Balcony	Rooms	Others	Total
87	18	0	15	120
72.5%	15.0%	0.0%	12.5%	100%

(2) Are plastic bags used for lining of the containers ?

Yes	No	Total
98	20	118
81.7%	16.7%	98.3%

2. Discharge Practice

(1) How is the waste discharged from the house ?

a)	b)	c)	d)	Total
76	39	0	0	115
63.3%	32.5%	0.0%	0.0%	95.8%

- a) Waste put in one large dustbin and taken out
- b) Each dustbin used in the house is taken out separately
- c) Waste thrown in the garbage chute
- d) Waste thrown in the communal container
- e) Waste is taken out and burnt

(2) Who mainly discharges the waste outside the house ?

a)	b)	c)	d)	e)	f)	g)	h)	Total
0	63	6	0	3	0	0	48	120
0.0%	52.5%	5.0%	0.0%	2.5%			40.0%	100%

- a) Father
- b) Mother
- c) Children
- d) Elderly family member

- e) Servant
- f) Doorman/custodian
- g) Collection worker comes to the door to collect the waste
- h) Not fixed

(3) How often do you discharge the waste from your house ?

a)	b)	c)	d)	Total
1	119	0	0	120
1%	99%	0%		100%

- a) At least twice daily
- b) Once daily
- c) Every 2 or 3 days
- d) Once a week

(4) During what time do you discharge the waste from your house ?

a)	b)	c)	d)	e)	f)	g)	Total
48	33	37	2	0	0	0	120
40.0%	27.5%	30.8%	1.7%	0.0%	0.0%	0.0%	100%

- a) 6 - 7:59 AM
- b) 8 - 9:59 AM
- c) 10 - 11:59 Noon
- d) 12 - 5:59 PM
- e) 6 - 7:59 PM
- f) 8 - 9:59 PM
- g) 10 PM - 5:59 AM

(5) Do you have any problems with the waste while it is kept inside the house ?

a)	b)	c)	d)	e)	f)	Total
3	111	66	0	0	0	180
2.5%	92.5%	55.0%	0.0%	0.0%		150%

- a) No problems
- b) Bad odor
- c) Attraction of insects
- d) Attraction of rats
- e) Takes up space
- f) Other

(6) Do you separate any waste items for recycling ?

a)		
No	Yes	Total
112	0	112
93.3%	0%	93.3%

b) In case of "yes" reply, then ask the following questions ?

(i) The following materials are separated from the waste to be discharged:

1	2	3	4	5	6	7	Total

- 1. Plastic bottles
- 2. Glass bottles
- 3. Newspapers, books, etc.
- 4. Magazines
- 5. Kitchen waste
- 6. Old clothes
- 7. Others, specify

(ii) What is done with the separated materials? (Indicate number of household who answered "yes" in each item.

Materials	Disposal method			Transport by others
	Sold	Given away	Other	
1				
2				
3				
4				
5				
6				
7				

1. Plastic bottles
2. Glass bottles
3. Newspapers, books, etc.,
4. Magazines
5. Kitchen waste
6. Old clothes
7. Others

3. Collection service

(1) Where is the waste put outside the house for collection ?

a)	b)	Total
120	0	120
100%	0%	100%

- a) Put in front of the house or building
- b) Taken to a designed pick up station

If reply is "yes" in "b)" describe conditions at the pick up station

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total

- ii) open area
- iii) communal container
- iv) station space, container capacity insufficient
- v) bad odor at the station
- vi) insects, etc. at the station
- vii) incomplete removal of waste from station
- viii) station designed by signboard or poster

(2) Who collects the waste from the frontage of the house, or the designated station ?

a)	b)	c)	Total
118	0	0	118
98.3%			98.3%

- a) Urban commune
- b) Private company
- c) Scavengers

(3) Is the collection service provided satisfactory ?

a)		Total
Yes	No	Total
101	7	108
84.2%	5.8%	90%

- a) In general satisfactory

b) For those who replied "No", what are the reasons for not being satisfied with the service?

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	Total
0	1	3	3	3	1	0	1	12
0%	1%	3%	3%	3%	1%	0%	1%	10%

- i) insufficient collection frequency (days/week)
- ii) collection trucks emit poor odor
- iii) waste falls of collection trucks
- iv) not all waste is collected from collection points
- v) collection trucks are noisy
- vi) collection workers mishandle individual containers
- vii) need to pay tips to collection workers
- ix) others

(4) For those who replied "No" in (3) a) above, how much extra money are they willing to pay to improve the service extended to them ?

Calculate the average:DH/month

a)	b)	c)	d)	e)	f)	Total
3	2	1	0	0	0	6
2.5%	1.7%	0.8%				5%

- a) not willing to pay anything
- b) less than 30 DH/month
- c) - 59 DH/month
- d) - 89 DH/month
- e) - 119 DH/month
- f) more than 120 DH/month

(5) Is there any communication between you and the collection service organization ?

a)		
Yes	No	Total
6	113	119
5.0%	94.2%	99.2%

b) If, YES, then in case of service organization to you, in which aspects:

i)	ii)	iii)	iv)	v)	vi)	vii)	viii)	ix)	x)	xi)	Total
2	0	1	0	0	1	1	1	0	0	0	6
1.7%		0.8%			0.8%	0.8%	0.8%				5.0%

- i) organization informs on the collection times
- ii) organization informs on suitable container which should be used
- iii) organization implements public education campaigns
- iv) organization encourages recycling activity
- v) organization requests additional fees
- vi) organization contacted you for other reasons
- vii) you requested information on collection times
- viii) you requested information on suitable container
- ix) you requested information on recycling activity
- x) you complained about the service provided
- xi) you contacted the service for other reasons

4. Willingness to assist in efforts to improve SWM

a)	b)	c)	d)	e)	f)	g)	h)	Total
21	55	31	41	2	69	31	0	250
17.5%	45.8%	25.8%	34.2%	1.7%	57.5%	25.8%		208.3%

- a) Discharge waste from the house every two days
- b) Discharge waste in plastic bags
- c) Discharge waste in plastic bin
- d) Take waste personally to a 50 - 100 meters distant collection station
- e) Clean around the collection station on a rotation basis
- f) Sweep the road in front of the house
- g) Separate newspapers, plastic and glass for recycling
- h) Not willing to do anything

Part D - Cleanliness Campaigns

1. Do you remember when any cleanliness campaigns that have taken place in your neighborhood in 1996 ?

Yes	No	Total
81	38	119
67.5%	31.7%	99.2%

2. Do you remember when it took place ?

a)	b)	c)	Total
7	35	40	82
5.8%	29.2%	33.3%	68.3%

- a) during spring
- b) during summer
- c) during autumn

3. Do you know the campaign message or purpose ?

a)	b)	c)	Total
77	3	0	80
64.2%	2.5%	0.0%	66.7%

- a) Yes, I know.
- b) No, I don't know.
- c) No, I have forgot.

4. How have you been informed about the campaign ?

a)	b)	c)	d)	e)	f)	g)	h)	i)	Total
5	55	0	13	41	0	0	25	14	153
4.2%	45.8%	0.0%	10.8%	34.2%		0.0%	20.8%	11.7%	127.5%

- a) through newspapers
- b) through loud speaker
- c) through street manifestations
- d) through public meetings
- e) through television
- f) through video or transparency projections
- g) through exposition
- h) through posters
- i) through family, relatives, and friends

5. Did the campaign bring any influence to you ?

a)	b)	c)	Total
21	30	13	64
17.5%	25.0%	10.8%	53.3%

- a) No, I did not get any influence.
- b) Yes, I grew my knowledge in and awareness of this matter.
- c) Yes, I got involved in the campaign.

6. Did you change your idea or behavior after the campaign ?

a)	b)	c)	Total
59	0	1	60
49.2%	0.0%	0.8%	50%

- a) Yes in idea
- b) Yes in behavior
- c) No

7. Do you think the city has improved in cleanliness ?

Yes	No	Total
117	3	120
97.5%	2.5%	100%

Part E - Others

In your opinion what are the most serious infrastructures problems facing the city ?

I)	ii)	iii)	iv)	v)	vi)	vii)	Total
27	1	19	14	82	27	40	210
22.5%	0.8%	15.8%	11.7%	68.3%	22.5%	33.3%	175.0%

- i) housing
- ii) water supply
- iii) sewerage
- iv) electricity
- v) roads
- vi) public transport
- vii) SWM

