

e.3 Schedule and Itinerary of the Visits

Counterpart personnel of the 14 municipalities, OPAMSS and leaders of the aforementioned communities participated in the two visits carried out before and after the pilot projects, on May 18 and June 27 respectively. The second visit, originally planned for June 23, had to be postponed to June 27 due to rain in San Marcos. The schedule of second site visit is shown below. Although no school visit was paid during the first site visit, the rest of the schedule are almost the same.

Table H-11: Schedule of the Second Site Visit to Pilot Project Areas

Site visit to pilot project areas after the implementation (Maria Auxiliadora and 10 de Octubre)		
Date: June 27 2000 (Tuesday)		Time: 9.45 AM
Meeting place: Office of OPAMSS		Duration of the visit: approximately 2.15 hours
Time	Schedule and Itinerary	Remarks
9.45	Welcome words	JICA
9.50	Departure from OPAMSS	Brief explanation of the pilot projects during the trip by Mr. Masaharu Kina (JICA Study Team) Delivery of questionnaire sheets
10.10	Arrival to Maria Auxiliadora (Cuscatancingo) Visit to pilot project areas	<ul style="list-style-type: none"> • Brief explanation of the experiment by Counterpart of Cuscatancingo • Results of resident participation by community leader • Experiences in school by teacher of Liceo Cristiano School
10.35	Departure from Cuscatancingo	
11.00	Arrival to 10 de Octubre (San Marcos) Visit to pilot project areas	<ul style="list-style-type: none"> • Brief explanation of the experiment by Counterpart of San Marcos • Results of resident participation by community leader • Experiences in school by teacher of 10 de Octubre School
11.20	Visit to school	Experiences in school by teacher of 10 de Octubre School
11.30	Departure from 10 de Octubre	Collection of questionnaire sheets
12.00	Arrival to OPAMSS	

H.4 Results of the Pilot Project

Immediately after the implementation of the pilot project of “sanitary education and public awareness promotion campaign” and “collection service experiment”, the following verification activities were conducted:

- 1) Public opinion survey (POS)
- 2) Meeting with community leaders and residents
- 3) Site visit to pilot project areas

a. Public Opinion Survey (POS)

A POS was conducted before and after the implementation of the pilot project to verify the following:

- Compare the change of the residents' opinions on sanitary aspects and waste handling manners, and
- Verify the residents' understanding and cooperation in the campaign.

a.1 Methodology

i) Aspects of the Survey

Direct interviews were conducted to determine the residents' opinions on a series of aspects related with SW, such as the collection service, problems of waste, sanitary conditions, resident's awareness, etc.

ii) Schedule of the Survey

The POS was carried out in pilot project areas according to the following schedule:

Pilot Project Areas	Before the Project	After the Project
Maria Auxiliadora (Cuscatancingo)	May 11, 2000	June 19, 2000
10 de Octubre (San Marcos)	May 12, 2000	June 28, 2000

iii) Number of Samples

Total number of samples was 200 allocated as follows: 50 samples from Maria Auxiliadora and 50 from 10 de Octubre interviewed twice, that is "before" and "after" pilot project.

iv) Questionnaire Survey Form

The municipalities of Cuscatancingo and San Marcos conducted the POS with the support of JICA Study Team.

This survey aimed to know the opinion of the residents of the selected communities about problems related to SW, the importance of sanitary education and the public awareness promotion campaign, before and after the implementation of the pilot project in the communities mentioned above.

The first survey (before the pilot project) was conducted using the following questionnaire:

Table H-12: Form of Public Opinion Survey (POS)

(1) General			
Municipality:	Community:		
Name of the interviewee:	Sex: Male / Female	Age:	
Address:			
Name of the interviewer:	Date:		, 2000
Number of family members:	(husband/wife/son/daughter/grandmother/grandfather)		

No.	Questionnaire	Yes	No	Remarks
(2)	Present situation of the collection service and problems of waste			
R1	Do you have a waste collection service in your area?			
R2	Who collects the waste? a) Municipality b) Private collectors c) Others			
R3	How often is your waste collected? a) Once a week b) Twice a week c) Three times a week d) More than 4 times a week e) None			
R4	Does a collection service truck have access to your house?			
R5	How do you dispose of your waste? a) Put it in front of the house b) Put it into a container at a collection point c) Bury or burn it d) Others			
R6	Are you satisfied with the waste collection service?			
R7	Why are you unsatisfied with the collection service? a) The service is infrequent b) The service is irregular c) The collection time is not adequate d) The collection workers do not pick up the waste e) The waste collection service is too expensive f) Collection point is too far g) Others (specify)			
P1	Are there waste problems in your community? (if the answer is NO, go to S1)			
P2	What are the problems? (tick where appropriate) a) Waste is disposed of in the streets b) Waste is disposed of in drainage and watercourses c) Illegal waste dumping in open areas and "quebradas" d) Proliferation of rats and other vectors e) Propagation of diseases (dengue, malaria, cholera, parasitic diseases, etc.) f) Offensive odor by illegal waste disposal g) Smoke caused by burning waste h) The city looks dirty (unaesthetic landscape) i) Others (please specify)			
(3)	Sanitary Education			
S1	Have you ever been taught methods of proper waste handling and discharge?			
S2	Who taught such methods? a) Family members b) School c) Municipality d) Central Government e) Others			
S3	Would you like to participate in sanitary education programs?			
S4	What would you want to learn? (choose one answer only) a) Appropriate waste discharge manner b) Health risks (diseases, etc.) caused by waste c) Environmental problems on waste d) Others			
S5	Do you think sanitary education is necessary for the improvement of sanitary conditions in your community?			
S6	Do you think sanitary/hygiene education should be included at school?			
(4)	Public Awareness Promotion Campaign			
C1	Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?			
C2	Do you think public cooperation is necessary to keep your community clean?			
C3	Do you think public awareness regarding the waste problems is sufficient in your community?			
C4	Do you think a campaign to raise awareness of people for maintaining a cleaner community and environment is necessary?			
C5	Will you participate and cooperate in clean-up activities for the improvement of sanitary conditions in your community?			
C6	Who should take actions for promoting public awareness on waste issues? a) Central government b) COAMSS c) Municipality d) Community e) School centers f) Family g) Other ()			

The second survey (after the pilot project) was conducted based on the previous questionnaire excluding questions (R1 to R7) on the present situation and collection service and some variations on questions S (sanitary education aspects) and C (public awareness promotion campaign).

a.2 Results

The results of the POS are shown below. Details of the POS are included in the Data Book.

1) Results of the POS on the Present Situation of Collection Service in Maria Auxiliadora and 10 de Octubre (before the implementation of the pilot project)

Table H-13: Present Situation of Collection Service in Maria Auxiliadora and 10 de Octubre (before the Pilot Project)

No.	Questionnaire	Maria Auxiliadora		10 de Octubre	
		Yes (%)	No (%)	Yes (%)	No (%)
R1	Do you have a waste collection service in your area?	86	12	98	2
R2	Who collects the waste?				
	a) Municipality	82		94	
	b) Private collectors	-		-	
	c) Others	-		-	
R3	How often is your waste collected?				
	a) Once a week	4		10	
	d) Twice a week	76		30	
	c) Three times a week	8		52	
	d) More than 4 times a week	-		4	
	e) None	6		-	
R4	Does a collection service truck have access to your house?	20	70	24	70
R5	How do you dispose of your waste?				
	a) Put it in front of the house	10		16	
	b) Put it into a container at a collection point	2		70	
	c) Bury or burn it	-		2	
	d) Others	70		-	
R6	Are you satisfied with the waste collection service?	64	16	76	20
R7	Why are you unsatisfied with the collection service?				
	a) The service is infrequent	72		12	
	b) The service is irregular	72		8	
	c) The collection time is not adequate	66		22	
	d) The collection workers do not pick up the waste	64		46	
	e) The waste collection service is too expensive	16		42	
	f) Collection point is too far	28		26	
	g) Others (specify)	-		2	

As can be seen from the percentages shown in the table above, there is a waste collection service in Maria Auxiliadora (86%) with a frequency of twice a week (76%). There is however, a discrepancy between these figures and the high percentage of residents who have answered that they use other methods than municipal collection service for waste disposal (70%). Before the implementation of the pilot project, there were no containers in the community (except a small “barrel” for community use), and the waste accumulation in “quebrada” in front of the community and the travel distance (50-100 meters upward) to the street where the collection truck passes suggest that some residents used the “quebrada” as a dumping area. Regarding the satisfaction with

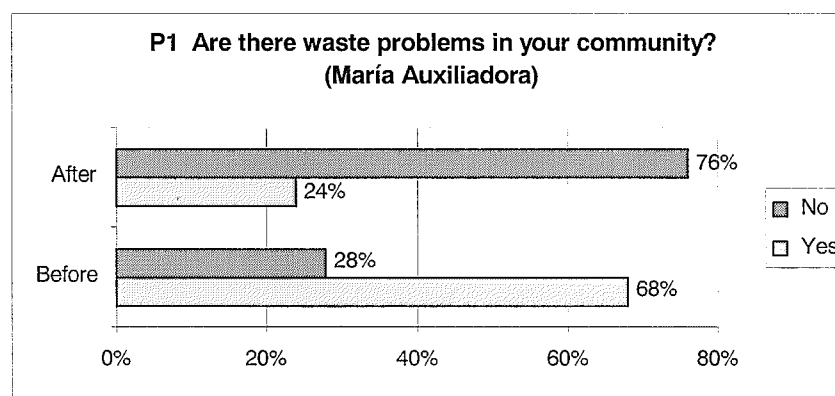
the collection service, there are also discrepancies due to the duplication of affirmative and negative answers.

The figures shown in San Marcos are more coherent. In 10 de Octubre, there are metallic and concrete containers (used by 70%). However, the problems observed in this community are the inadequate use of those containers and the collection points.

2) Results of the POS on Waste Problems in Maria Auxiliadora

Table H-14: Waste Problems in Maria Auxiliadora (before and after the PP)

No.	Questionnaire	Before the PP		After the PP	
		Yes (%)	No (%)	Yes (%)	No (%)
P1	Are there waste problems in your community? (if the answer is NO, go to S1)	68	28	24	76
P2	What are the problems? (tick where appropriate)				
	a) Waste is disposed of in the streets	56		10	
	b) Waste is disposed of in drainage and watercourses	44		12	
	c) Illegal waste dumping in open areas and "quebradas"	60		18	
	d) Proliferation of rats and other vectors	42			
	e) Propagation of diseases (dengue, malaria, cholera, parasitic diseases, etc.)	52		12	
	f) Offensive odor by illegal waste disposal	64		14	
	g) Smoke caused by burning waste	16		4	
	h) The city looks dirty (unaesthetic landscape)	46		14	
	i) Others (please specify)	2			



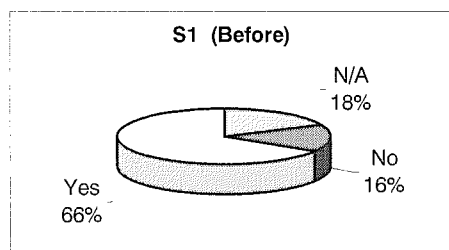
P1 (before/after). The changes observed in P1, before and after the implementation of the pilot project is remarkable (see table and figure above). Before the implementation, 68% of the interviewees answered that there were waste problems, while 28% responded that there were no problems. The remaining 4% of the interviewees responded that they did not know or did not answer. After the implementation of the pilot project, these opinions were inverted with 24% that affirmed the existence of waste problems against 76% that responded that those problems no longer existed.

3) Results of the POS on Sanitary Education in Maria Auxiliadora

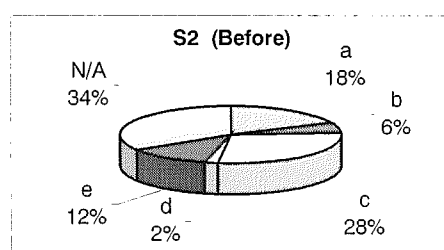
Table H-15: Sanitary Education in Maria Auxiliadora (before and after the PP)

Before the Pilot Project				After the Pilot Project			
No.	Questionnaire	Yes (%)	No (%)	Yes (%)	No (%)	Questionnaire	No.
S1	Have you ever been taught methods of proper waste handling and discharge?	16	66				
S2	Who taught such methods?						
	a) Family members	18					
	b) School	6					
	c) Municipality	28					
	d) Central Government	2					
	e) Others	12					
S3	Would you like to participate in sanitary education programs?	60	14	88	12	Did you participate in the sanitary education program carried out in your community? (if the answer is YES, go to S2 and S3)	S1
S4	What would you want to learn? (choose one answer only)					What aspect interested you the most? (choose one answer only)	S2
	a) Appropriate waste discharge manner	6		46		a) Appropriate waste discharge manner	
	b) Health risks (diseases, etc.) caused by waste	38		30		b) Health risks (diseases, etc.) caused by waste	
	c) Environmental problems on waste	18		24		c) Environmental problems on waste	
	d) Others	12		-		d) Others	
S5	Do you think sanitary education is necessary for the improvement of sanitary conditions in your community?	98	0	90	N/A	Do you think the continuation of sanitary education is necessary for the improvement of sanitary conditions in your community?	S3
S6	Do you think sanitary/hygiene education should be included at school?	76	2	94	4	Do you think sanitary/hygiene education should be included at school?	S4

Before
S1 Have you ever been taught methods of proper waste handling and discharge?



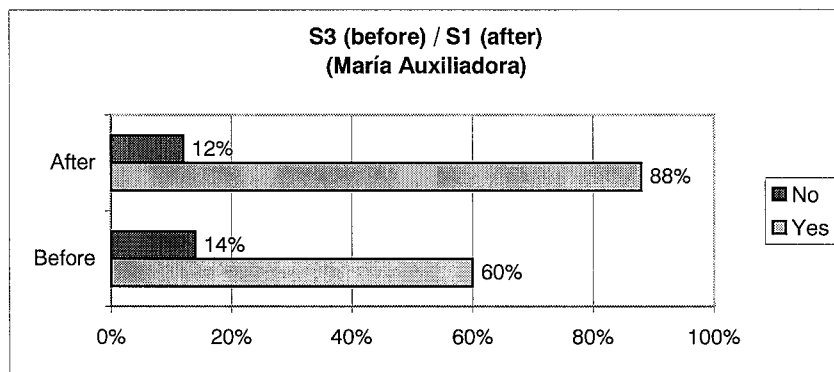
Before
S2 Who taught such methods?
a) Family members
b) School
c) Municipality
d) Central Government
e) Others



S1 (before). As observed in the figure above, 66% of interviewees have been taught methods of proper waste handling and discharge. The remaining 16% have not taught, and 18% did not answer.

S2 (before). Among people who answered affirmatively, the majority received training from the municipality (28%), followed by family members (18%) and other sources (12%).

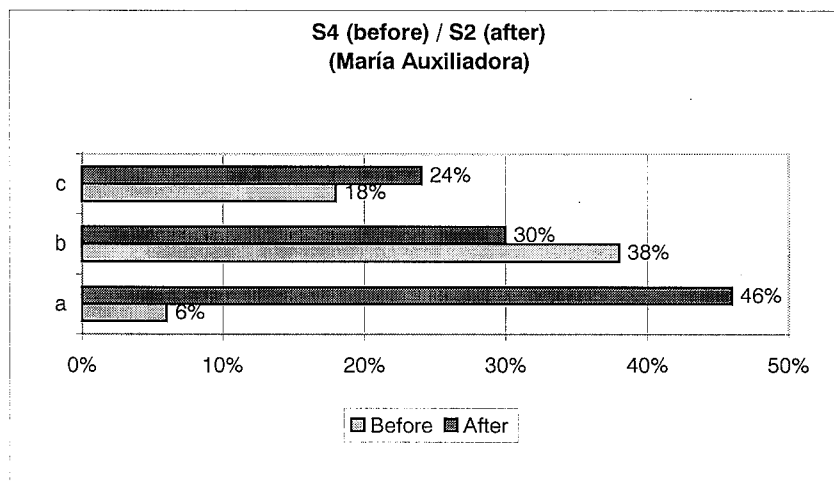
- | | |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| Before | After |
| S3 Would you like to participate in sanitary education programs? | S1 Did you participate in the sanitary education program carried out in your community? |



S3 (before). Regarding participation in sanitary education programs (before the pilot project), only 60% of the interviewees affirmed that they would like to participate in these programs.

S1 (after). However, questionnaire conducted after pilot project showed that the majority of the interviewees (88%) participated in the programs carried out in the community. It can be said that this achievement was obtained due to the series of meetings and the initiatives carried out by the Municipality of Cuscatancingo.

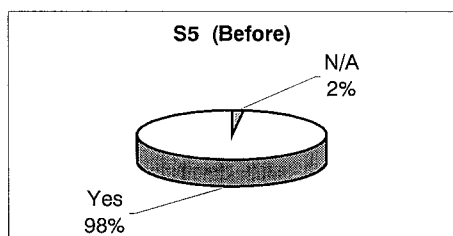
- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>S4 What would you want to learn?
(choose one answer only)</p> <ul style="list-style-type: none"> a) Appropriate waste discharge manner b) Health risks (diseases, etc.) caused by waste c) Environmental problems on waste d) Others | <p>S2 What aspect interested you the most?
(choose one answer only)</p> <ul style="list-style-type: none"> a) Appropriate waste discharge manner b) Health risks (diseases, etc.) caused by waste c) Environmental problems on waste d) Others |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



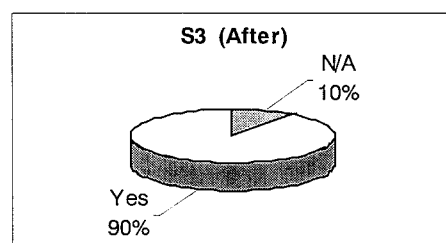
S4 (before). As was expected, the biggest concern for the residents are risks which directly affect their health (38%), environmental problems on waste (18%) and appropriate waste discharge manner (6%).

S2 (after). After the implementation of the pilot project, the order of interest was significantly altered, with 46% being most interested in the appropriate waste discharge manner, 30% in health risks, and 24% in environmental problems. These results show that the interviewees have understood the objectives of the sanitary education and the message of awareness campaign, since, with an appropriate waste discharge manner, diseases can be avoided and the environment can be protected.

S5 Do you think sanitary education is necessary for the improvement of sanitary conditions in your community?



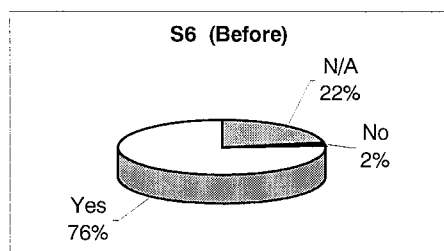
S3 Do you think the continuation of sanitary education is necessary for the improvement of sanitary conditions in your community?



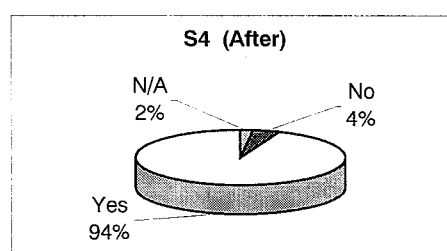
S5 (before). Before the pilot project, almost all interviewees (98%) responded that sanitary education is necessary for the improvement of sanitary conditions in the community.

S3 (after). Regarding the question on the necessity of continuing sanitary education to improve sanitary conditions in the community, 90% responded affirmatively. The remaining 10% responded that they did not know or did not answer.

S6 Do you think sanitary/hygiene education should be included at school?



S4 Do you think sanitary/hygiene education should be included at school?



S6 (before). Before the pilot project, 76% of the respondents answered that sanitary/hygiene education should be part of school curriculum as shown in figure above.

S4 (after). After the implementation of the pilot project, the number of respondents who answered affirmatively to the same question rose dramatically to 94%, confirming the necessity and the importance of the sanitary/hygiene education at schools.

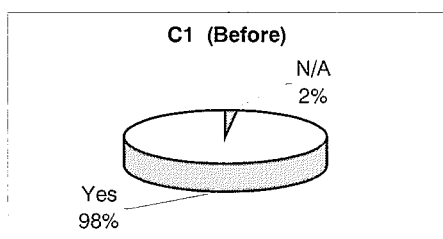
4) Results of the POS on the Public Awareness Promotion Campaign in Maria Auxiliadora

Table H-16: Public Awareness Promotion Campaign in Maria Auxiliadora (before and after the PP)

Before the Pilot Project				After the Pilot Project			
No.	Questionnaire	Yes (%)	No (%)	Yes (%)	No (%)	Questionnaire	No.
C1	Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?	98	0	100	0	Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?	C1
C2	Do you think public cooperation is necessary to keep your community clean?	90	2	98	2	Do you think public cooperation is necessary to keep your community clean?	C2
C3	Do you think public awareness regarding the waste problems is sufficient in your community?	48	48	98		Do you think the campaign and clean-up activities carried out in your community raised public awareness?	C3
C4	Do you think a campaign to raise awareness of people for maintaining a cleaner community and environment is necessary?	98	0				
C5	Will you participate and cooperate in clean-up activities for the improvement of sanitary conditions in your community?	100	0	96	4	Did you participate in the clean-up activities carried out in your community?	C4
C6	Who should take actions for promoting public awareness on waste issues?			Who should take actions for promoting public awareness on waste issues?			
	a) Central government	8		4		a) Central government	C5
	b) COAMSS	0		2		b) COAMSS	
	c) Municipality	32		10		c) Municipality	
	d) Community	28		26		d) Community	
	e) School centers	0		0		e) School centers	
	f) Family	0		2		f) Family	
g) Other	16		56		g) Other (All)		

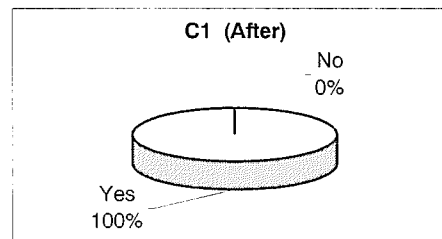
Before

C1 Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?



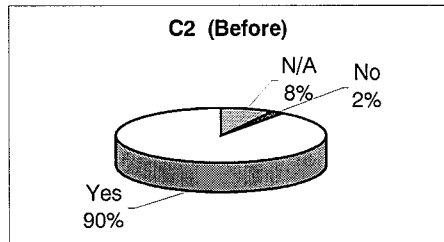
After

C1 Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?

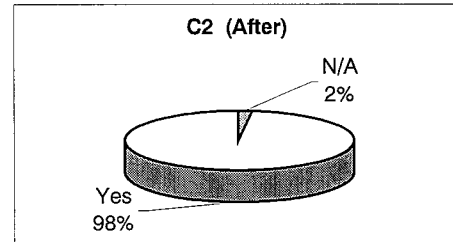


C1 (before/after). Practically all the interviewees responded that somebody in their household cleans the sidewalk or adjacent public areas in front of their houses with 98% and 100% before and after the pilot project respectively.

C2 Do you think public cooperation is necessary to keep your community clean?



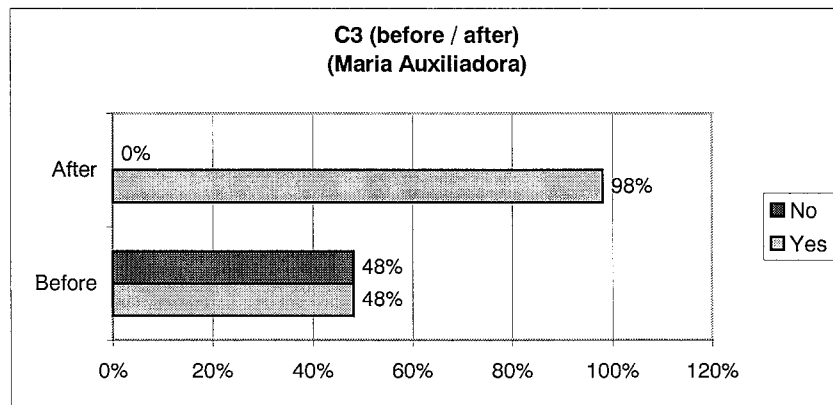
C2 Do you think public cooperation is necessary to keep your community clean?



C2 (before/after). Before the pilot project, 90% of the interviewees affirmed that the public cooperation is necessary to maintain the community clean. After the pilot project, almost all the interviewees gave an affirmative answer (98%). The result shows the pilot project was effective to let residents realize the importance of public cooperation.

C3 Do you think public awareness regarding the waste problems is sufficient in your community?

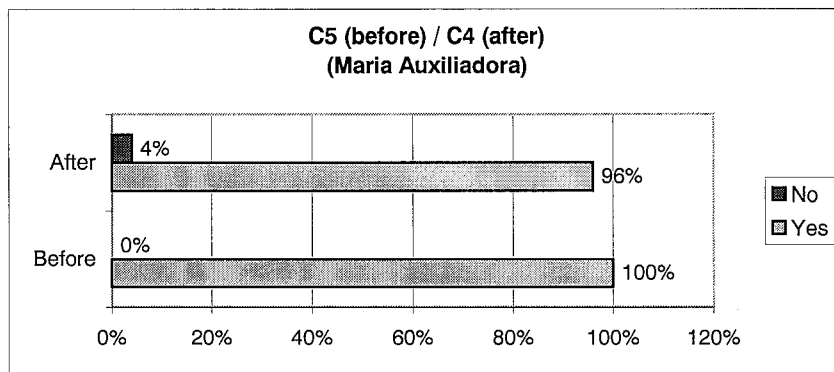
C3 Do you think the campaign and clean-up activities carried out in your community raised public awareness?



C3 (before/after). As shown in the figure above, the number of interviewees who answered public awareness is sufficient and not sufficient was the same at 48%. After the pilot project, concerning whether the campaign and clean-up activities carried out in the community raised public awareness, almost all (98%) responded affirmatively, with 2% without answers.

C5 Will you participate and cooperate in clean-up activities for the improvement of sanitary conditions in your community?

C4 Did you participate in the clean-up activities carried out in your community?

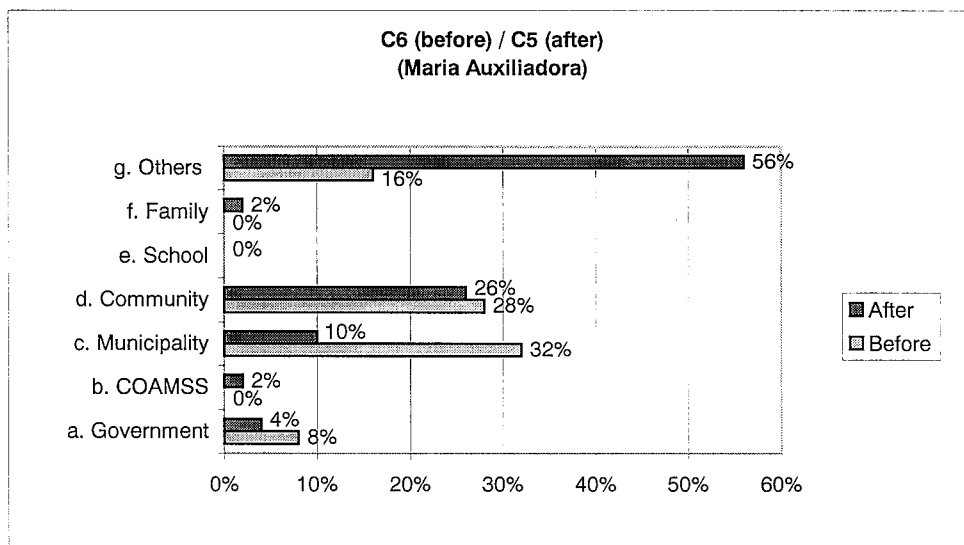


C5 (before). Regarding the willingness to participate and cooperate in clean-up activities for the improvement of sanitary conditions of the community, 100% of the interviewees responded that they would participate and cooperate in those activities.

C4 (after). The result obtained after the pilot project is very satisfactory, since 96% have participated in the clean-up activities, with only 4% that allegedly did not have time.

C6 Who should take actions for promoting public awareness on waste issues?
 a) Central government
 b) COAMSS
 c) Municipality
 d) Community
 e) School centers
 f) Family
 g) Other

C5 Who should take actions for promoting public awareness on waste issues?
 a) Central government
 b) COAMSS
 c) Municipality
 d) Community
 e) School centers
 f) Family
 g) Other



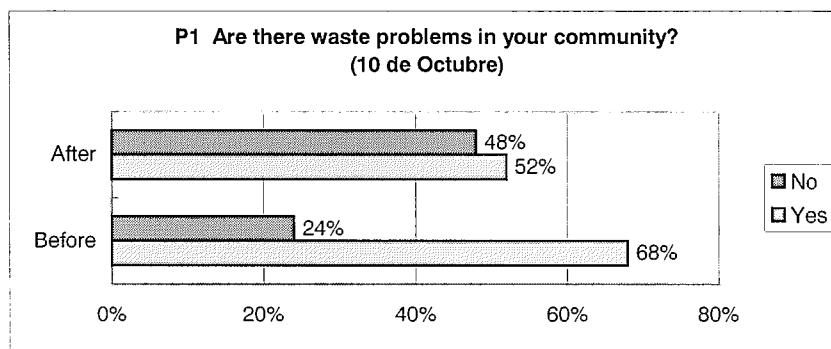
C6 (before). With regard to who should take actions for promoting public awareness on waste issues, the following results were obtained: Municipality (32%), community (28%), other (16%) and Central Government (8%).

C5 (after). There was a great turnabout after the pilot project, with the following results: others, which include the responsibility of all the components of society (56%), community (26%), Municipality (10%), Central Government (4%), and family and COAMSS with 2% respectively. Based on their recent experiences, the interviewees consider that the waste problem is the responsibility and concern of society as a whole. This positive change in the interviewees' attitudes is due to the series of meetings, workshops and residents' participation in communal activities during the implementation of the pilot project.

5) Results of the POS on Waste Problems in 10 de Octubre

Table H-17: Waste Problems in 10 de Octubre (before and after the PP)

No.	Questionnaire	Before the PP		After the PP	
		Yes (%)	No (%)	Yes (%)	No (%)
P1	Are there waste problems in your community? (if the answer is NO, go to S1)	68	24	52	48
P2	What are the problems? (tick where appropriate)				
	a) Waste is disposed of in the streets	44			
	b) Waste is disposed of in drainage and watercourses	30			
	c) Illegal waste dumping in open areas and "quebradas"	26			
	d) Proliferation of rats and other vectors	64			
	e) Propagation of diseases (dengue, malaria, cholera, parasitic diseases, etc.)	44		50	
	f) Offensive odor by illegal waste disposal	40			
	g) Smoke caused by burning waste	22			
	h) The city looks dirty (unaesthetic landscape)	18			
	i) Others (please specify)	2			



P1 (before/after). Before the implementation of the pilot project, 68% of the interviewees responded that waste problems existed, while 24% responded negatively. The table and figure above (after the pilot project) show that a great percentage of interviewees expressed those waste problems still existed (52%). However, the remaining problems are not directly related with waste but with the proliferation of pests and diseases, as there are lots of vermin inside the houses within the community.

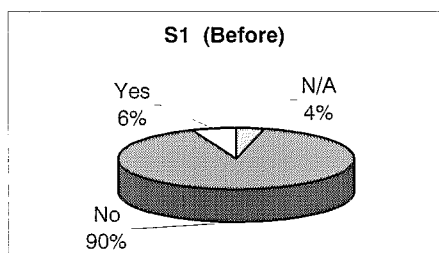
6) Results of the POS on Sanitary Education in 10 de Octubre

Table H-18: Sanitary Education in 10 de Octubre (before and after the PP)

Before the Pilot Project				After the Pilot Project			
No.	Questionnaire	Yes (%)	No (%)	Yes (%)	No (%)	Questionnaire	No.
S1	Have you ever been taught methods of proper waste handling and discharge?	6	90				
S2	Who taught such methods?						
	a) Family members	14					
	b) School	0					
	c) Central Government	0					
	d) Municipality	0					
	e) Others	6					
S3	Would you like to participate in sanitary education programs?	80	16	96	4	Did you participate in the sanitary education program carried out in your community? (if the answer is YES, go to S2 and S3)	S1
S4	What would you want to learn? (choose one answer only)					What aspect interested you the most? (choose one answer only)	S2
	a) Appropriate waste discharge manner	34		52		a) Appropriate waste discharge manner	
	b) Health risks (diseases, etc.) caused by waste	26		28		b) Health risks (diseases, etc.) caused by waste	
	c) Environmental problems on waste	10		2		c) Environmental problems on waste	
	d) Others	0		0		d) Others	
S5	Do you think sanitary education is necessary for the improvement of sanitary conditions in your community?	96	0	100	0	Do you think the continuation of sanitary education is necessary for the improvement of sanitary conditions in your community?	S3
S6	Do you think sanitary/hygiene education should be included at school?	100	0	100	0	Do you think sanitary/hygiene education should be included at school?	S4

Before

S1 Have you ever been taught methods of proper waste handling and discharge?

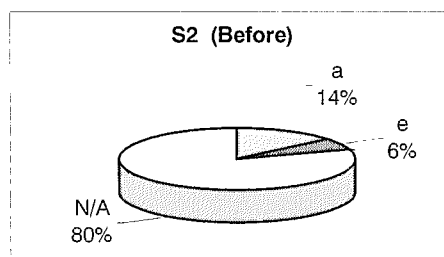


S1 (before). As shown in the figure above and unlike Maria Auxiliadora, only 6% responded that they have been taught methods of proper waste handling and discharge. The remaining 90 % and 4% did not receive any training or did not answer.

Before

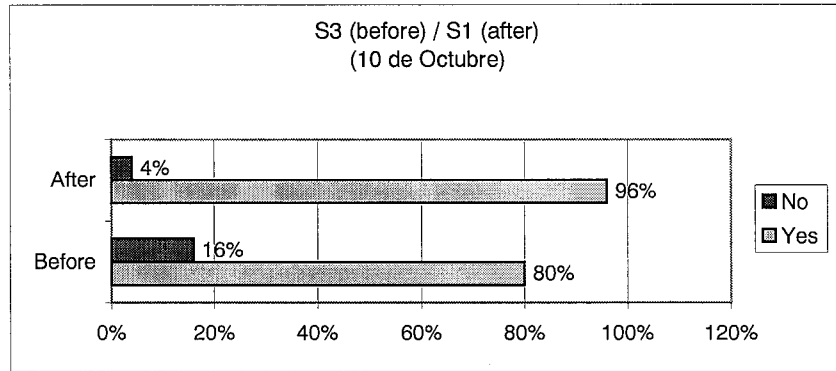
S2 Who taught such methods?

- a) Family members
- b) School
- c) Central Government
- d) Municipality
- e) Others



S2 (before). Among people who responded affirmatively, 14% of the interviewees learned from family members and 6% by others.

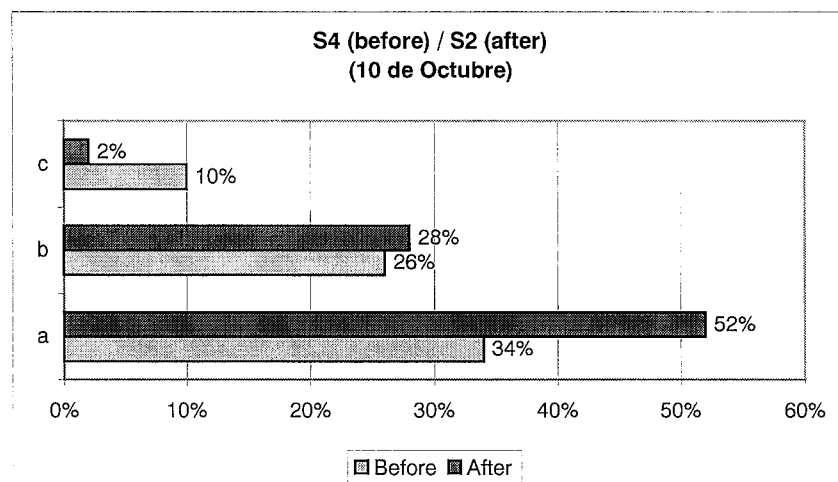
- | Before | After |
|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| S3 Would you like to participate in sanitary education programs? | S1 Did you participate in the sanitary education program carried out in your community? |



S3 (before). Regarding the participation in sanitary education programs (before the pilot project), 80% affirmed that they would participate in these programs and 16% answered negatively.

S1 (after). However, after the implementation of the pilot project, most of the interviewees (96%) participated in programs implemented in the community. This achievement was obtained due to the series of meetings, the interest and initiatives carried out by residents in improving the sanitary conditions of the community.

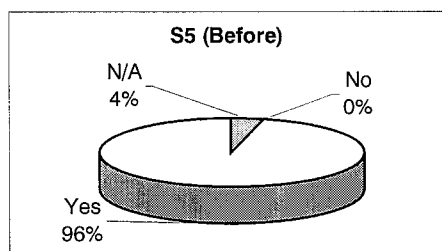
- | | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>S4 What would you want to learn?
(choose one answer only)</p> <ul style="list-style-type: none"> a) Appropriate waste discharge manner b) Health risks (diseases, etc.) caused by waste c) Environmental problems on waste d) Others | <p>S2 What aspect interested you the most?
(choose one answer only)</p> <ul style="list-style-type: none"> a) Appropriate waste discharge manner b) Health risks (diseases, etc.) caused by waste c) Environmental problems on waste d) Others |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



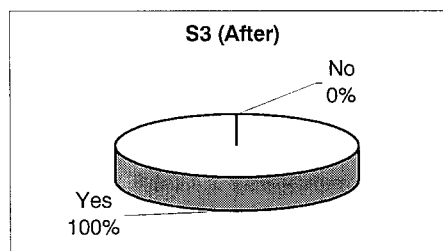
S4 (before). The following answers were obtained: appropriate waste discharge manner (34%), health risks caused by waste (26%), environmental problems on waste (10%). Although a collection service exists in the community, a great percentage of interviewees wanted to learn about appropriate waste discharge manner. This should be due to the deficiency of the service, the bad habits of the residents and the existent unaesthetic and unsanitary problems in the community.

S2 (after). The order of preference did not change before and after the pilot project, with slight increase in percentage of appropriate waste discharge manner (52%) and health risks (28%), and a decrease in percentage of environmental problems on waste (2%). These results demonstrate that the interviewees have understood the objectives of the sanitary education and the messages of awareness campaign, since with an appropriate waste discharge manner, diseases can be prevented and the environment can be protected.

S5 Do you think sanitary education is necessary for the improvement of sanitary conditions in your community?



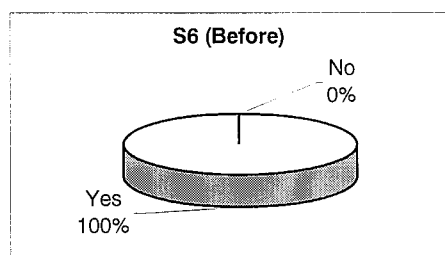
S3 Do you think the continuation of sanitary education is necessary for the improvement of sanitary conditions in your community?



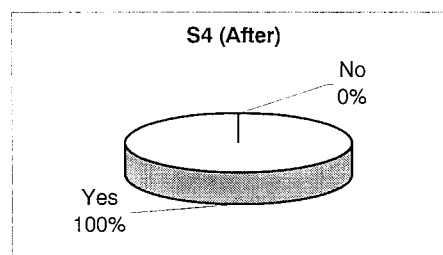
S5 (before). Before the pilot project, almost all interviewees (96%) responded that sanitary education is necessary for the improvement of sanitary conditions in the community.

S3 (after). Regarding the question on the necessity of continuing education to improve sanitary conditions in the community, 100% responded affirmatively.

S6 Do you think sanitary/hygiene education should be included at school?



S4 Do you think sanitary/hygiene education should be included at school?



S6 (before). As shown in the figure, 100% of the interviewees responded that sanitary/hygiene education should be included in the school curriculum.

S4 (after). The answer to this question was the same before and after the pilot project at 100% confirming the necessity and the importance of the sanitary/hygiene education at school.

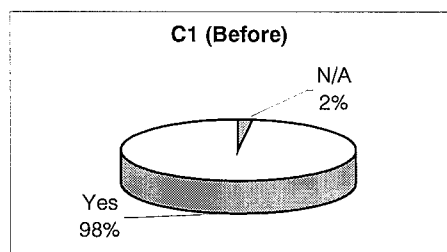
7) Results of POS on public awareness promotion campaign in 10 de Octubre

Table H-19: Public Awareness Promotion Campaign in 10 de Octubre (before and after the PP)

No.	Before the Pilot Project				After the Pilot Project			
	Questionnaire	Yes (%)	No (%)	Yes (%)	No (%)	Questionnaire	No.	
C1	Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?	98	0	100	0	Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?	C1	
C2	Do you think public cooperation is necessary to keep your community clean?	92	6	100	0	Do you think public cooperation is necessary to keep your community clean?	C2	
C3	Do you think public awareness regarding the waste problems is sufficient in your community?	28	66	90	N/A	Do you think the campaign and clean-up activities carried out in your community raised public awareness?	C3	
C4	Do you think a campaign to raise awareness of people for maintaining a cleaner community and environment is necessary?	94	2					
C5	Will you participate and cooperate in clean-up activities for the improvement of sanitary conditions in your community?	100	0	94	6	Did you participate in the clean-up activities carried out in your community?	C4	
C6	Who should take actions for promoting public awareness on waste issues?			Who should take actions for promoting public awareness on waste issues?				C5
	a) Central government	14				a) Central government		
	b) COAMSS	0				b) COAMSS		
	c) Municipality	78		78		c) Municipality		
	d) Community	38		92		d) Community		
	e) School centers	0				e) School centers		
	f) Family	0				f) Family		
	g) Other	4				g) Other (all)		

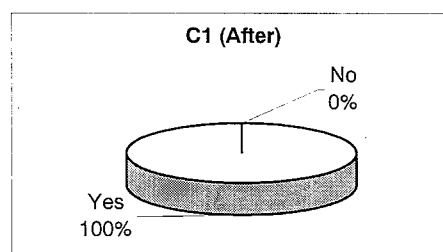
Before

C1 Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?



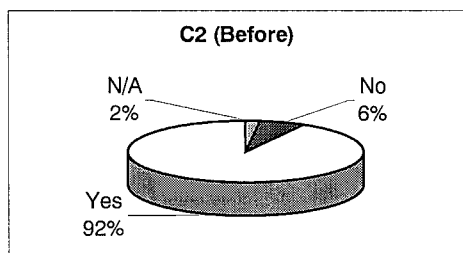
After

C1 Does anyone in your family clean the sidewalk or adjacent public areas in front of your house?

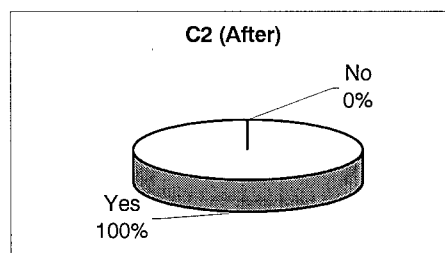


C1 (before/after). Practically all the interviewees responded that family members clean the sidewalk or adjacent public areas in front of their houses with 98% and 100% before and after the project respectively. It can be judged that residents have relatively high sense of responsibility to keep clean the areas they are living in.

C2 Do you think public cooperation is necessary to keep your community clean?



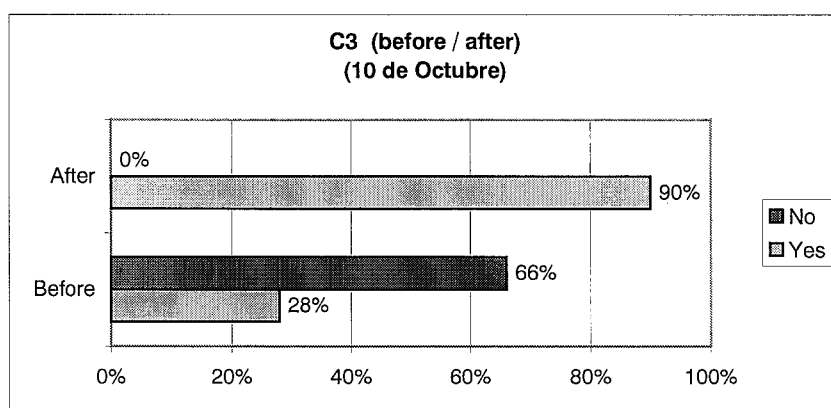
C2 Do you think public cooperation is necessary to keep your community clean?



C2 (before/after). 92% of the interviewees affirmed that public cooperation is necessary to keep the community clean. After the pilot project, all the interviewees (100%) answered affirmatively. The result shows the pilot project was effective to let the residents realize the importance of public cooperation.

C3 Do you think public awareness regarding the waste problems is sufficient in your community?

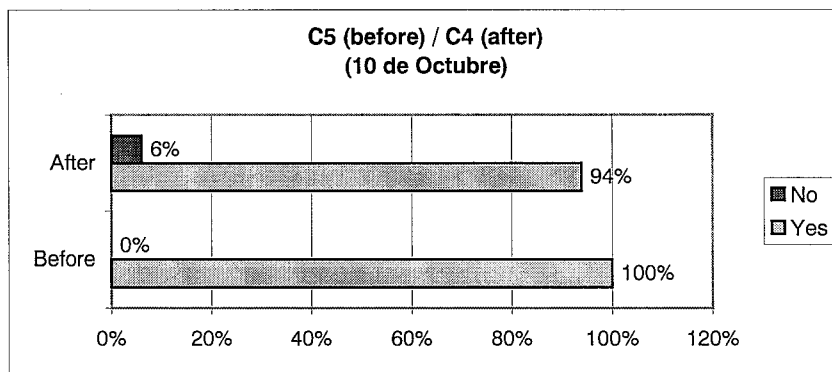
C3 Do you think that campaign and clean-up activities carried out in your community raised public awareness?



C3 (before/after). As shown in the figure above, only 28% of the total interviewees responded that public awareness is sufficient, with 66% answered that such awareness is insufficient. After the pilot project, with regard to whether campaign and clean-up activities carried out in the community raised public awareness, almost all (90%) responded affirmatively, with 10% who did not answer.

C5 Will you participate and cooperate in clean-up activities for the improvement of sanitary conditions in your community?

C4 Did you participate in the clean-up activities carried out in your community?

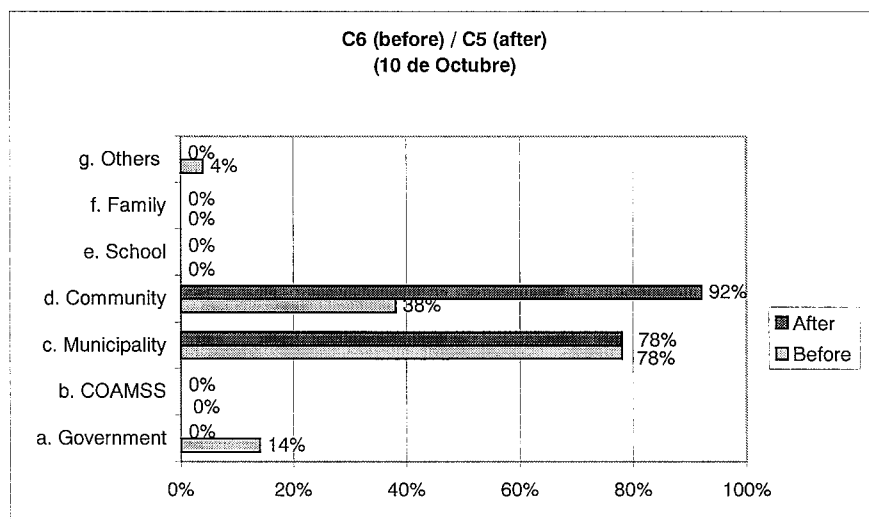


C5 (before). Regarding the willingness to participate and cooperate in clean-up activities for the improvement of sanitary conditions of the community, 100% of the interviewees responded that they would participate and cooperate in those activities.

C4 (after). The result obtained after the pilot project is very satisfactory, since 94% have participated in the clean-up activities, with only 6% that allegedly did not have time.

C6 Who should take actions for promoting public awareness on waste issues?
a) Central government
b) COAMSS
c) Municipality
d) Community
e) School centers
f) Family
g) Other

C5 Who should take actions for promoting public awareness on waste issues?
a) Central government
b) COAMSS
c) Municipality
d) Community
e) School centers
f) Family
g) Other



C6 (before). With regard to who should take actions for promoting public awareness on waste issues, the following results were obtained: Municipality (78%), community (38%), Central Government (14%) and other (4%).

C5 (after). The second survey (after the project) showed the following results: community (92%) and Municipality (78%). The percentage of people who lay down the responsibility onto the Municipality stayed at the same level as in the first survey for the following reasons: 1) the deficiency of the collection service before the pilot project still persists; 2) insufficient time to observe any change due to the implementation of the survey immediately after the completion of the pilot project.

However, the remarkable change is observed in the great percentage of interviewees who responded that the community should take actions. Based on their recent experiences, the interviewees consider that the waste problem is the responsibility and concern of society as a whole. This positive change in the attitude of the interviewees is due to the series of meetings, workshops and residents' participation in communal activities during the implementation of the pilot project.

H.5 Results of the Clean-up Activities

The result of participation in Maria Auxiliadora has been very satisfactory, since almost 70% of the community (a majority of women) have participated in the clean-up activities.

Community leaders and residents of 10 de Octubre deserve a special mention for their great participation, the coverage of strategic working areas, the efforts and the enthusiasm manifested during the cleaning day.

However, although the population of 10 de Octubre is four times bigger than that of Maria Auxiliadora, the workload for planning and implementing pilot project are not less in Maria Auxiliadora.

As previously mentioned, the personnel of both municipalities were well organized in teams and respective working groups. Good points were to form a structure of the work groups which were supervised by municipality personnel and a community leader. This structure was possible thanks to the strong communal organization and the municipalities.

The organization of the clean-up activities and coordination on the part of both municipalities can also be qualified as very satisfactory.

The participation of schools (Liceo Cristiano School and 10 de Octubre School) distributing stickers, and teaching preventive and hygienic measures to the residents by institutions (MSPAS & ISSS) was very positive to promote the campaign and to improve the sanitary conditions of the communities.

Table H-20: Results of the Clean-up Activities

* 1. Insufficient 2. Fair 3. Satisfactory 4. Very Satisfactory

	Items	Maria Auxiliadora	10 de Octubre	Remarks
1.	General organization	4	4	
2.	Coordination between institutions	4	3	
3.	Participation of health institutions	4	4	
4.	Participation of the communities	3	4	
5.	Participation of schools	4	4	
6.	Personal of the municipalities	4	4	
7.	Technical aspect (equipment and materials)	4	4	
8.	Public awareness after the clean-up activities and campaign	4	4	
9.	Condition and use of containers	4	4	
10.	Condition of main clean-up activity area	4	4	
11.	General condition of the communities	4	4	
12.	Attendance or witnesses of other counterpart personnel	1	1	It was almost null the participation of the counterpart personnel from other AMSS municipalities

The negative thing: There was a existing conflict among residents (between residents who own houses and who live in temporary houses) of Maria Auxiliadora. Most of the families settled in the community have their own houses. However, some families still living in temporary houses showed little interest in participating in the clean-up activities.

The remarkable thing: Trees were planted in an area where there used to be a waste promontory which was eliminated thanks to the clean-up activities with the students' participation.

The nice thing: One member of the community dressed as Escolim.

The beautiful thing: The organization of student groups supervised by student leaders with protective helmet, safety traffic vest and stop sign.

The important thing: The cleaning of waste promontory areas (ravines) and contamination areas, and especially the very positive participation of the people of both communities.

In general, the results of the clean-up activities were very satisfactory and positive, thanks to a series of meetings and workshops that involved municipalities, institutions of health, community leaders, residents, schoolteachers and students of the pilot project community areas. The great performance of the clean-up activity is the result of good organization and coordination among the institutions, the enthusiasm of the residents. As for San Marcos, experience acquired during the first activity in Maria Auxiliadora led to the success. The result showed the importance of the experiences.