

**Republic of Trinidad and Tobago**



**National Institute of Higher Education,  
Research, Science and Technology**

***Survey of  
Environmental  
Awareness and  
Practices  
2013***



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## Foreword

In this publication, the National Institute of Higher Education, Research, Science and Technology (NIHERST) presents the results of the Survey of Environmental Awareness and Practices, 2013. This survey is the second of its kind to be conducted by NIHERST as a similar study was undertaken in 2008.

The results of this study are intended to provide a better understanding of the population's knowledge, behaviour and practices with respect to the environment. The enquiry focuses on concerns about the eco-system and biodiversity, consumption and conservation of water, waste disposal practices, transportation decisions and pesticide use; and has generated essential indicators for comparison with similar studies. In addition, information was obtained on several key social characteristics of respondents.

People's lives and livelihoods are threatened by environmental concerns such as climate change, rising sea levels, unsafe practices in waste disposal and natural resource depletion, and failure to address these concerns could hinder sustainable development. This study aims to measure and analyse changes in public knowledge, awareness and practices regarding the environment over time. The information can, therefore, assist researchers, decision-makers and environmentalists in formulating and evaluating policies.

NIHERST wishes to thank members of households who willingly provided the data collated in this report and also acknowledge the assistance of the Central Statistical Office.

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## **Executive Summary**

- ❖ Of the total respondents, 47% were males and 53% were females.
- ❖ Most respondents (43%) reported their highest level of educational attainment as primary, followed by secondary (36%).
- ❖ The majority of respondents (61%) was employed while 8% were unemployed.
- ❖ A half (50%) of the survey respondents indicated that they were very interested in the environment and one-third (36%) was interested. The survey results also show that the proportion of respondents interested in the environment increased in relationship to educational attainment.
- ❖ Results from the household survey of environmental awareness and practices 2013, compared to a previous undertaking in 2008, revealed a similar level of considerable interest in the environment.
- ❖ Respondents expressed considerable personal responsibility, a lot (47%) and quite a lot (36%), towards the environment.
- ❖ Most respondents (53%) stated that personal interest was the main reason for seeking information about environmental issues, followed by keeping abreast of important developments (42%).
- ❖ Most respondents rated the condition of the natural environment as poor (44%). A similar pattern of response was recorded within the various age groups and educational attainment. Compared with the results of a similar survey undertaken in 2008, the condition of the natural environment rated as good increased slightly to 17% in 2013 from 14% in 2008; but overall, the condition of the environment remained unchanged as poor.
- ❖ The majority (63%) of respondents indicated that the natural environment in 2013 compared to ten years ago had deteriorated; only 18% observed improvement. A similar order of responses was observed in the previous study undertaken in 2008 compared to 2013.
- ❖ In 2013, pollution (43%) was identified as the most important environmental concern, followed by waste disposal (31%) as recorded five years ago in 2008.
- ❖ Over three-fifths of the respondents were very concerned with traffic congestion (66%), pollution in rivers (65%), air pollution (64%) and levels of waste (62%). Twenty-three percent (23%) of the respondents were a little concerned with oil depletion and one-fifth (20%) gave a similar rating to loss of wildlife and rising sea levels.
- ❖ A significant percentage of the households frequently conserved water (79%) and switched off equipment and lights (74%). Approximately a third bought low

energy lighting and equipment (34%) and recycled or reused materials (30%) frequently.

- ❖ Survey participants identified the television (63%) as the leading source of information on environmental issues, followed by newspapers (17%) and Internet (11%). By educational attainment a substantial percentage of the respondents with a bachelor's degree and above (37%) and an associate degree (29%) identified the internet as a source of information in 2013 compared to 23% and 24% respectively in 2008.
- ❖ A significant percentage (83%) of the respondents was aware of the existence of the Environmental Management Authority (EMA) and the majority (66%) in all age groups and levels of educational attainment was of the opinion that the EMA played an important role in protecting the environment.
- ❖ Two-thirds (65%) of the survey participants indicated that they had no knowledge of any environmental awareness and protection programmes.
- ❖ The majority (72%) of respondents overall, felt that there was insufficient state investment in environmental preservation and protection programmes.
- ❖ Most respondents (90%) felt that pollution in the nearby rivers was getting worse. Two-thirds or more of the respondents knew that carbon dioxide and other gases released into the atmosphere could lead to global warming (71%), slash and burn was not an eco-friendly method of cultivation (66%) and CFC found in cleaning products was harmful to the environment (65%). Over a half of the respondents provided correct responses for the statements: the ozone layer absorbed ultraviolet radiation (56%) and styrofoam not was biodegradable (53%). Approximately a quarter (23%) of the respondents disagreed that all radioactivity was produced by man. The results of this study in 2013 were comparable to 2008.
- ❖ Accumulatively, a half or more of the survey participants in 2013 was very familiar and familiar with the terms global warming (60%), ozone layer (60%) and eco-friendly (50%). Overall, the pattern of responses observed in 2013 was similar to that of 2008. A substantial percentage of respondents in 2013 was not familiar with the term biodiversity (48%) and greenhouse effect (31%).
- ❖ Almost all (96%) of the survey participants indicated that they travelled by car, van or maxi-taxi as their main mode of transportation. A negligible 2% travelled by public transport bus mainly due to convenience and cost.
- ❖ Three-fifths (59%) of the households owned a motor vehicle and that motor vehicle ownership increased in relationship to household size.
- ❖ A large proportion (60%) of the survey participants stated that cost was the most important factor considered when purchasing a motor vehicle, followed by fuel economy (22%). Four-fifths (82%) of the respondents used gasoline to power their

motor vehicles and over a half (57%) serviced their motor vehicles once every three months.

- ❖ Three-quarters (76%) of the survey respondents did not carpool which 86% considered helpful to the environment.
- ❖ Overall, a significant majority (98%) of the households did not have access to a recycling programme. Of the 2% that did participate in a recycling programme, 62% and 53% identified home and work respectively as the main places of recycling activity, consisting mainly of bottles, old clothing and paper.
- ❖ The survey results show that three-quarters (74%) of the households disposed of hazardous waste through the usual garbage collection service from their houses. By geographical area, the data reveal that one-fifth (21%) of the households in Nariva/Mayaro used a special service and a similar proportion (20%) in Diego Martin accessed dumps.
- ❖ Thirty-one percent (31%) of the households emptied their septic tanks once every two to three years and 26% once every four or more years.
- ❖ Less than a half (46%) of the total sample of households that participated in the survey had a lawn or garden.
- ❖ Approximately one-half (48%) of the survey participants, especially in Nariva/Mayaro (90%) and St. Patrick (64%), watered their lawns or gardens less than once a week, and a quarter (25%), mainly in Port of Spain (42%) and Rest of St. George (40%), did so three times or more a week.
- ❖ The majority (73%) of responding households did not apply any weed killers, pesticides, or fungicides to their lawns or gardens.
- ❖ Over a half (59%) of the households surveyed did not treat their drinking water. Of the households that treated their drinking water, the majority (71%) did so to remove possible bacteria.



## **Methodology**

### **Introduction**

The empirical results of this second study on environmental awareness and practices are intended to assist in monitoring public knowledge, attitudes and behaviour towards the environment and sources of information about the environment through a number of key indicators and monitor changes over time. The undertaking will also facilitate and inform the development of effective environmental management, conservation and communication policies. This methodology describes the objectives, scope, coverage, data collection and processing of the results of the survey.

### **Objectives**

The enquiry focused on:

- knowledge and awareness of environmental factors and occurrences,
- sources, interest and consumption of information,
- consumption and conservation of water,
- ownership and maintenance of vehicles,
- waste disposal practices,
- pesticide and fertiliser use, and
- change in attitudes to the environment over time.

### **Scope**

The scope of this study included information on the demographic and social characteristics of the respondents such as age, gender, educational attainment and employment status. The population's knowledge and awareness of the environment and its behaviour and practices regarding the environment was measured by examining the survey participants' knowledge, interest, attitudes and practices towards the environment. The enquiry also incorporated data on the sources of information on the environment in Trinidad and Tobago. Changes in knowledge and attitudes towards the environment over time were also highlighted in this publication by comparing the results to a similar study undertaken in 2008.

### **Coverage**

The sample design of the survey was based on the approach used by the Central Statistical Office (CSO) in the conduct of its quarterly household surveys to generate labour force statistics. Basically, the design consists of a two-stage sampling procedure in which enumeration districts (E.Ds. - small geographic areas) are selected at the first stage, followed by a random selection of a cluster of households within each E.D. at the second stage. At each stage, the sampling units are selected with probability proportional to size.

A representative sample of two thousand, five hundred and twenty-eight (2,528) from all administrative areas in Trinidad and Tobago was obtained from the CSO. From each of the selected households a respondent was chosen on the basis of having attained the age of



eighteen or over and was the last household member to celebrate his/her birthday. In order to maintain the sample size of the survey vacant and close buildings and refusals were replaced. Of the total completed questionnaires, two were excluded from the tabulated results due to inconsistency in the data reported. The following table show the sample selected by administrative areas.

Sample Selected by Administrative Area

<b>Administrative area</b>	<b>No.</b>	<b>Percentage</b>
All areas	2528	100
Port of Spain	88	3
San Fernando	112	4
Arima	50	2
Point Fortin	45	2
Chaguanas	141	6
Diego Martin	191	8
St. Ann's	308	12
Tacarigua	281	11
Rest of St. George	116	5
Caroni	217	9
Victoria	362	14
St. Patrick	232	9
St. Andrew/St. David	121	5
Nariva/Mayaro	66	3
Tobago	198	8

### **Data Collection**

A questionnaire was designed to include the underlying objectives. Data were subsequently collected by a group of experienced interviewers and supervisors who were trained in administering the survey questionnaire. Data collection commenced in April, 2013 and was completed by June, 2013.

### **Data Processing**

As completed questionnaires were received, data were edited for consistency and omissions. Where discrepancies were identified, questionnaires were returned to the field for verification and correction as necessary. Edited data were then captured in the Statistical Package for the Social Sciences (SPSS) version 16.0 software which was used to produce the tabulations in this report.

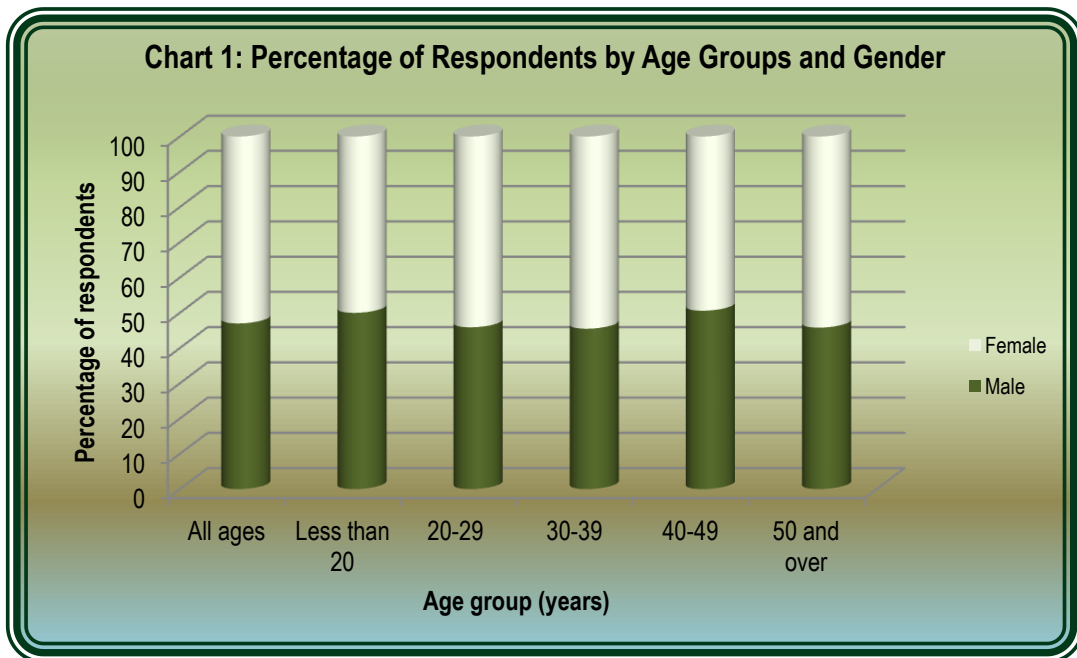
### **Results**

The results of the survey are presented in the various tabulations and graphics which follow.

**Table 1: Distribution of Respondents by Age Groups and Gender**

Age group (years)	Gender					
	Total		Male		Female	
	No.	%	No.	%	No.	%
	(1)	(2)	(3)	(4)	(5)	(6)
All ages	2526	100	1186	47	1340	53
Less than 20	88	100	44	50	44	50
20-29	425	100	195	46	230	54
30-39	503	100	229	46	274	55
40-49	549	100	278	51	271	50
50 and over	961	100	440	46	521	54

Table 1 shows the distribution of respondents by age group and gender. Of the total respondents, 47% were males and 53% were females. A further examination of the data reveals a similar pattern of age distribution within both genders (Table 2).



Source: Table 1

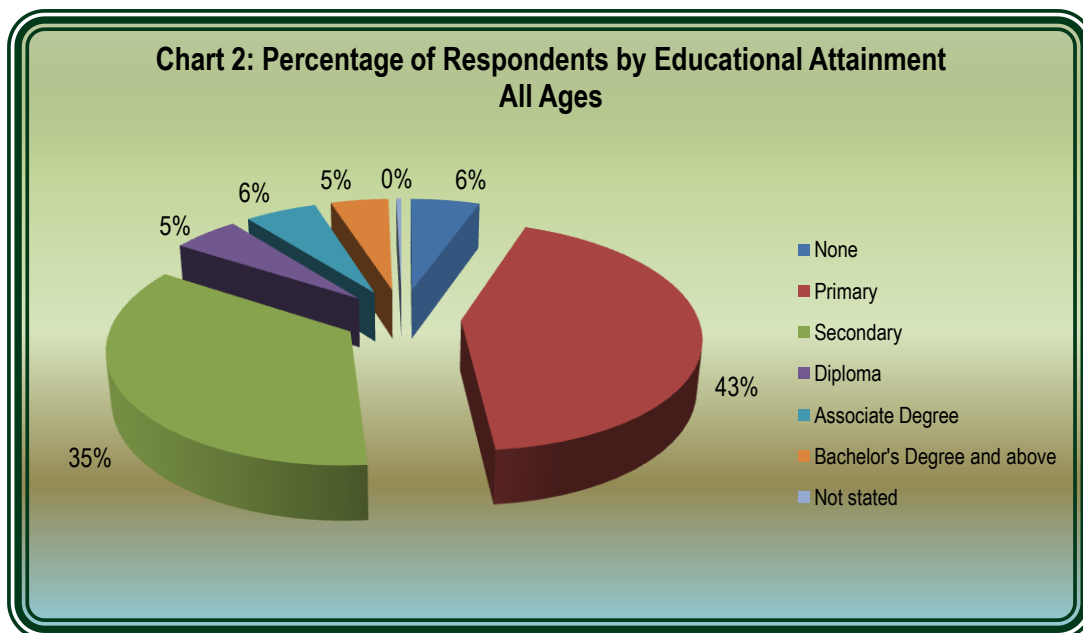
**Table 2: Percentage of Respondents by Age Groups within Gender**

Gender	Age group (years)					
	Total	Less than 20	20-29	30-39	40-49	50 and over
	(1)	(2)	(3)	(4)	(5)	(6)
Total	100	4	17	20	22	38
Male	100	4	17	19	23	37
Female	100	3	17	21	20	39

**Table 3: Percentage of Respondents by Age Groups and Educational Attainment**

Age group (years)	Highest level of educational attainment							
	Total	None	Primary	Secondary	Diploma	Associate Degree	Bachelor's Degree and above	Not stated
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(percentage)							
All ages	100	6	43	36	5	6	5	0
Less than 20	100	0	32	59	6	3	0	0
20-29	100	0	40	44	5	6	5	0
30-39	100	1	39	41	5	7	6	0
40-49	100	6	43	35	6	5	5	0
50 and over	100	10	48	28	5	5	4	1

The majority of respondents (43%) reported their highest level of educational attainment as primary, followed by secondary (36%) (Table 3). A further review of the data by age group within educational attainment shows that the largest proportions of respondents with primary (48%) and no education (10%) were fifty years and over. By gender, educational attainment amongst the males was comparable to the females (Table 4).



Source: Table 3

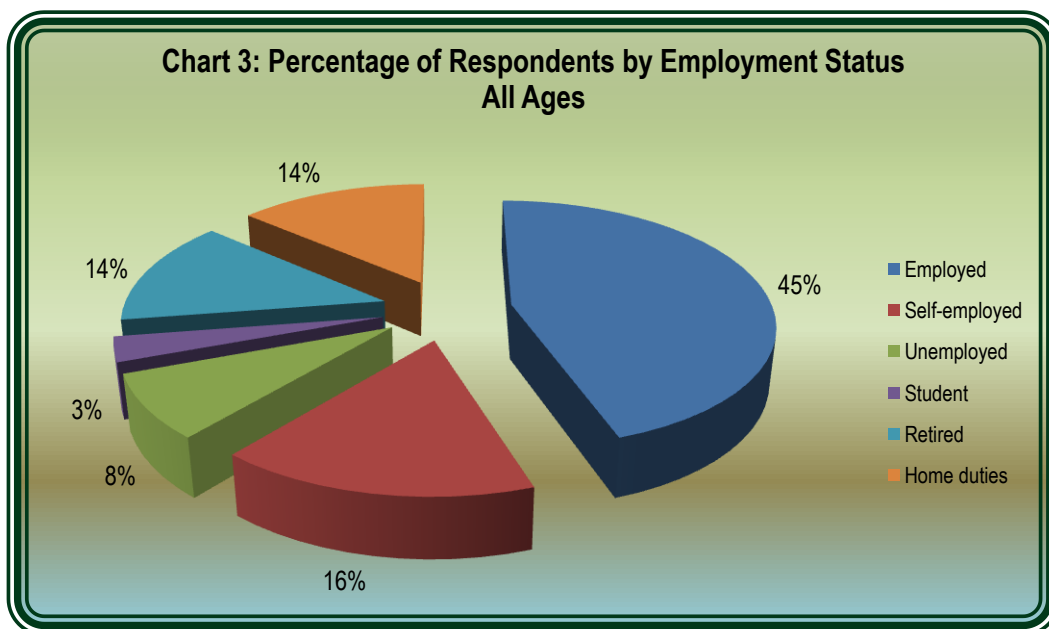
**Table 4: Percentage of Respondents by Gender and Educational Attainment**

Gender	Highest level of educational attainment							
	Total	None	Primary	Secondary	Diploma	Associate degree	Bachelor's degree and above	Not stated
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(percentage)							
Total	100	6	43	36	5	6	5	0
Male	100	6	43	36	5	5	5	0
Female	100	6	43	35	5	6	4	0

**Table 5: Percentage of Respondents by Age Groups and Employment Status**

Age group (years)	Employment status						
	Total	Employed	Self-employed	Unemployed	Student	Retired	Home duties
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(percentage)						
All ages	100	45	16	8	3	14	14
Less than 20	100	33	5	17	44	0	1
20-29	100	60	11	11	9	0	8
30-39	100	62	20	8	0	0	11
40-49	100	57	23	8	0	1	11
50 and over	100	23	14	7	0	36	20

Table 5 shows the distribution of respondents by age and employment status. The majority of respondents (61%) was employed while 8% were unemployed. The highest level of unemployment (17%) was observed in the less than 20 age group which also reflected the largest proportion of students (44%). In addition, three-quarters (73%) of the males were employed compared to a half (51%) in the case of the females (Table 6).



Source: Table 5

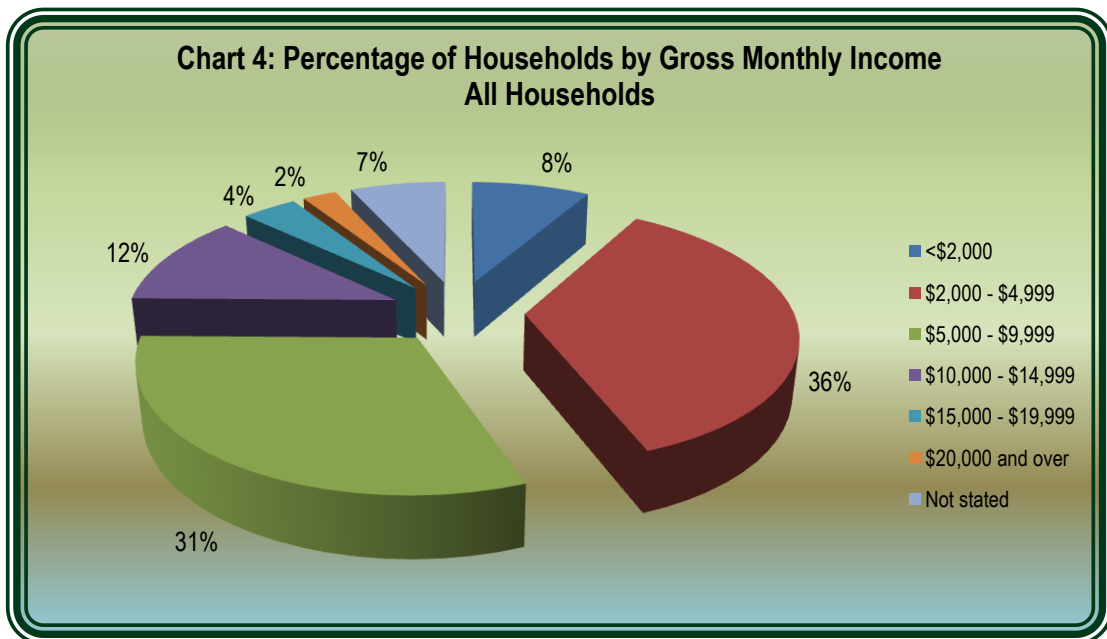
**Table 6: Percentage of Respondents by Gender and Employment Status**

Gender	Employment status						
	Total	Employed	Self-employed	Unemployed	Student	Retired	Home duties
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(percentage)			
Total	100	45	16	8	3	14	14
Male	100	51	22	8	3	16	0
Female	100	39	12	9	4	12	26

Table 7: Percentage of Households by No. of Persons and Gross Monthly Income

No. of persons in household	Gross monthly income							
	Total	<\$2,000	\$2,000 - \$4,999	\$5,000 - \$9,999	\$10,000 - \$14,999	\$15,000 - \$19,999	\$20,000 and over	Not stated
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(percentage)							
Total	100	8	36	31	12	4	2	7
1 person	100	22	50	18	4	1	1	5
2 persons	100	8	40	32	9	3	1	7
3 persons	100	5	37	32	11	5	3	7
4 persons	100	3	31	34	19	4	4	6
5 or more persons	100	7	25	35	15	6	3	9

A relatively large proportion of the sample of households (36%), especially households with one person (50%), reported gross monthly incomes in the range of \$2,000 - \$4,999. Approximately one-third (31%) of the households in all household sizes except households with one person reported gross monthly incomes between \$5,000 - \$9,999.



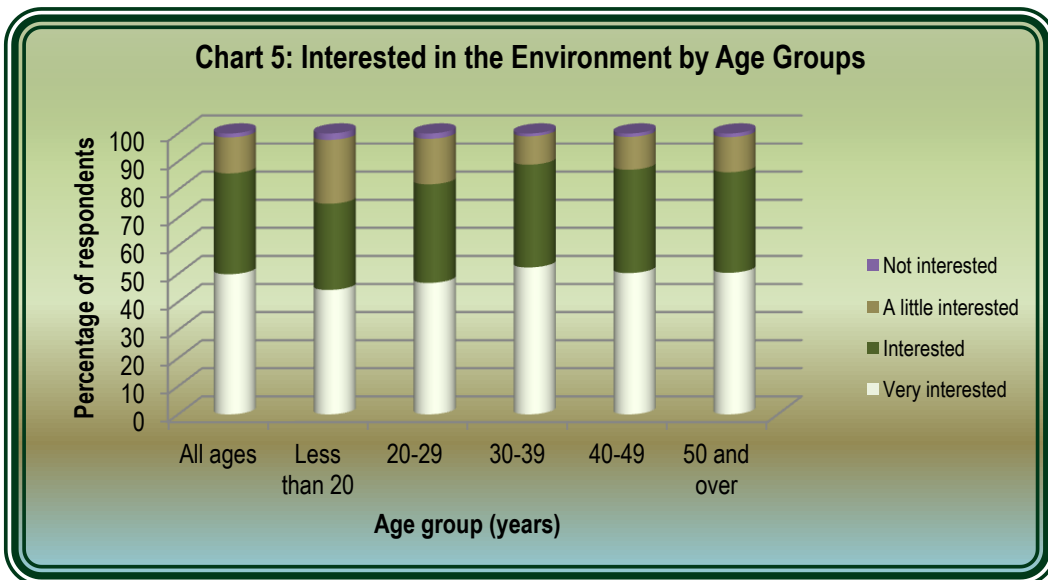
Source: Table 7



**Table 8: Interested in the Environment by Age Groups**

Age group (years)	Interested in the environment				
	Total	Very interested	Interested	A little interested	Not interested
	(1)	(2)	(3)	(4)	(5)
	(percentage)				
All ages	100	50	36	13	1
Less than 20	100	44	31	23	2
20-29	100	47	35	16	2
30-39	100	52	37	10	1
40-49	100	50	37	12	1
50 and over	100	50	36	13	1

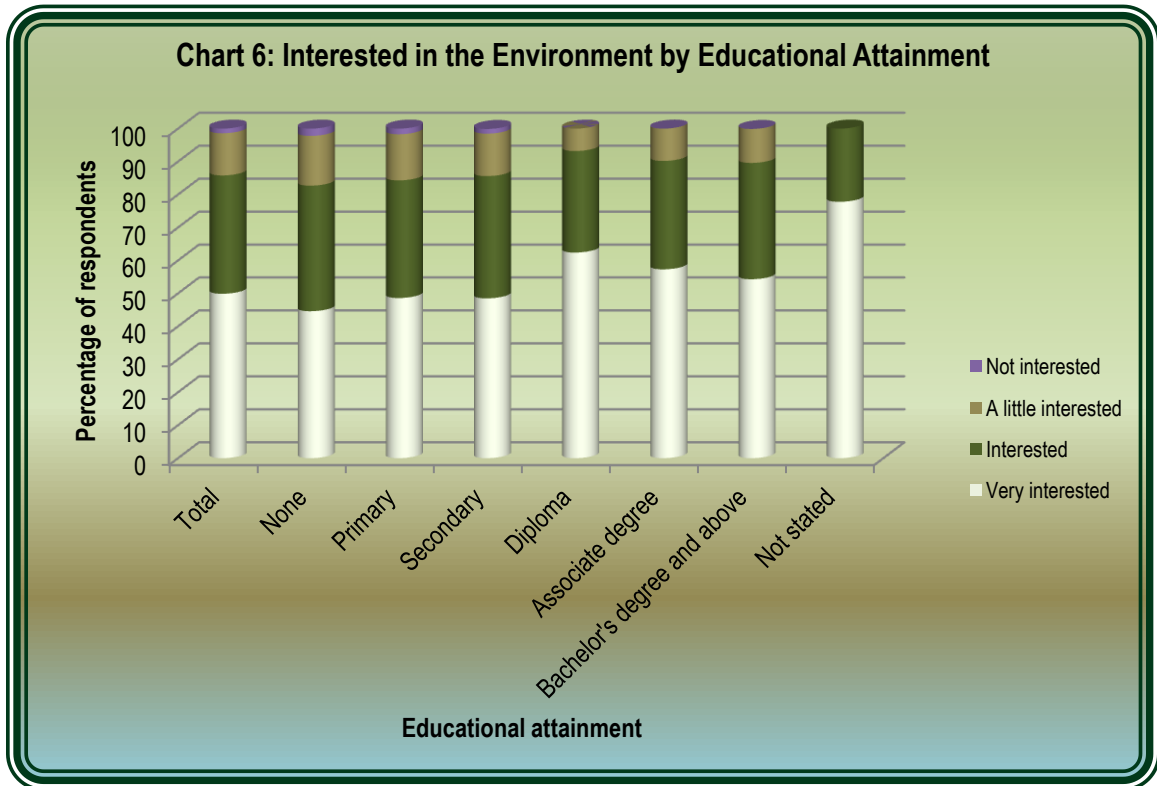
A half (50%) of the survey respondents indicated that they were very interested in the environment and one-third (36%) was interested (Table 8). The highest percentage of respondents (23%) that reported little interest was recorded in the less than 20 age group. The survey results also show that the proportion of respondents interested in the environment increased in relationship to educational attainment (Table 9).



Source: Table 8

**Table 9: Interested in the Environment by Educational Attainment**

Educational attainment	Interested in the environment				
	Total	Very interested	Interested	A little interested	Not interested
	(1)	(2)	(3)	(4)	(5)
		(percentage)			
Total	100	50	36	13	1
None	100	45	38	15	2
Primary	100	49	36	14	2
Secondary	100	49	37	13	1
Diploma	100	62	31	7	0
Associate degree	100	57	33	10	0
Bachelor's degree and above	100	54	35	10	0
Not stated	100	78	22	0	0

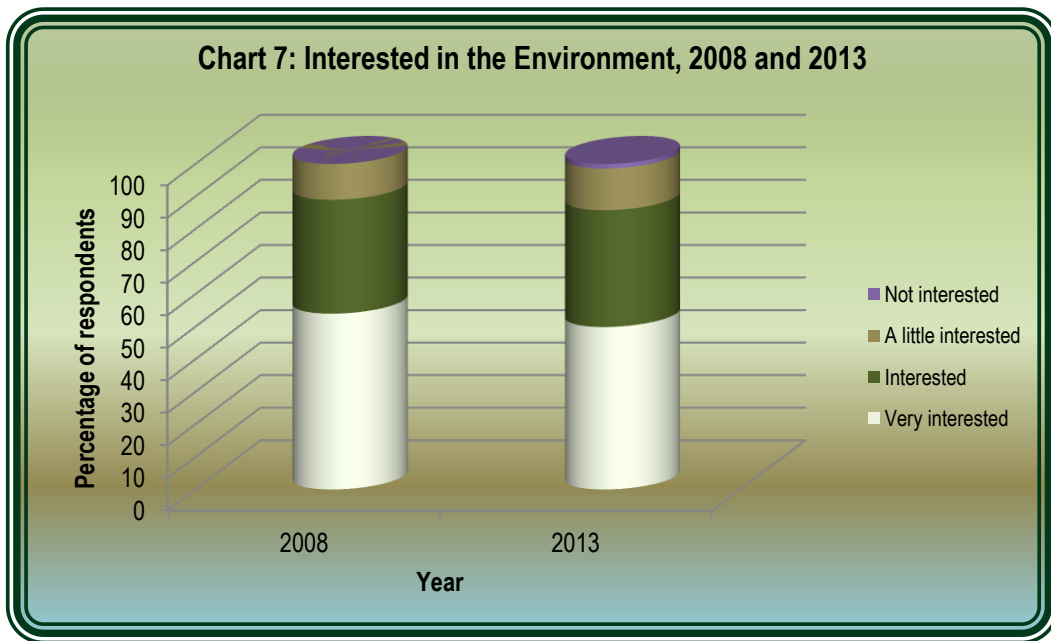


Source: Table 9

**Table 10: Interested in the Environment, 2008 and 2013**

Level of interest	Year - percentage of respondents	
	2008	2013
	(1)	(2)
Total	100	100
Very interested	54	50
Interested	35	36
A little interested	11	13
Not interested	1	1

Data from the household survey of environmental awareness and practices, 2013, compared to the results of a previous undertaking in 2008, reveal a similar level of considerable interest in the environment.

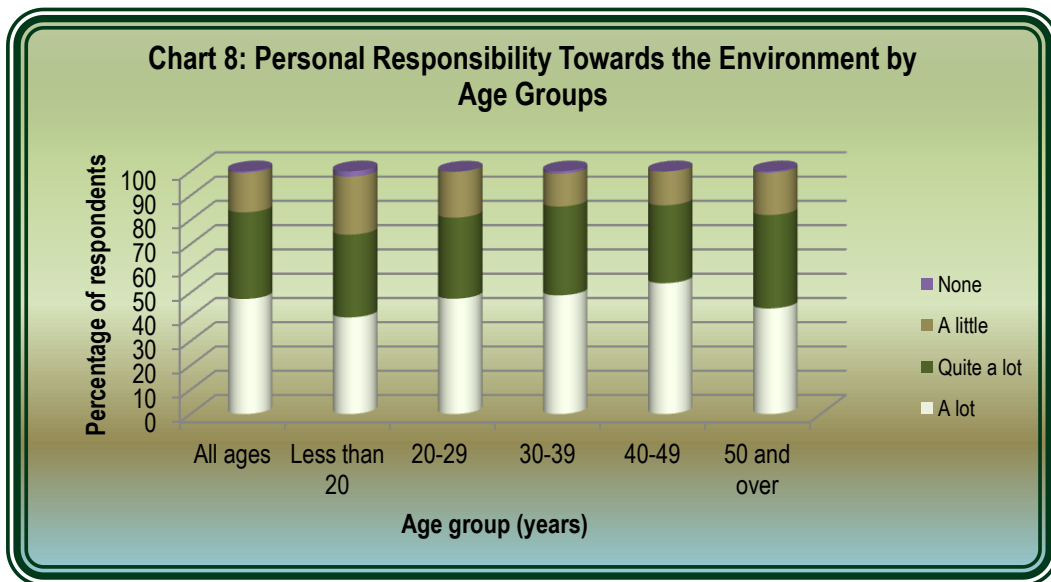


Source: Table 10

**Table 11: Personal Responsibility Towards the Environment by Age Groups**

Age group (years)	Personal responsibility towards the environment				
	Total	A lot	Quite a lot	A little	None
	(1)	(2)	(3)	(4)	(5)
			(percentage)		
All ages	100	47	36	16	1
Less than 20	100	40	34	24	2
20-29	100	48	33	19	0
30-39	100	49	37	14	1
40-49	100	54	32	14	0
50 and over	100	44	39	17	1

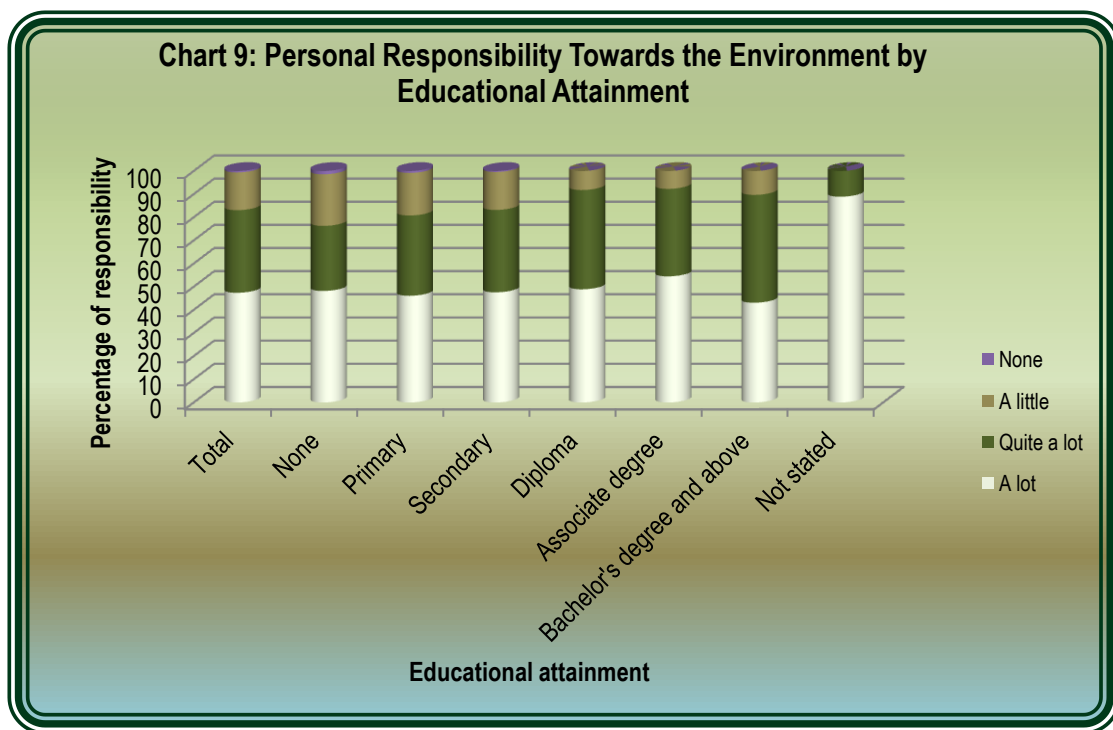
A substantial percentage of the respondents expressed considerable personal responsibility, a lot (47%) and quite a lot (36%), towards the environment. The data by age group (Table 11) reflected a similar pattern of responses as recorded by educational attainment (Table 12).



Source: Table 11

**Table 12: Personal Responsibility Towards the Environment by Educational Attainment**

Educational attainment	Personal responsibility towards the environment				
	Total	A lot	Quite a lot	A little	None
	(1)	(2)	(3)	(4)	(5)
	(percentage)				
Total	100	47	36	16	1
None	100	48	28	22	1
Primary	100	46	35	18	1
Secondary	100	48	36	16	0
Diploma	100	49	43	8	0
Associate degree	100	55	38	8	0
Bachelor's degree and above	100	43	47	10	0
Not stated	100	89	11	0	0

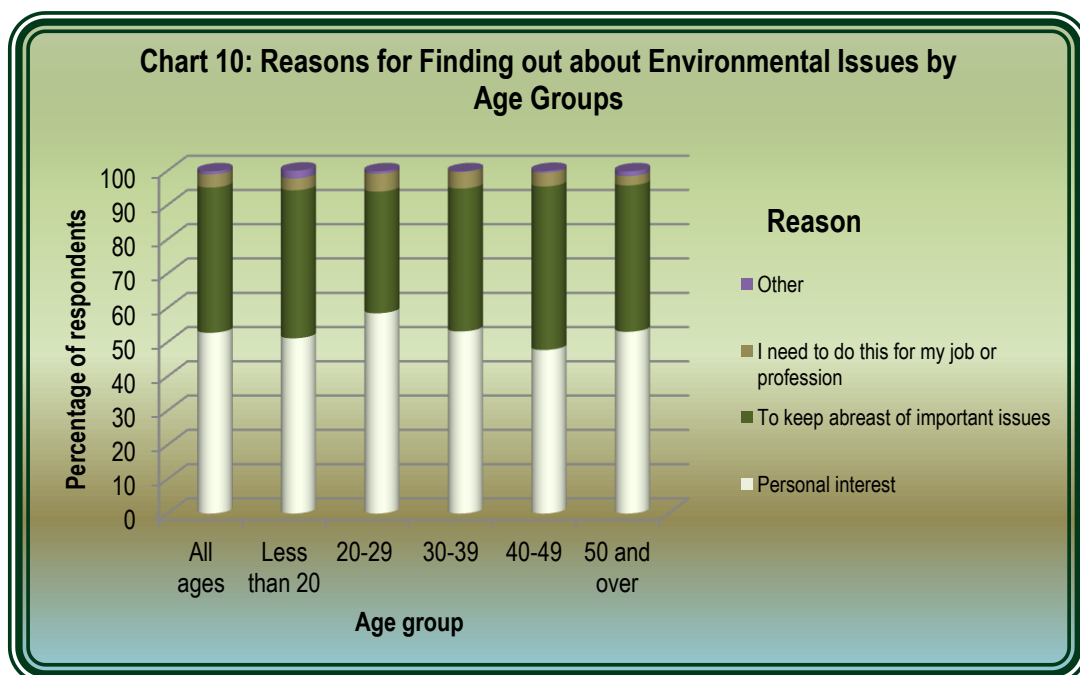


Source: Table 12

**Table 13: Reasons for Finding out about Environmental Issues by Age Groups**

Age group (years)	Reason				
	Total	Personal interest	To keep abreast of important issues	I need to do this for my job or profession	Other
	(1)	(2)	(3)	(4)	(5)
	(percentage)				
All ages	100	53	42	4	1
Less than 20	100	51	43	3	2
20-29	100	58	36	5	1
30-39	100	53	42	5	0
40-49	100	48	48	4	1
50 and over	100	53	43	3	1

Most respondents (53%) stated that personal interest was the main reason for seeking information about environmental issues, followed by keeping abreast of important developments (42%). This order of response, in general, was recorded amongst the various age groups (Table 13) and levels of educational attainment (Table 14).

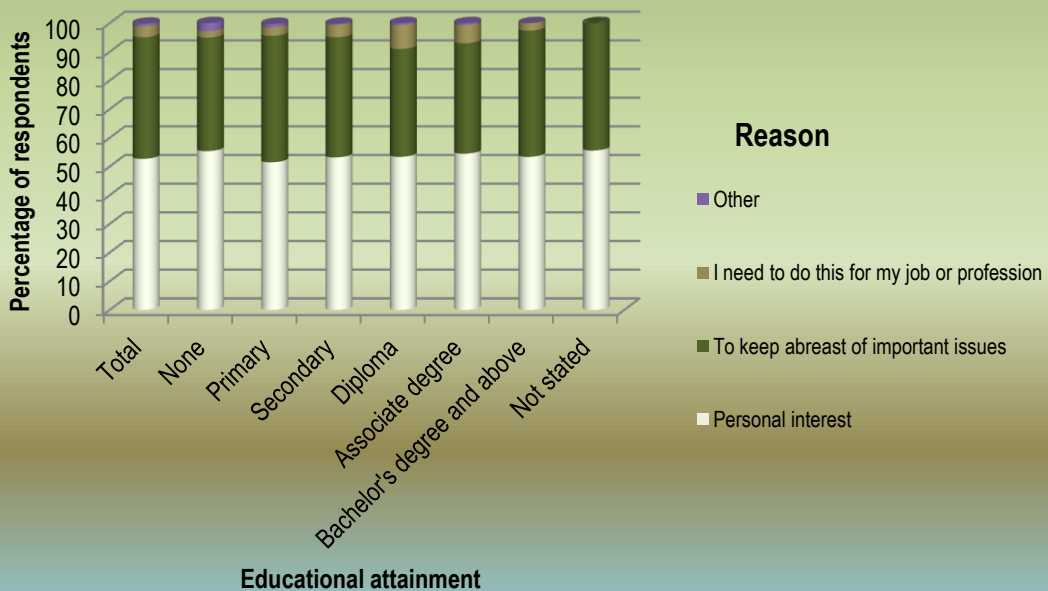


Source: Table 13

**Table 14: Reasons for Finding out about Environmental Issues by Educational Attainment**

Educational attainment	Reason				
	Total	Personal interest	To keep abreast of important issues	I need to do this for my job or profession	Other
	(1)	(2)	(3)	(4)	(5)
	(percentage)				
Total	100	53	42	4	1
None	100	55	40	2	3
Primary	100	52	44	3	1
Secondary	100	53	42	4	0
Diploma	100	53	38	8	1
Associate degree	100	55	39	6	1
Bachelor's degree and above	100	53	44	3	0
Not stated	100	56	44	0	0

**Chart 11: Reasons for Finding out about Environmental Issues by Educational Attainment**

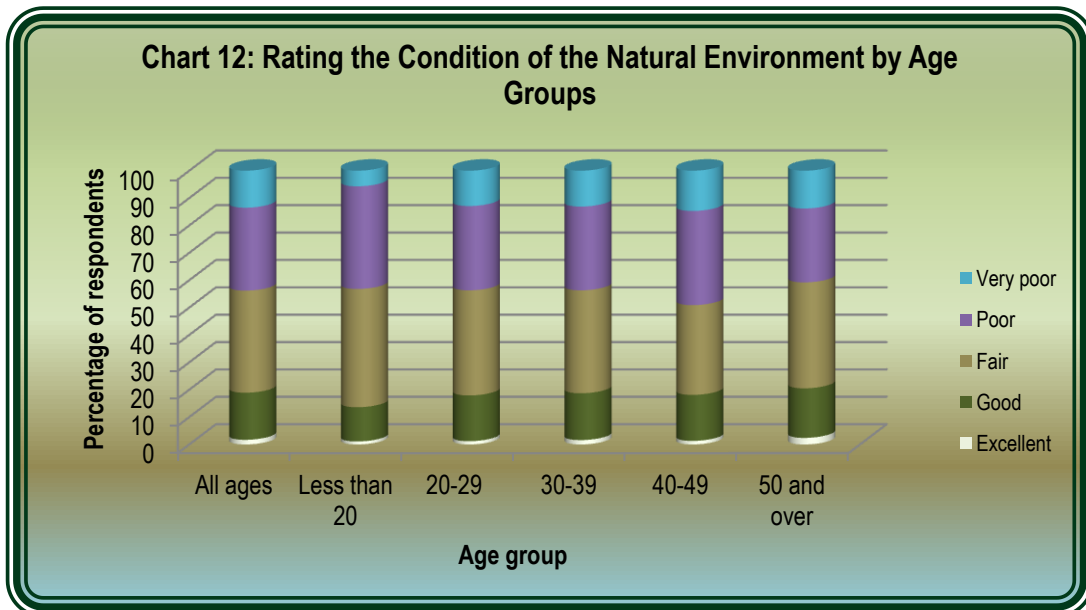


Source: Table 14

**Table 15: Rating the Condition of the Natural Environment by Age Groups**

Age group (years)	Rating of the natural environment						Poor [col. 5+6]
	Total	Excellent	Good	Fair	Poor	Very poor	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(percentage)						
All ages	100	2	17	37	30	14	44
Less than 20	100	1	13	43	38	6	43
20-29	100	1	17	38	31	13	44
30-39	100	2	17	38	31	13	44
40-49	100	1	17	33	34	15	49
50 and over	100	2	18	39	27	14	41

Table 15 reveals that most respondents rated the condition of the natural environment as poor (44%). A similar pattern of response was recorded within the various age groups (Table 15) and educational attainment levels except bachelor's degree and above where the majority of respondents gave a modal rating of fair to the environment (Table 16). Compared with the results of a similar survey of the environment undertaken in 2008, the percentage of respondents who rated the condition of the natural environment as good increased slightly to 17% in 2013 from 14% in 2008, but overall, the condition of the environment remained unchanged as poor (Table 17).

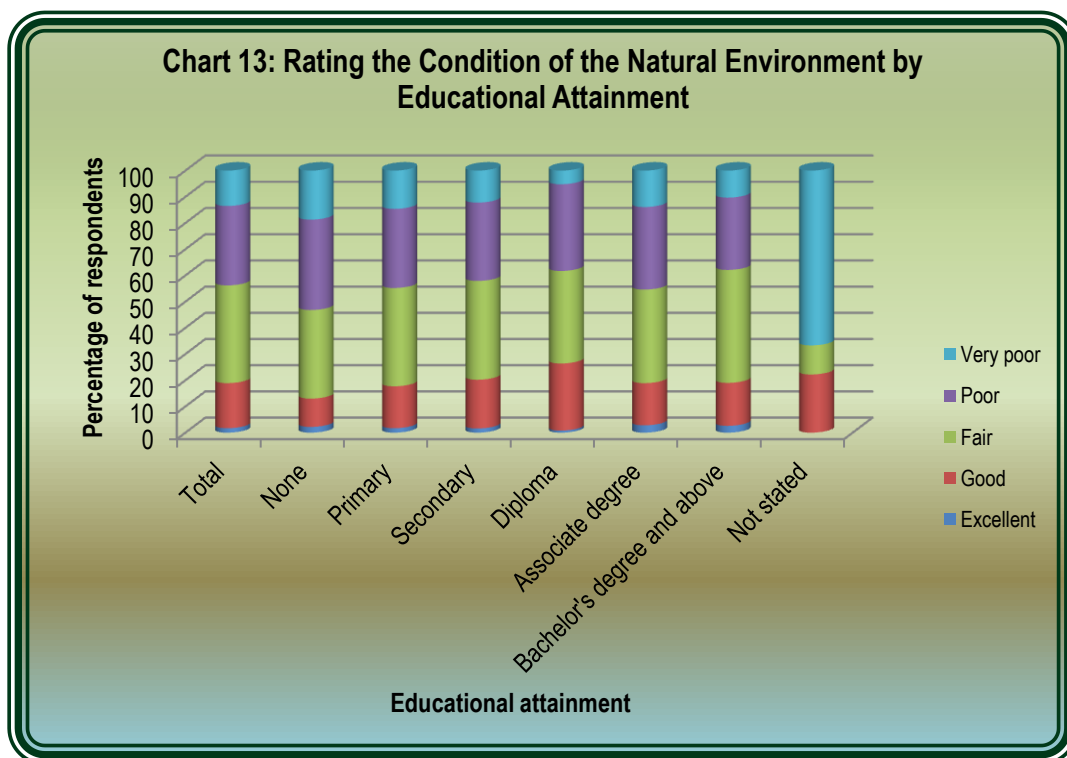


Source: Table 15



**Table 16: Rating the Condition of the Natural Environment by Educational Attainment**

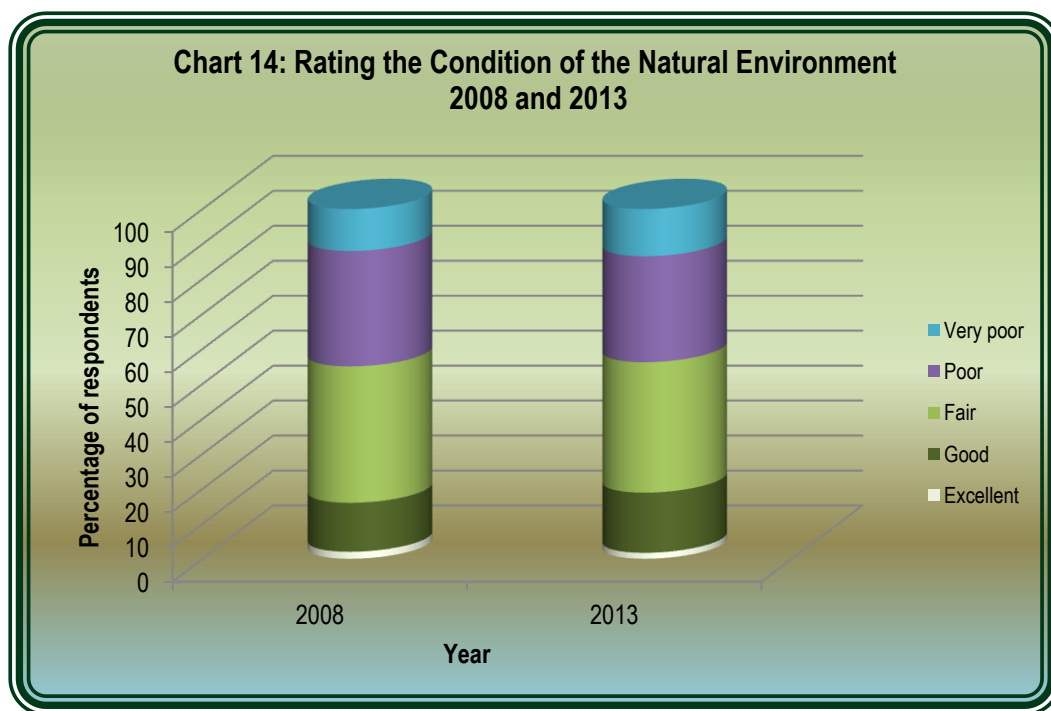
Educational attainment	Rating of the natural environment						Poor [col. 5+6]
	Total	Excellent	Good	Fair	Poor	Very poor	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(percentage)						
Total	100	2	17	37	30	14	44
None	100	2	11	34	35	19	53
Primary	100	2	16	38	30	15	45
Secondary	100	2	19	38	30	12	42
Diploma	100	1	26	35	33	5	38
Associate degree	100	3	16	36	32	14	46
Bachelor's degree and above	100	3	16	43	28	10	38
Not stated	100	0	22	11	0	67	67



Source: Table 16

**Table 17: Rating the Condition of the Natural Environment, 2008 and 2013**

Rating of the natural environment	Year	
	2008	2013
	(1)	(2)
	(percentage)	
Total	100	100
Excellent	2	2
Good	14	17
Fair	39	37
Poor	33	30
Very poor	12	14

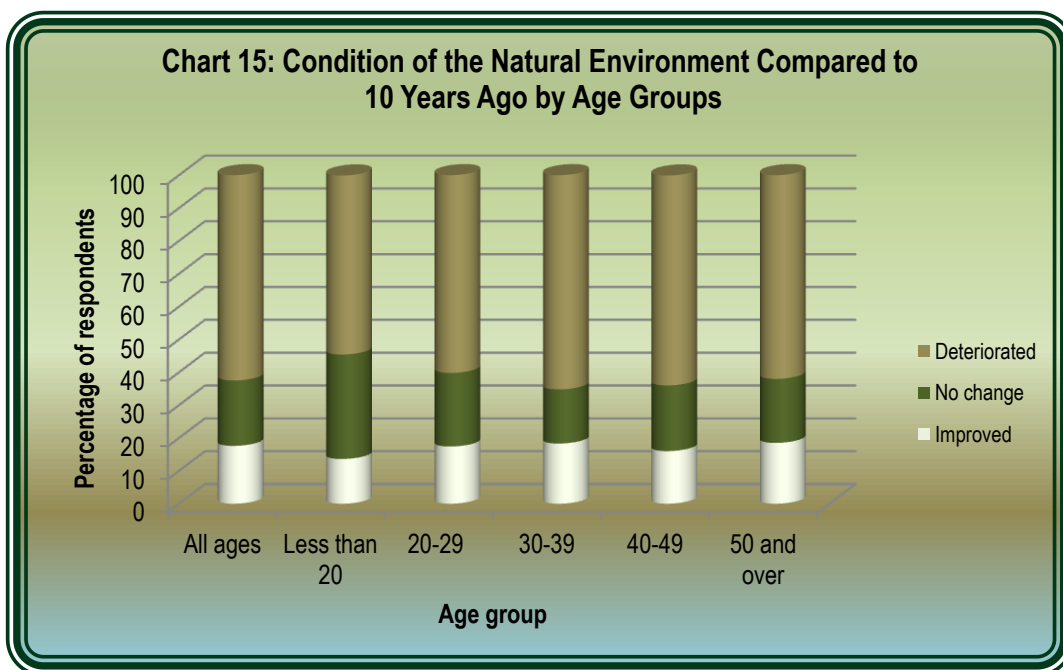


Source: Table 17

**Table 18: Condition of the Natural Environment Compared to 10 Years Ago by Age Groups**

Age group (years)	Condition of the natural environment compared to 10 years ago			
	Total	Improved	No change	Deteriorated
	(1)	(2)	(3)	(4)
	(percentage)			
All ages	100	18	20	63
Less than 20	100	14	32	55
20-29	100	17	22	60
30-39	100	18	17	65
40-49	100	16	20	64
50 and over	100	19	20	62

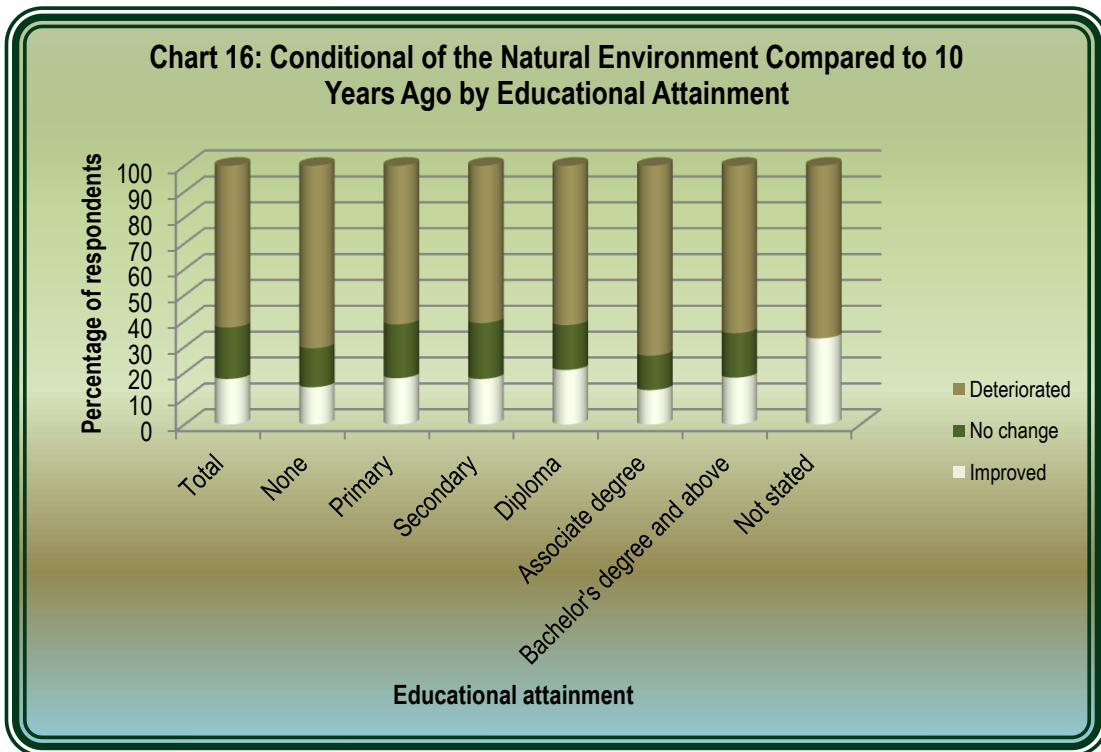
The majority (63%) of respondents indicated that the natural environment in 2013 compared to ten years ago had deteriorated; only 18% observed improvement. The survey results show a comparable pattern of responses by age groups (Table 18) and educational attainment (Table 19). A similar order of responses was observed in the previous study undertaken in 2008 compared to 2013 (Table 20).



Source: Table 18

**Table 19: Condition of the Natural Environment Compared to 10 Years Ago by Educational Attainment**

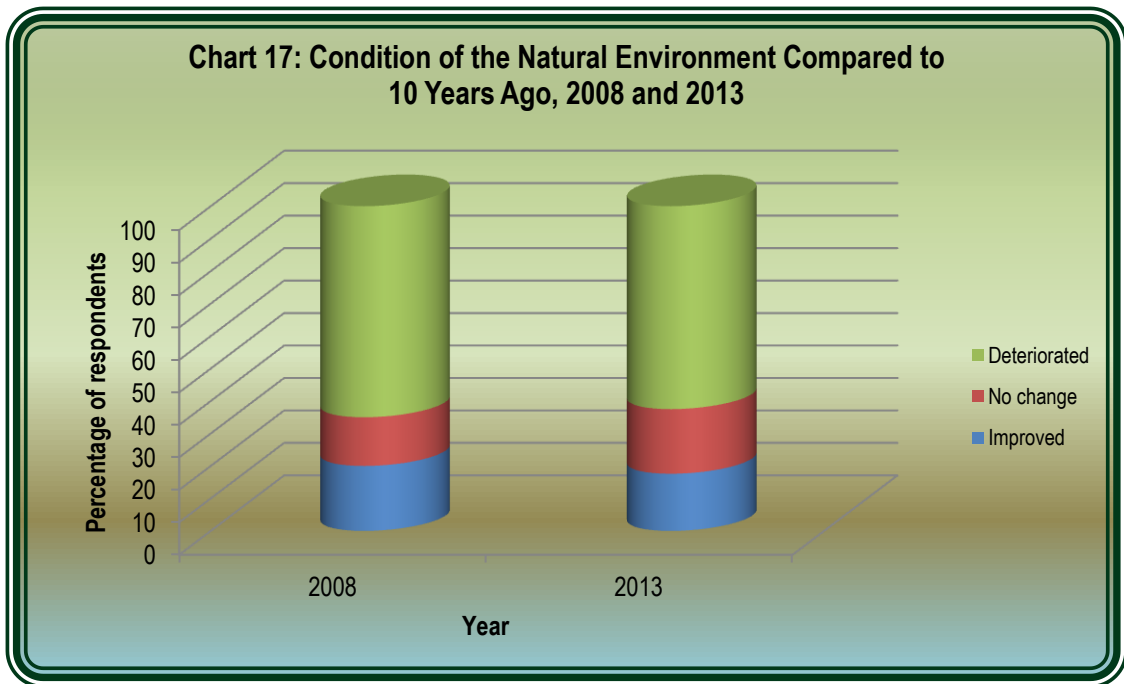
Educational attainment	Condition of the natural environment compared to 10 years			
	Total	Improved	No change	Deteriorated
	(1)	(2)	(3)	(4)
	(percentage)			
Total	100	18	20	63
None	100	14	15	71
Primary	100	18	21	61
Secondary	100	18	22	61
Diploma	100	21	17	62
Associate degree	100	13	13	73
Bachelor's degree and above	100	18	17	65
Not stated	100	33	0	67



Source: Table 19

**Table 20: Condition of the Natural Environment Compared to 10 Years Ago, 2008 and 2013**

Condition of the natural environment compared to 10 years ago	Year	
	2008	2013
	(1)	(2)
	(percentage)	
Total	100	100
Improved	20	18
No change	15	20
Deteriorated	65	63

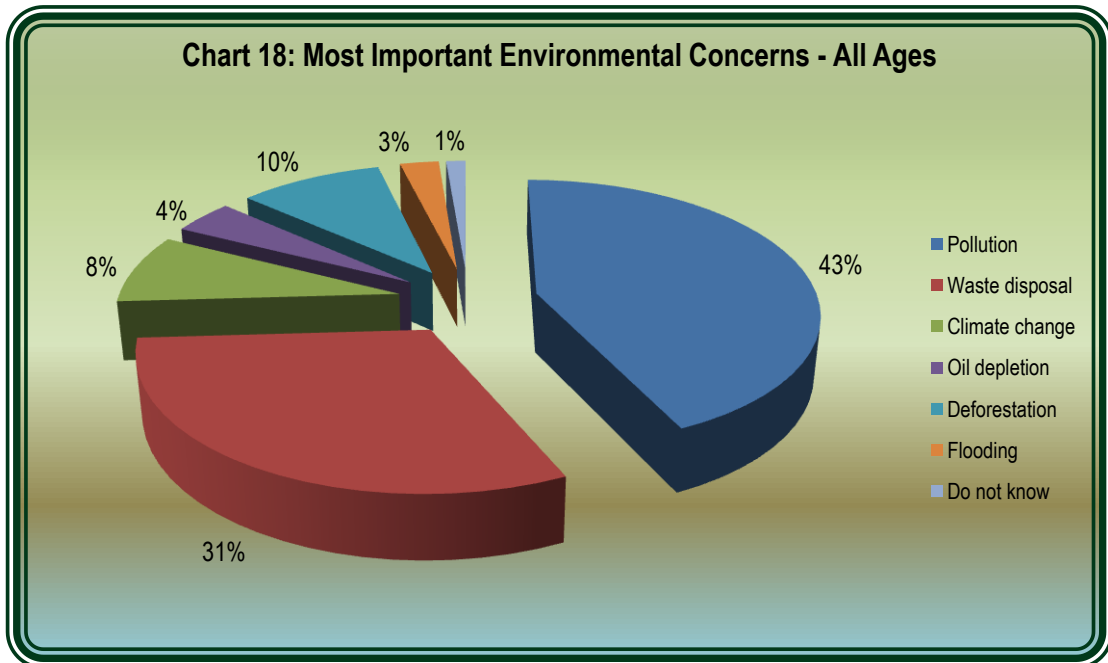


Source: Table 20

**Table 21: Most Important Environmental Concerns by Age Groups**

Age group (years)	Most important environmental concern							
	Total	Pollution	Waste disposal	Climate change	Oil depletion	Deforestation	Flooding	Do not know
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(percentage)							
All ages	100	43	31	8	4	10	3	1
Less than 20	100	47	30	6	3	8	3	3
20-29	100	45	29	7	8	8	3	0
30-39	100	46	29	9	6	7	2	1
40-49	100	43	29	10	4	11	3	1
50 and over	100	40	34	8	2	11	3	2

A relatively large proportion (43%) of the survey participants identified pollution as the most important environmental concern, followed by waste disposal (31%). This order of response was recorded within each age group (Table 21) and levels of educational attainment generally (Table 22). A similar pattern of response was observed in the 2008 study (Table 23).



Source: Table 21

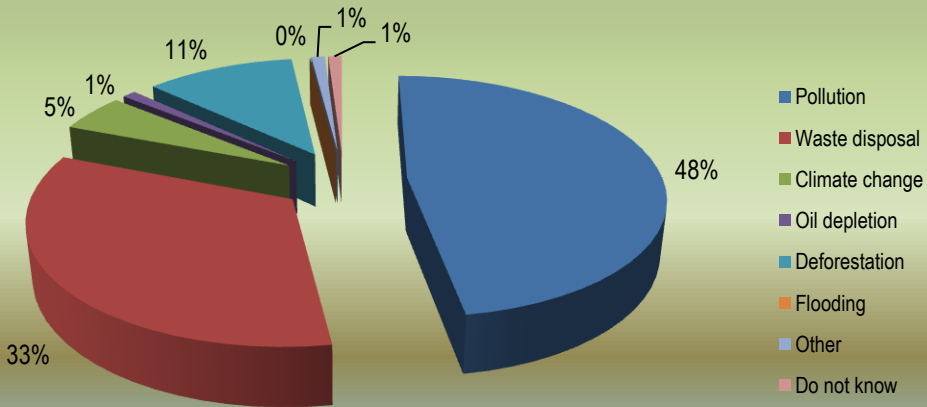
**Table 22: Most Important Environmental Concerns by Educational Attainment**

Educational attainment	Most important environmental concern							
	Total	Pollution	Waste disposal	Climate change	Oil depletion	Deforestation	Flooding	Do not know
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	(percentage)							
Total	100	43	31	8	4	10	3	1
None	100	44	36	4	1	8	3	4
Primary	100	46	32	6	3	9	3	1
Secondary	100	43	29	10	6	9	2	1
Diploma	100	29	35	15	5	13	2	2
Associate degree	100	46	27	12	4	11	1	0
Bachelor's degree and above	100	39	29	9	4	16	3	0
Not stated	100	22	44	0	0	33	0	0

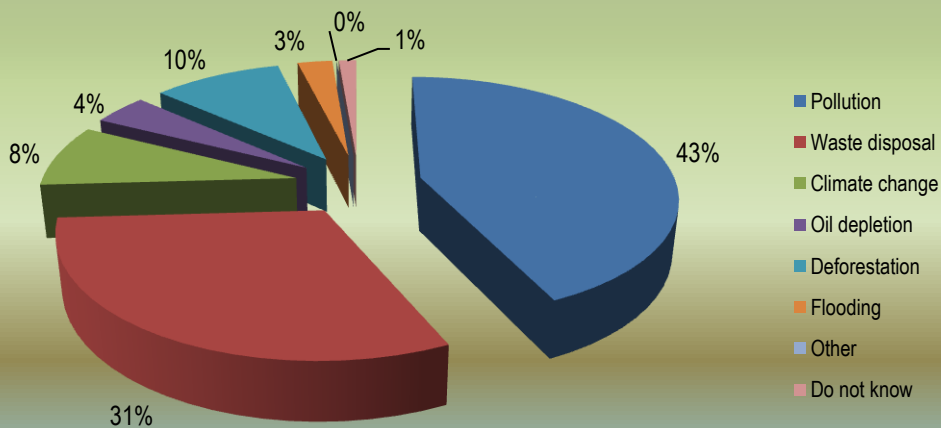
**Table 23: Most Important Environmental Concern, 2008 and 2013**

Most important environmental concern	Year	
	2008 (1)	2013 (2)
	(percentage)	
Total	100	100
Pollution	47	43
Waste disposal	33	31
Climate change	5	8
Oil depletion	1	4
Deforestation	11	10
Flooding	0	3
Other	1	0
Do not know	1	1

**Chart 19: Most Important Environmental Concern, 2008**



**Chart 20: Most Important Environmental Concern, 2013**

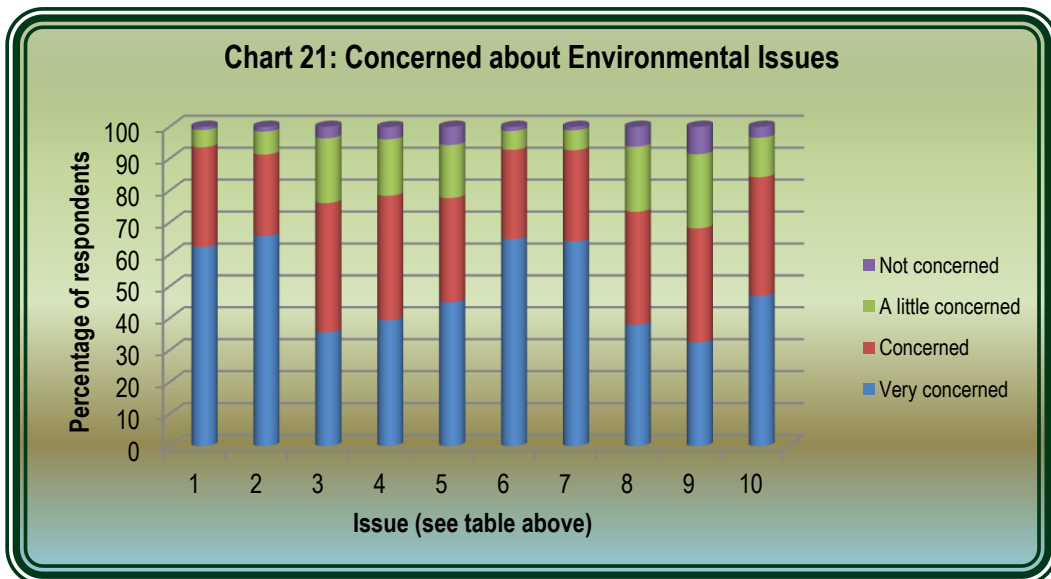




**Table 24: Concerned about Environmental Issues**

Issue	Concern				
	Total	Very concerned	Concerned	A little concerned	Not concerned
	(1)	(2)	(3)	(4)	(5)
	(percentage)				
1 Levels of waste	100	62	31	5	1
2 Traffic congestion	100	66	26	7	2
3 Loss of wildlife	100	36	41	20	4
4 Climate change	100	39	39	18	4
5 Damage to the ozone layer	100	45	33	17	6
6 Pollution in rivers	100	65	28	6	1
7 Air pollution	100	64	29	6	1
8 Rising sea levels	100	38	35	20	6
9 Oil depletion	100	33	36	23	9
10 Preservation of forests	100	47	37	12	3

Table 24 above shows considerable level of concern expressed on selected key environmental issues. Over three-fifths of the respondents were very concerned with traffic congestion (66%), pollution in rivers (65%), air pollution (64%) and levels of waste (62%). Twenty-three percent (23%) of the respondents were a little concerned with oil depletion and one-fifth (20%) gave a similar rating to loss of wildlife and rising sea levels.

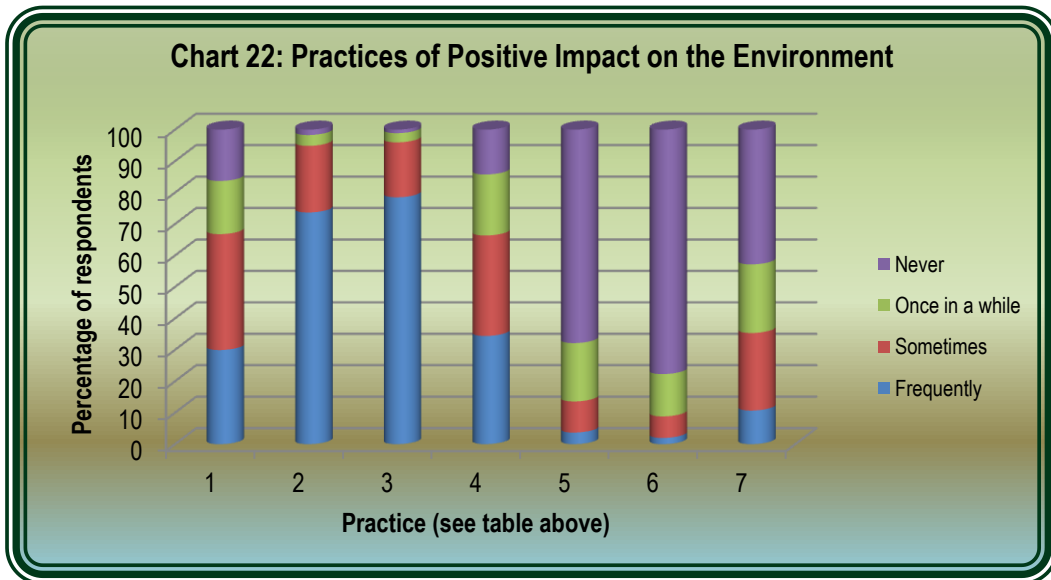


Source: Table 24

**Table 25: Practices of Positive Impact on the Environment**

Practice	Frequency				
	Total	Frequently	Sometimes	Once in a while	Never
	(1)	(2)	(3)	(4)	(5)
	(percentage)				
1 Recycle or reuse materials	100	30	37	17	16
2 Switch off equipment and lights	100	74	21	3	2
3 Conserve water	100	79	17	3	1
4 Buy low energy lighting and equipment	100	34	32	19	14
5 Participate in clean-up campaigns	100	4	10	19	68
6 Donate money to environmental causes	100	2	7	13	78
7 Buy recycled or eco-friendly products	100	11	25	22	43

The table above shows that a significant percentage of the households respondents frequently conserved water (79%) and switched off equipment and lights (74%). Approximately a third of the households bought low energy lighting and equipment (34%) and recycled or reused materials (30%) frequently. The majority of respondents never donated money to environmental causes (78%), never participated in clean-up campaigns (68%) nor bought recycled or eco-friendly products (43%).

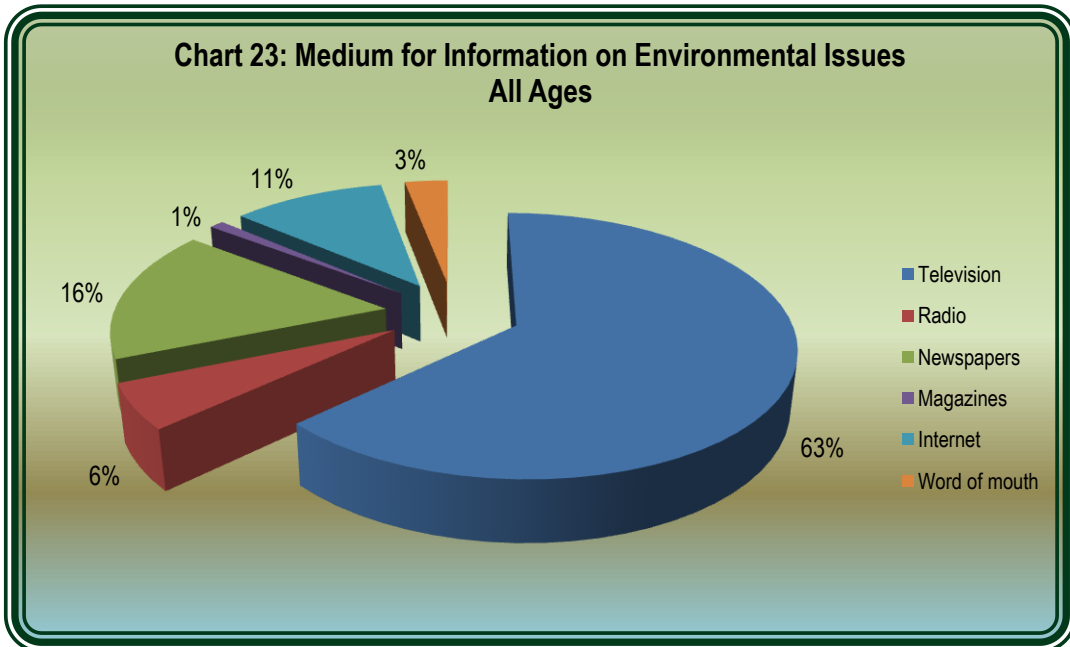


Source: Table 25

**Table 26: Medium for Information on Environmental Issues by Age Groups**

Age group (years)	Medium						
	Total	Television	Radio	Newspapers	Magazines	Internet	Word of mouth
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	(percentage)						
All ages	100	63	6	17	1	11	3
Less than 20	100	58	2	15	0	24	1
20-29	100	62	4	15	1	15	4
30-39	100	61	4	17	2	15	2
40-49	100	64	6	14	1	11	4
50 and over	100	65	7	19	1	6	3

When asked about the leading source of information on environmental issues a large proportion of the survey participants identified the television (63%), followed by newspapers (17%) and Internet (11%). A review of the data by age group shows that a quarter (24%) of the respondents less than 20 years old accessed information on environmental issues through the Internet (Table 26). By educational attainment a substantial percentage of the respondents with a bachelor's degree and above (37%) and an associate degree (29%) identified the Internet as a source of information in 2013 (Table 27) compared to 23% and 24% respectively in 2008.



Source: Table 26

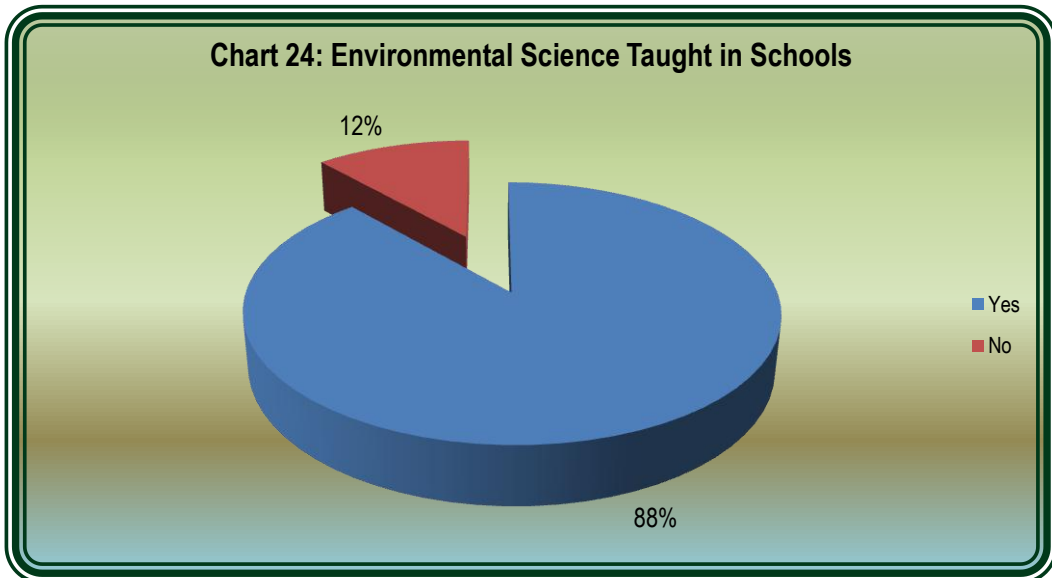
**Table 27: Medium for Information on Environmental Issues by Educational Attainment**

Educational attainment	Medium						
	Total	Television	Radio	Newspapers	Magazines	Internet	Word of mouth
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				(percentage)			
Total	100	63	6	17	1	11	3
None	100	67	13	14	0	1	4
Primary	100	68	6	18	1	3	3
Secondary	100	64	5	14	0	15	3
Diploma	100	61	2	14	3	18	3
Associate degree	100	36	4	25	2	29	4
Bachelor's degree and above	100	41	2	17	2	37	1
Not stated	100	44	0	56	0	0	0

**Table 28: Environmental Science Taught in Schools by Age Groups**

Age group (years)	Environmental science taught in schools		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All ages	100	89	12
Less than 20	100	84	16
20-29	100	92	9
30-39	100	88	12
40-49	100	90	10
50 and over	100	87	13

Overall, the majority (89%) of respondents indicated that environmental science should be taught in schools.

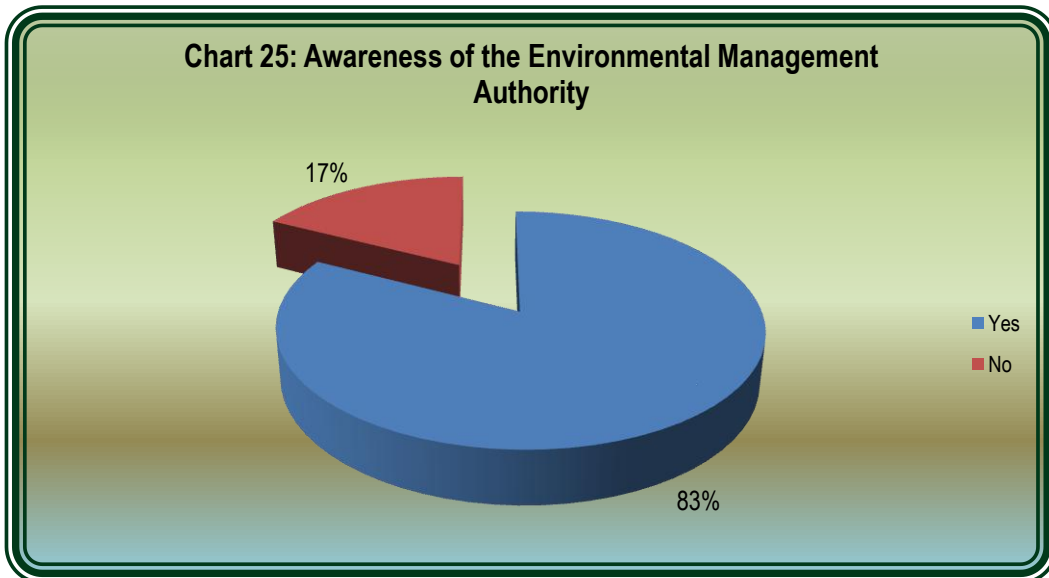


Source: Table 28

**Table 29: Awareness of the Environmental Management Authority (EMA) by Age Groups**

Age group (years)	Aware of the EMA		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All ages	100	83	17
Less than 20	100	80	21
20-29	100	83	17
30-39	100	84	17
40-49	100	83	17
50 and over	100	82	18

The survey results reveal that a significant percentage (83%) of the respondents was aware of the existence of the Environmental Management Authority (EMA) (Table 29). The majority (66%) of respondents in all age groups (Tables 31) and levels of educational attainment (Table 32) was of the opinion that the EMA played an important role in protecting the environment but a quarter (26%) in general disagreed.



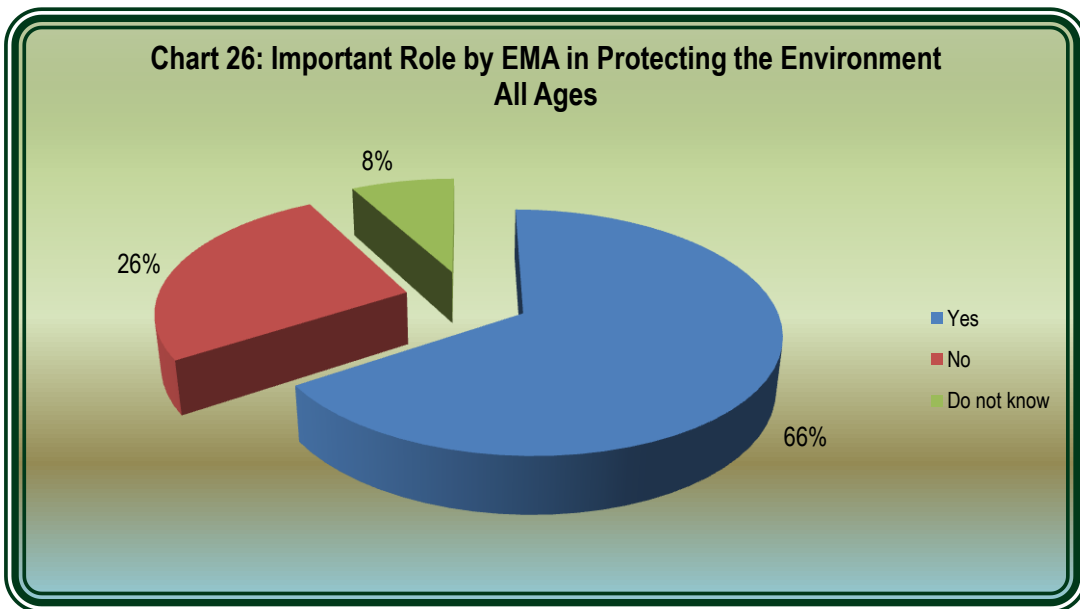
Source: Table 29

**Table 30: Awareness of the EMA by Educational Attainment**

Educational attainment	Aware of the EMA		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
Total	100	83	17
None	100	72	28
Primary	100	78	22
Secondary	100	86	14
Diploma	100	86	14
Associate degree	100	95	5
Bachelor's degree and above	100	95	5
Not stated	100	78	22

**Table 31: Important Role by the EMA in Protecting the Environment by Age Groups**

Age group (years)	Important role by EMA			
	Total	Yes	No	Do not know
	(1)	(2)	(3)	(4)
		(percentage)		
All ages	100	66	26	8
Less than 20	100	77	17	6
20-29	100	69	23	8
30-39	100	64	29	7
40-49	100	68	25	8
50 and over	100	63	28	9



Source: Table 31



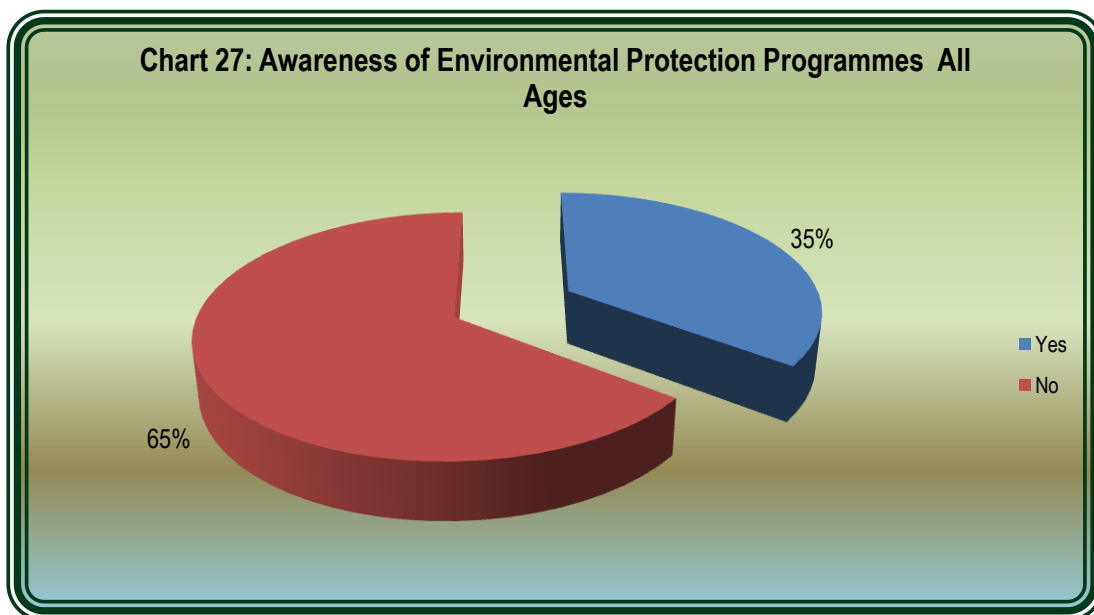
**Table 32: Important Role by the EMA in Protecting the Environment by Educational Attainment**

Educational attainment	Important role by EMA			
	Total	Yes	No	Do not know
	(1)	(2)	(3)	(4)
	(percentage)			
Total	100	66	26	8
None	100	56	33	11
Primary	100	68	23	9
Secondary	100	65	27	8
Diploma	100	65	28	7
Associate degree	100	60	39	1
Bachelor's degree and above	100	68	29	3
Not stated	100	57	29	14

**Table 33: Environmental Awareness and Protection Programmes by Age Groups**

Age group (years)	Awareness of environmental protection programmes		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All ages	100	35	65
Less than 20	100	38	63
20-29	100	37	63
30-39	100	35	65
40-49	100	38	62
50 and over	100	33	68

Two-thirds (65%) of the survey participants indicated that they had no knowledge of any environmental awareness and protection programmes. A similar pattern of responses was recorded within the various age groups (Table 33). The data also show a positive relationship between knowledge of such programmes and educational attainment (Table 34). A further review of the data by geographical areas reveals that the largest proportions of respondents who were aware of environmental programmes were in Arima (64%), followed by Tobago (51%), Rest of St. George (48%), St. Ann's (46%) and Tacarigua (42%) (Table 35).



Source: Table 33

**Table 34: Environmental Awareness and Protection Programmes by Educational Attainment**

Educational attainment	Awareness of environmental protection programmes		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
Total	100	35	65
None	100	28	72
Primary	100	32	68
Secondary	100	33	67
Diploma	100	51	49
Associate Degree	100	48	52
Bachelor's Degree and above	100	53	47
Not stated	100	67	33

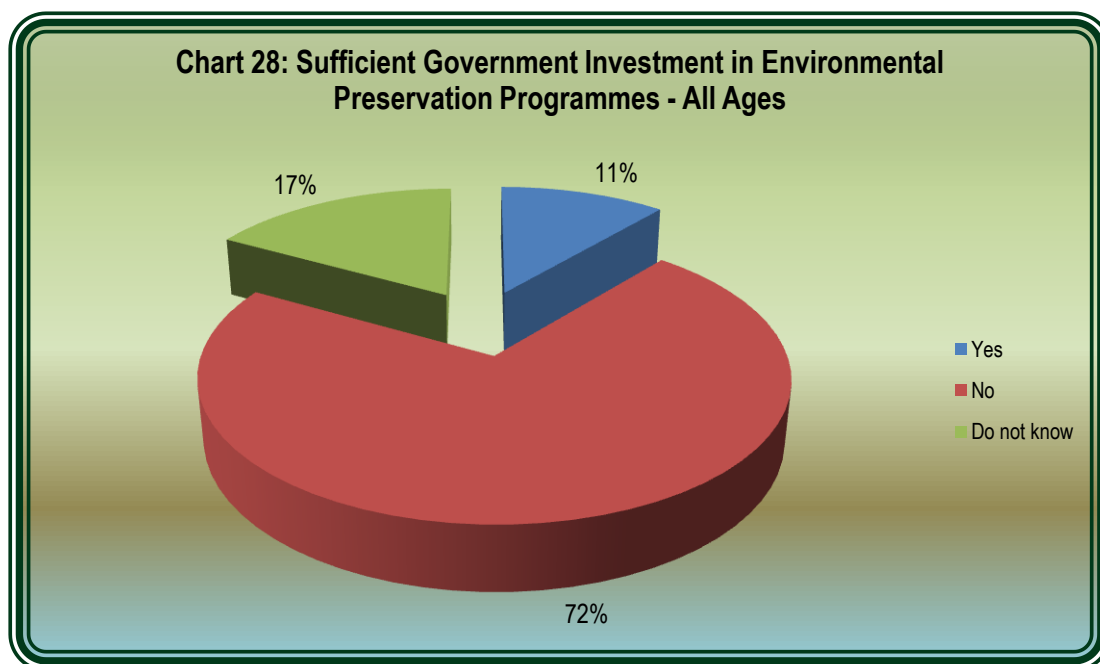
**Table 35: Environmental Awareness and Protection Programmes by Geographical Areas**

Geographical area	Awareness of environmental protection programmes		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All areas	100	35	65
Port of Spain	100	27	73
San Fernando	100	24	76
Arima	100	64	36
Point Fortin	100	31	69
Chaguanas	100	37	63
Diego Martin	100	22	78
St. Ann's	100	46	54
Tacarigua	100	43	57
Rest of St. George	100	48	52
Caroni	100	21	79
Victoria	100	25	75
St. Patrick	100	36	64
St. Andrew/St. David	100	36	65
Nariva/Mayaro	100	33	67
Tobago	100	51	49

**Table 36: Government Investment in Environmental Preservation Programmes by Age Groups**

Age group (years)	Sufficient government investment			
	Total	Yes	No	Do not know
	(1)	(2)	(3)	(4)
		(percentage)		
All ages	100	11	72	17
Less than 20	100	10	69	21
20-29	100	10	76	15
30-39	100	9	75	16
40-49	100	11	72	17
50 and over	100	13	69	18

The majority (72%) of respondents overall, and by the various age groups (Table 36) and educational attainment (Table 37), felt that there was insufficient government investment in environmental preservation programmes. A similar opinion was expressed with respect to regulation and involvement in environmental protection by the state (Table 38).



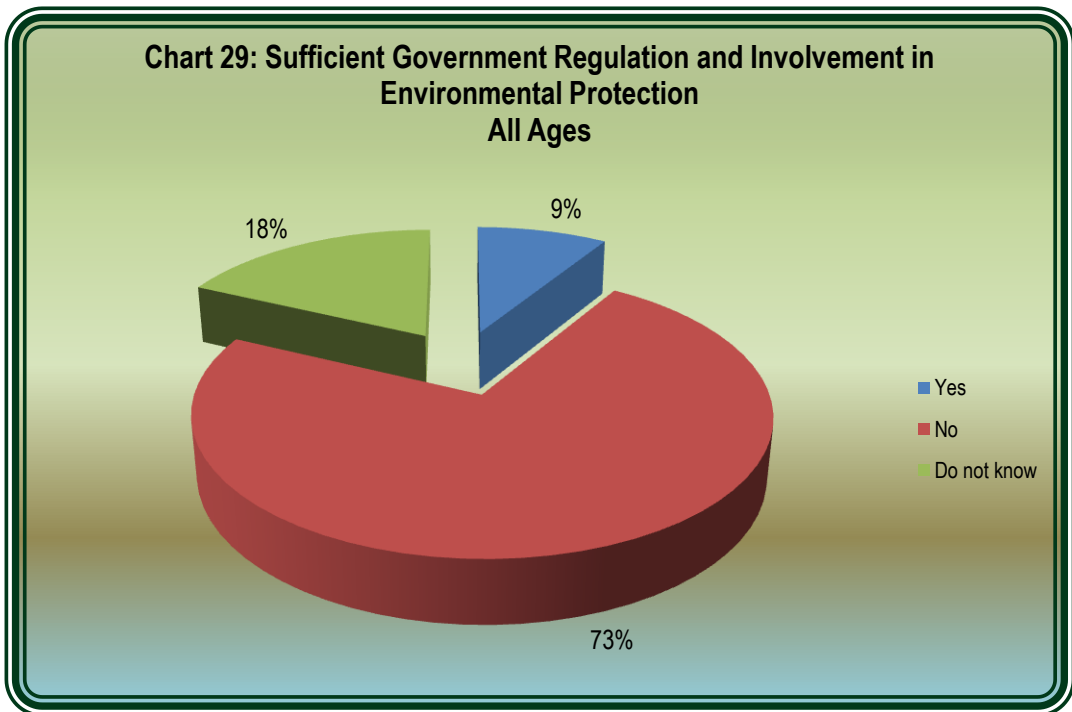
Source: Table 36

**Table 37: Government Investment in Environmental Preservation Programmes by Educational Attainment**

Educational attainment	Sufficient government investment in environmental preservation programmes			
	Total (1)	Yes (2)	No (3)	Do not know (4)
		(percentage)		
Total	100	11	72	17
None	100	9	71	21
Primary	100	13	70	18
Secondary	100	11	72	17
Diploma	100	10	80	11
Associate degree	100	8	78	13
Bachelor's degree and above	100	10	75	16
Not stated	100	22	56	22

**Table 38: Government Regulation and Involvement in Environmental Protection by Age Groups**

Age group (years)	Sufficient government regulation and involvement in environmental protection			
	Total	Yes	No	Do not know
	(1)	(2)	(3)	(4)
		(percentage)		
All ages	100	9	73	18
Less than 20	100	7	63	31
20-29	100	7	77	16
30-39	100	9	74	17
40-49	100	10	75	16
50 and over	100	10	71	20



Source: Table 38

**Table 39: Government Regulation and Involvement in Environmental Protection by Educational Attainment**

Educational attainment	Sufficient government regulation and involvement in environmental protection			
	Total	Yes	No	Do not know
	(1)	(2)	(3)	(4)
	(percentage)			
Total	100	9	73	18
None	100	11	71	19
Primary	100	9	73	17
Secondary	100	8	71	21
Diploma	100	11	73	17
Associate degree	100	7	85	8
Bachelor's degree and above	100	10	76	15
Not stated	100	22	56	22

**Table 40: Awareness of Negative Impact on the Environment**

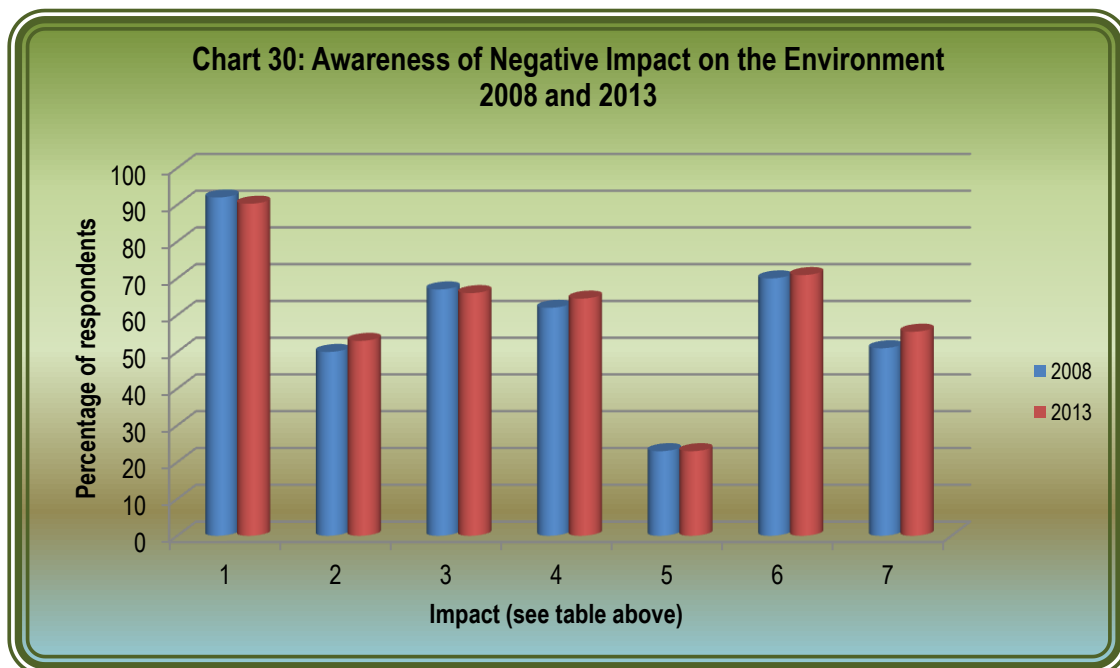
Statement	Response			
	Total	True	False	Do not know
	(1)	(2)	(3)	(4)
		(percentage)		
1 Pollution in the nearby rivers is getting worse	100	90	5	5
2 Styrofoam is biodegradable	100	17	53	30
3 Slash and burn is an eco-friendly method of cultivation	100	17	66	17
4 Chlorofluorocarbon (CFC) found in cleaning products is harmful to the environment	100	65	9	27
5 All radioactivity is produced by man	100	38	23	40
6 Carbon dioxide and other gases can lead to global warming	100	71	3	26
7 The ozone layer absorbs ultraviolet radiation	100	56	6	38

Table 40 above indicates respondents' knowledge of negative impact on the environment. Most respondents (90%) felt that pollution in the nearby rivers was getting worse. Two-thirds or more of the respondents knew that carbon dioxide and other gases released into the atmosphere could lead to global warming (71%), slash and burn was not an eco-friendly method of cultivation (66%) and CFC found in cleaning products was harmful to the environment (65%). Over a half of the respondents provided correct responses for the statements: the ozone layer absorbed ultraviolet radiation (56%) and styrofoam was biodegradable (53%). Approximately a quarter (23%) of the respondents disagreed that all radioactivity was produced by man. The results of this study in 2013 were comparable to 2008 (Table 41).



**Table 41: Awareness of Negative Impact on the Environment, 2008 and 2013**

Statement	Year	
	2008	2013
	(1)	(2)
	(percentage of correct responses)	
1 Pollution in the nearby rivers is getting worse	92	90
2 Styrofoam is biodegradable	50	53
3 Slash and burn is an eco-friendly method of cultivation	67	66
4 CFC found in cleaning products is harmful to the environment	62	65
5 All radioactivity is produced by man	23	23
6 Carbon dioxide and other gases can lead to global warming	70	71
7 The ozone layer absorbs ultraviolet radiation	51	56



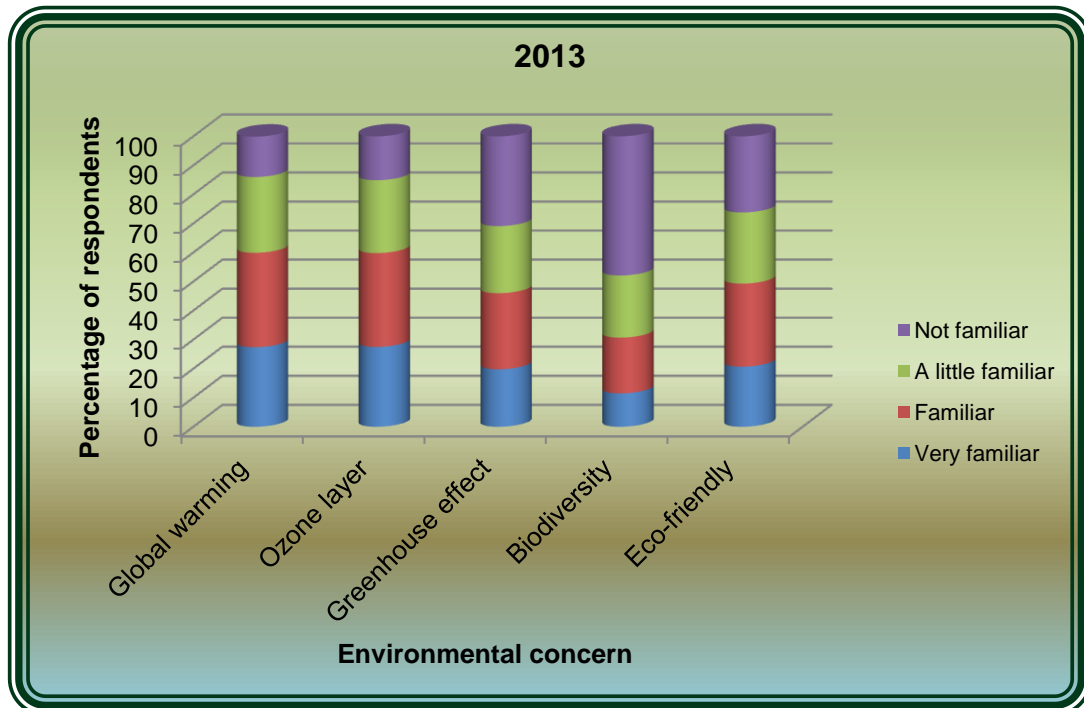
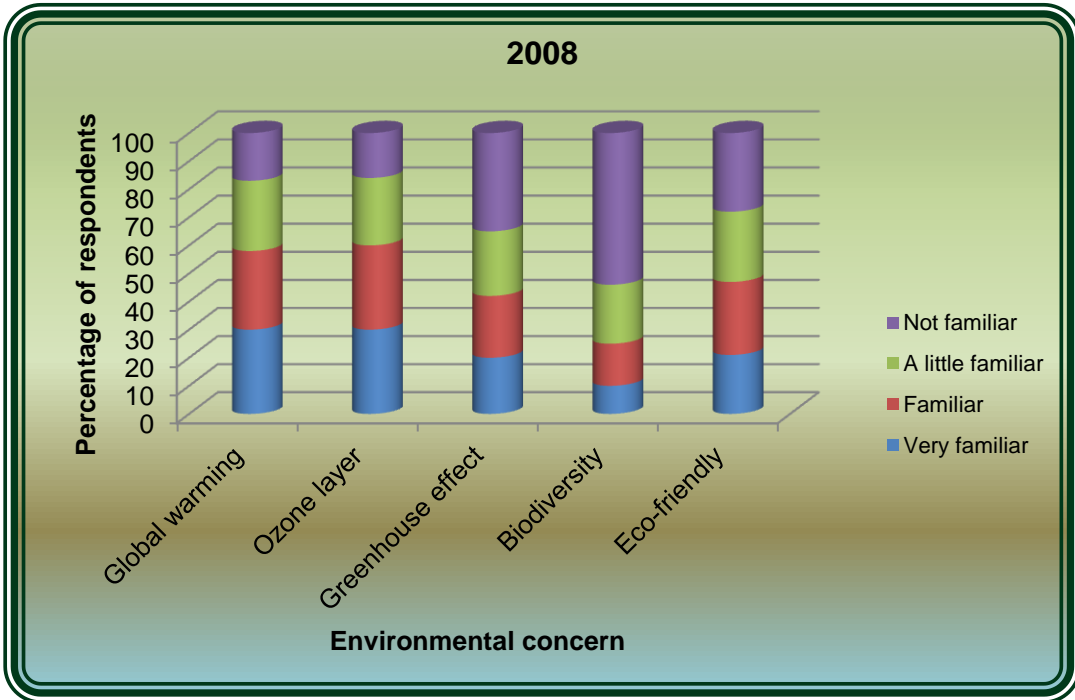
Source: Table 41

**Table 42: Familiarity with Environmental Concerns, 2008 and 2013**

Environmental concern	Level of familiarity									
	Total		Very familiar		Familiar		A little familiar		Not familiar	
	Year									
	2008	2013	2008	2013	2008	2013	2008	2013	2008	2013
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	(percentage)									
Global warming	100	100	30	27	28	33	25	26	18	14
Ozone layer	100	100	30	28	30	32	24	25	17	15
Greenhouse effect	100	100	20	20	22	26	23	23	36	31
Biodiversity	100	100	10	12	15	19	21	21	54	48
Eco-friendly	100	100	21	21	26	29	25	25	28	26

Accumulatively, a half or more of the survey participants in 2013 was very familiar and familiar with the terms global warming (60%), ozone layer (60%) and eco-friendly (50%). Overall, the pattern of responses observed in 2013 was similar to that of 2008. A substantial percentage of respondents in 2013 was not familiar with the term biodiversity (48%) and greenhouse effect (31%). However, compared to 2008 the percentage of respondents who were not familiar with the terms biodiversity and greenhouse effect declined slightly in 2013.

Chart 31: Familiarity with Environmental Concerns, 2008 and 2013

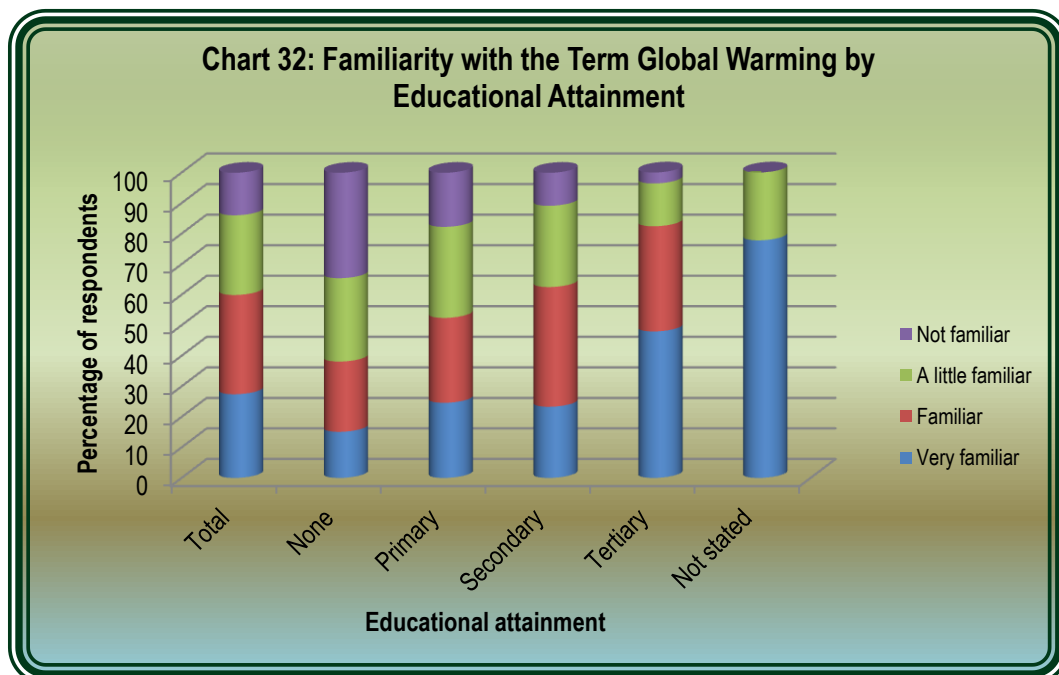


Source: Table 42

**Table 43: Familiarity with the Term Global Warming by Educational Attainment**

Educational attainment	Level of familiarity				
	Total	Very familiar	Familiar	A little familiar	Not familiar
	(1)	(2)	(3)	(4)	(5)
		(percentage)			
Total	100	27	33	26	14
None	100	15	23	27	35
Primary	100	25	28	30	18
Secondary	100	23	39	27	11
Tertiary	100	48	34	14	4
Not stated	100	78	0	22	0

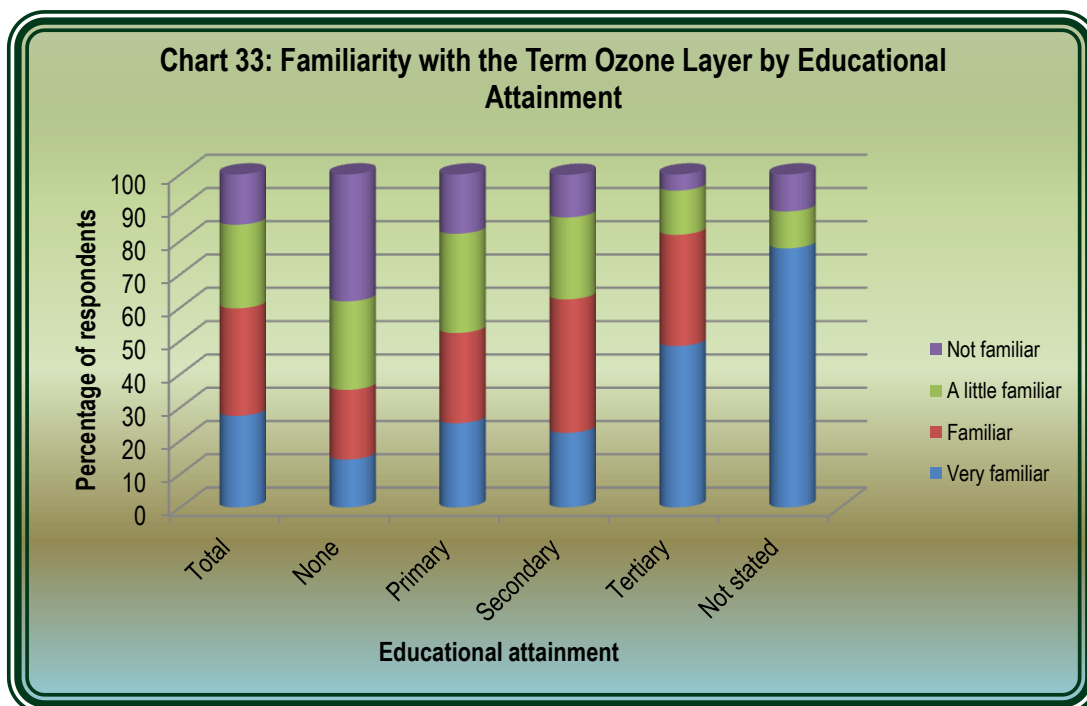
A further review of the data indicates a positive correlation between respondents educational attainment and familiarity with each term shown in Tables 43 - 47. Except for biodiversity (60%), three-quarters or more of the respondents with tertiary education were very familiar and familiar with the terms global warming (82%), ozone layer (81%), greenhouse effect (74%) and eco-friendly (78%). Least familiarity was shown with the term biodiversity by respondents of all educational groups.



Source: Table 43

**Table 44: Familiarity with the Term Ozone Layer by Educational Attainment**

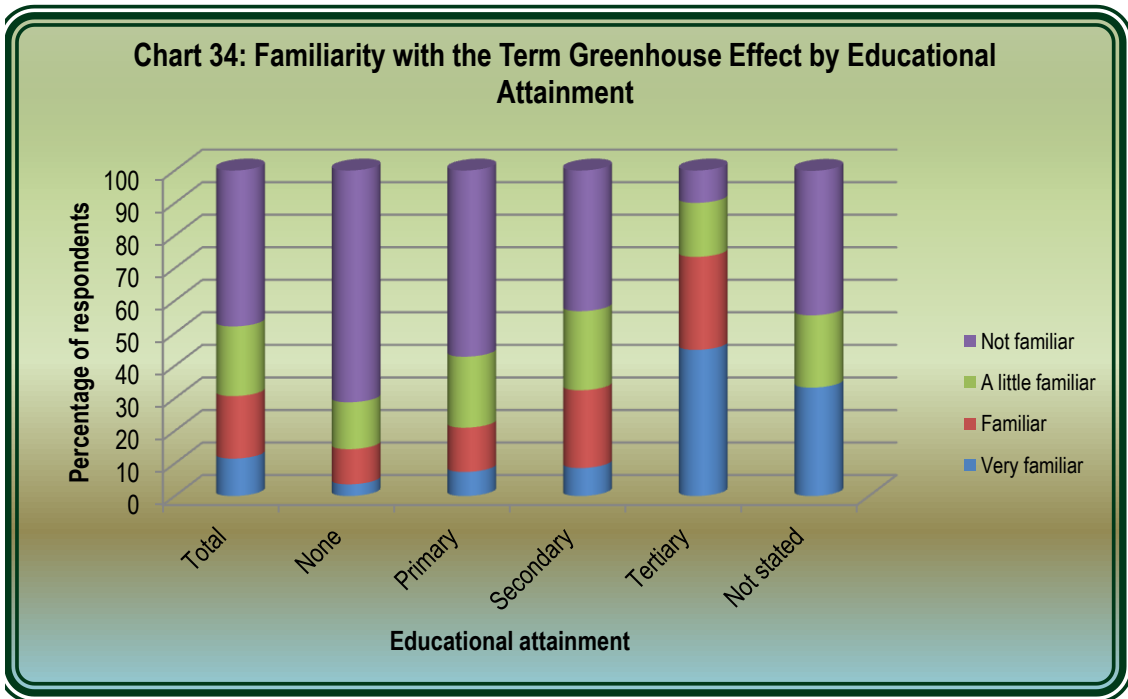
Educational attainment	Level of familiarity				
	Total	Very familiar	Familiar	A little familiar	Not familiar
	(1)	(2)	(3)	(4)	(5)
			(percentage)		
Total	100	28	32	25	15
None	100	14	21	27	38
Primary	100	25	27	30	18
Secondary	100	22	40	25	13
Tertiary	100	48	33	13	5
Not stated	100	78	0	11	11



Source: Table 44

**Table 45: Familiarity with the Term Greenhouse Effect by Educational Attainment**

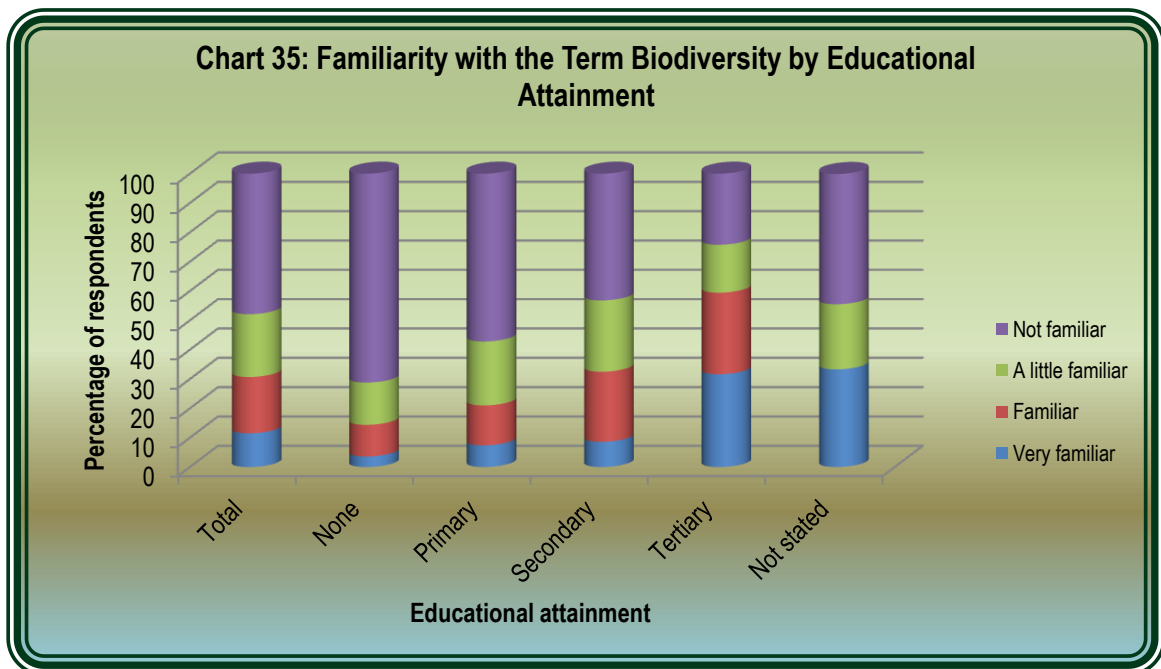
Educational attainment	Level of familiarity				
	Total	Very familiar	Familiar	A little familiar	Not familiar
	(1)	(2)	(3)	(4)	(5)
			(percentage)		
Total	100	12	19	21	48
None	100	4	11	14	71
Primary	100	7	14	22	57
Secondary	100	9	24	24	43
Tertiary	100	45	29	17	10
Not stated	100	33	0	22	44



Source: Table 45

**Table 46: Familiarity with the Term Biodiversity by Educational Attainment**

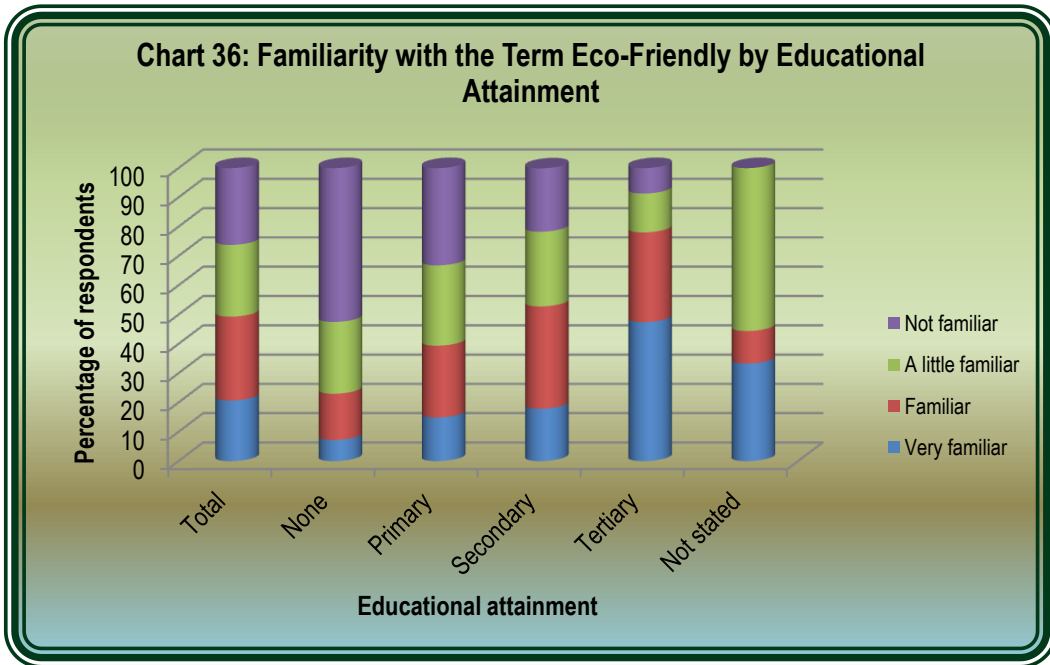
Educational attainment	Level of familiarity				
	Total	Very familiar	Familiar	A little familiar	Not familiar
	(1)	(2)	(3)	(4)	(5)
Total	100	12	19	21	48
None	100	4	11	14	71
Primary	100	7	14	22	57
Secondary	100	9	24	24	43
Tertiary	100	32	28	16	24
Not stated	100	33	0	22	44



Source: Table 46

**Table 47: Familiarity with the Term Eco-Friendly by Educational Attainment**

Educational attainment	Level of familiarity				
	Total	Very familiar	Familiar	A little familiar	Not familiar
	(1)	(2)	(3)	(4)	(5)
		(percentage)			
Total	100	21	29	25	26
None	100	7	16	25	53
Primary	100	15	25	27	33
Secondary	100	18	35	26	22
Tertiary	100	47	31	13	9
Not stated	100	33	11	56	0



Source: Table 47

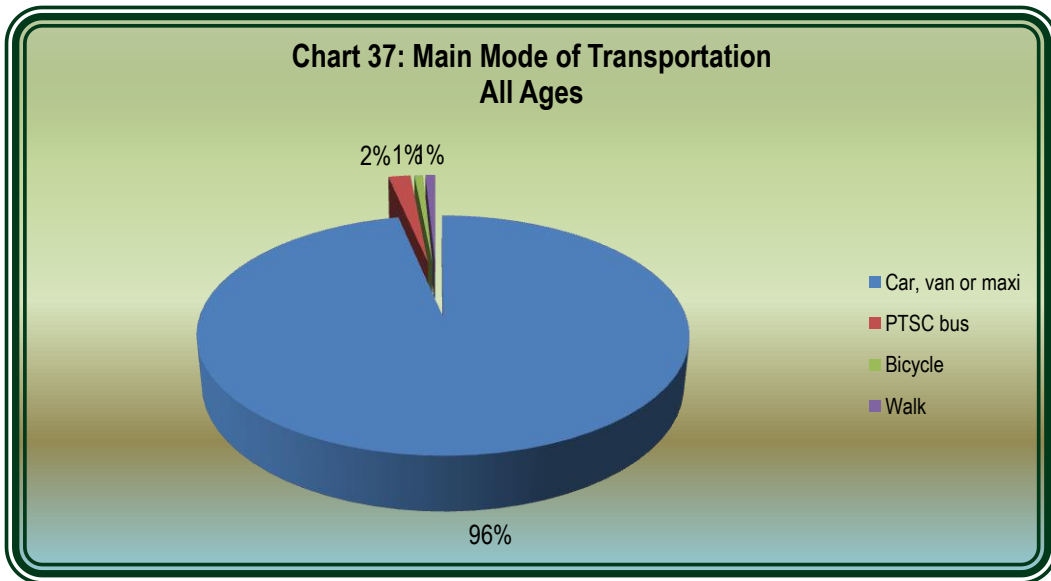


**Table 48: Main Mode of Transportation by Age Group**

Age group (years)	Main mode of transportation				
	Total	Car, van or maxi	PTSC bus	Bicycle	Walk
	(1)	(2)	(3)	(4)	(5)
		(percentage)			
All ages	100	96	2	1	1
less than 20	100	98	0	1	1
20-29	100	97	1	1	1
30-39	100	98	1	0	0
40-49	100	97	2	0	1
50 and over	100	95	3	1	1

\*Public Transport Service Corporation (PTSC)

Almost all (96%) of the survey participants indicated that they travelled by car, van or maxi-taxi as their main mode of transportation. A negligible 2% travelled by public transport bus, mainly due to convenience and cost (Tables 48 and 49).



Source: Table 48

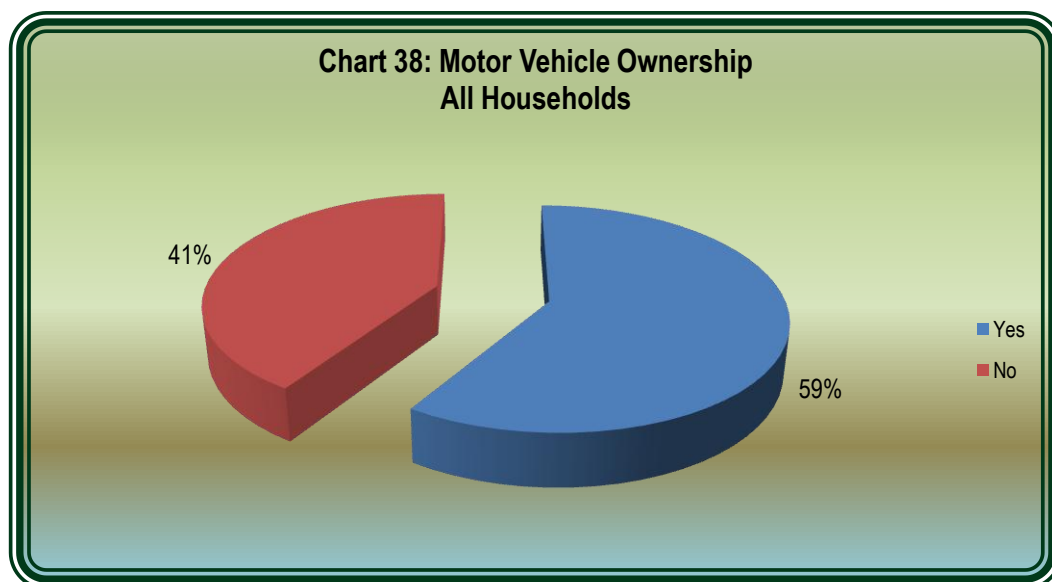
**Table 49: Why Use PTSC Bus**

Reason	Percentage
	(1)
More convenient	54
Less costly	33
Less stressful	22
Don't own a vehicle	15
Parking	9
Environmental concerns	7
Other	7

**Table 50: Motor Vehicle Ownership by Household Size**

Household size	Own a motor vehicle		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All households	100	59	41
1 person	100	37	63
2 persons	100	57	43
3 persons	100	64	36
4 persons	100	69	31
5 or more persons	100	63	38

Table 50 shows that three-fifths (59%) of the households owned a motor vehicle and that motor vehicle ownership increased in relationship to household size. By geographical areas, a half or more of the households in all areas except Nariva/Mayaro (46%) owned a motor vehicle (Table 51). Additionally, the largest percentages of motor vehicle ownership were observed in San Fernando (67%), Arima (66%) and Caroni (66%).



Source: Table 50

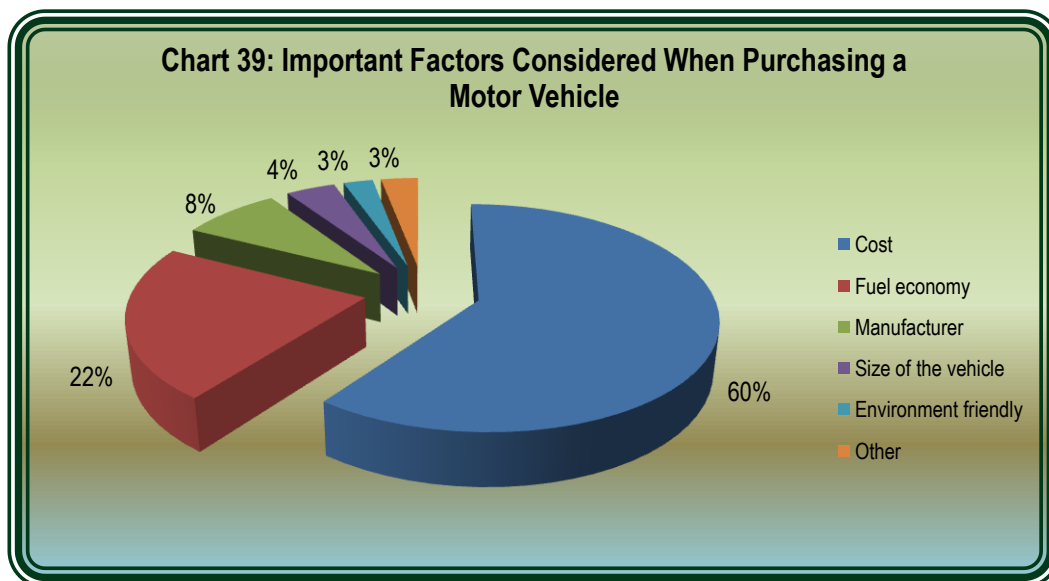
**Table 51: Motor Vehicle Ownership by Geographical Areas**

Geographical area	Own a motor vehicle		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All areas	100	59	41
Port of Spain	100	59	41
San Fernando	100	67	33
Arima	100	66	34
Point Fortin	100	56	44
Chaguanas	100	61	39
Diego Martin	100	61	39
St. Ann's	100	49	51
Tacarigua	100	59	41
Rest of St. George	100	60	40
Caroni	100	66	34
Victoria	100	61	39
St. Patrick	100	60	40
St. Andrew/St. David	100	55	45
Nariva/Mayaro	100	46	55
Tobago	100	59	41

**Table 52: Important Factors Considered When Purchasing a Motor Vehicle**

Factor	Percentage
Total	100
Cost	60
Fuel economy	22
Manufacturer	8
Size of the vehicle	4
Environment friendly	2
Other	3

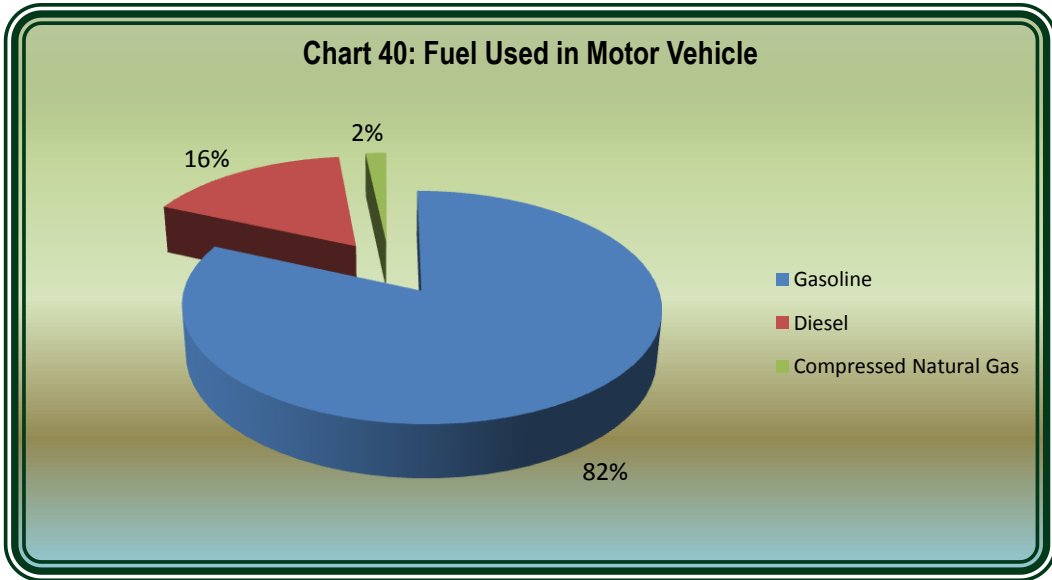
A large proportion (60%) of the survey participants stated that cost was the most important factor considered when purchasing a motor vehicle, followed by fuel economy (22%). Four-fifths (82%) of the respondents used gasoline to power their motor vehicles (Table 53) and over a half (57%) serviced their motor vehicles once every three months (Table 54).



Source: Table 52

**Table 53: Fuel Used in Motor Vehicle**

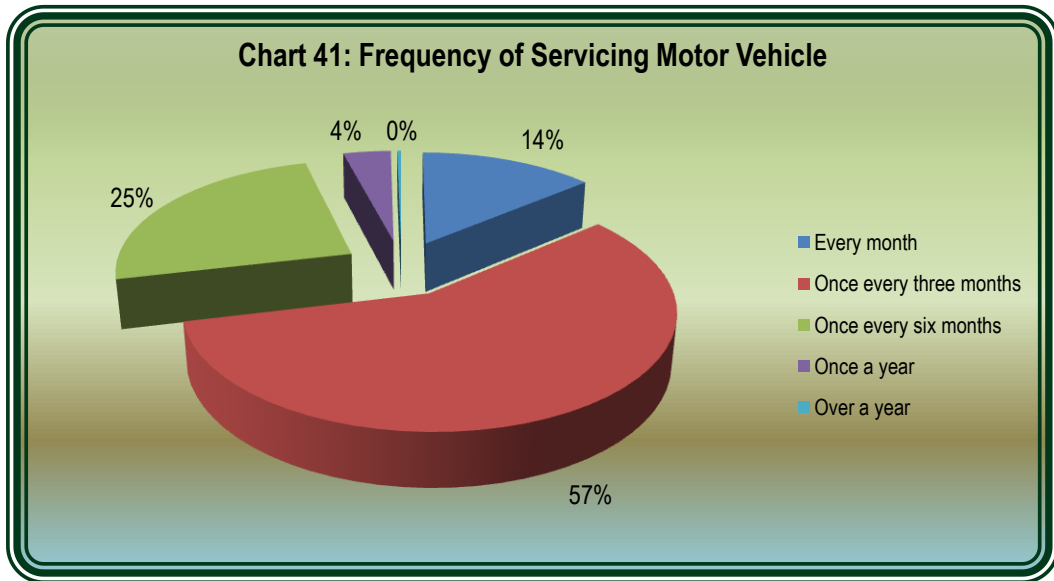
Fuel used	Percentage
Total	(1)
Gasoline	82
Diesel	17
Compressed Natural Gas	2



Source: Table 53

**Table 54: Frequency of Servicing Motor Vehicle**

Frequency	Percentage
Total	100
Every month	14
Once every three months	57
Once every six months	25
Once a year	4
Over a year	0

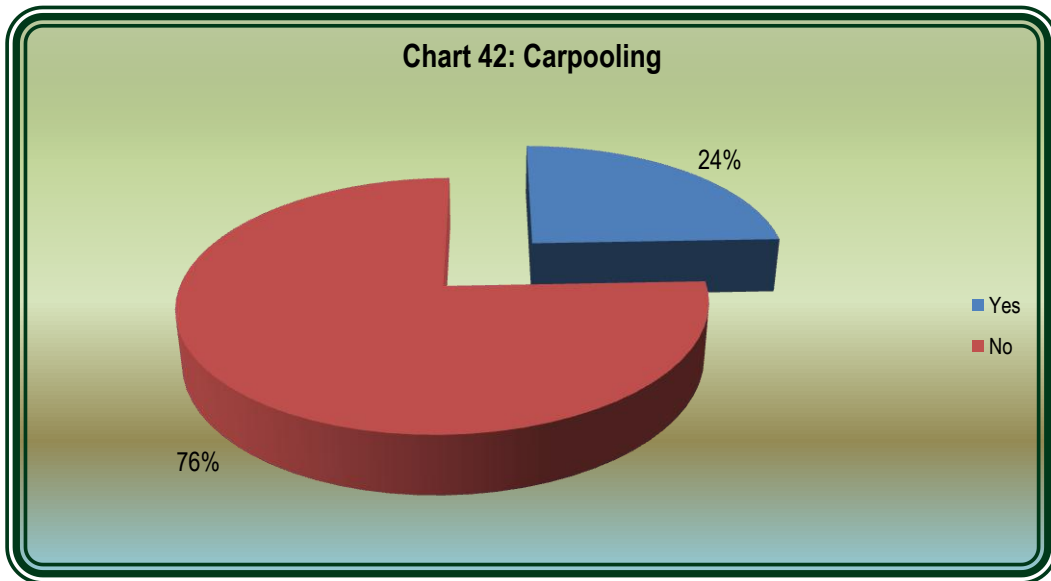


Source: Table 54

**Table 55: Carpooling**

Carpool	Percentage
Total	100
Yes	24
No	76

Three-quarters (76%) of the survey respondents did not carpool (Table 55) and 86% were of the opinion that carpooling helped the environment (Table 56).

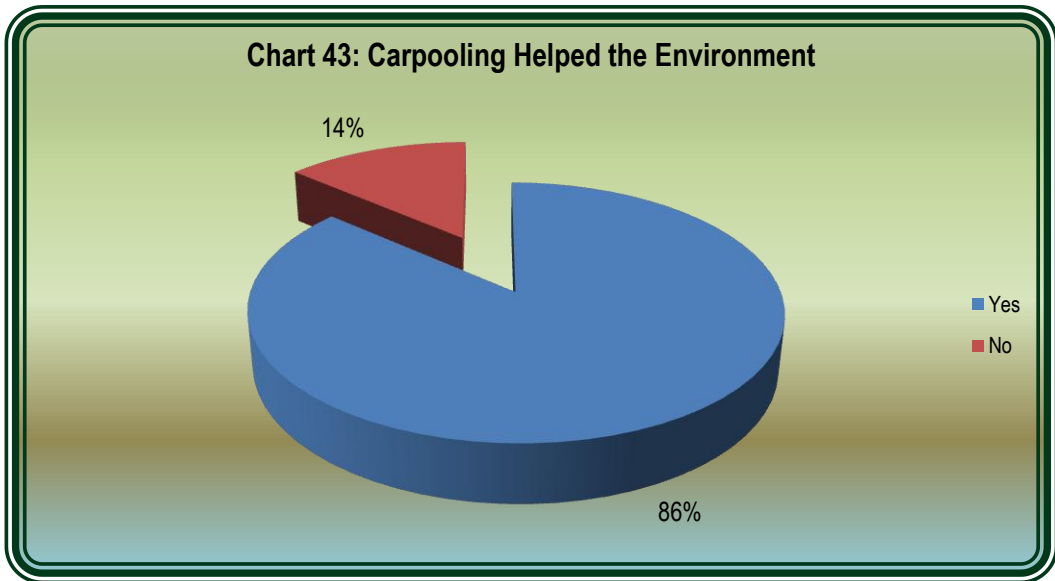


Source: Table 55



**Table 56: Carpooling Helped the Environment**

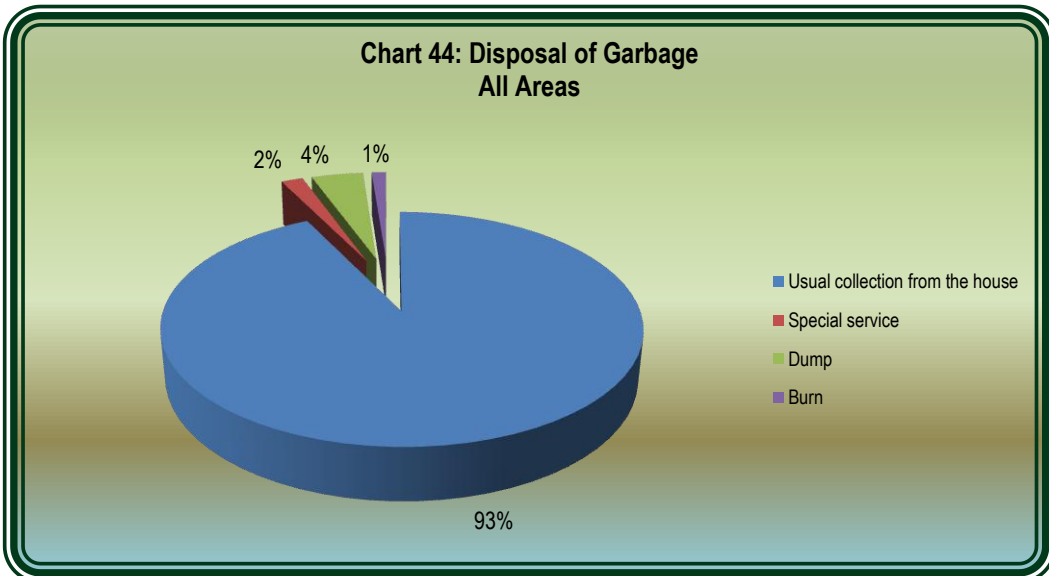
Carpooling helped the environment	Percentage
Total	100
Yes	86
No	14



Source: Table 56

**Table 57: Disposal of Garbage by Geographical Areas**

Geographical area	Method of garbage disposal				
	Total	Usual collection from the house	Special service	Dump	Burn
	(1)	(2)	(3)	(4)	(5)
			(percentage)		
All Areas	100	93	2	4	1
Port of Spain	100	86	1	11	1
San Fernando	100	98	1	0	1
Arima	100	94	6	0	0
Point Fortin	100	100	0	0	0
Chaguanas	100	99	0	0	1
Diego Martin	100	71	1	28	0
St. Ann's	100	91	1	8	0
Tacarigua	100	93	2	1	3
Rest of St. George	100	92	0	7	1
Caroni	100	97	1	1	1
Victoria	100	98	0	0	1
St. Patrick	100	90	8	0	2
St. Andrew/St. David	100	96	2	0	3
Nariva/Mayaro	100	100	0	0	0
Tobago	100	94	3	2	2

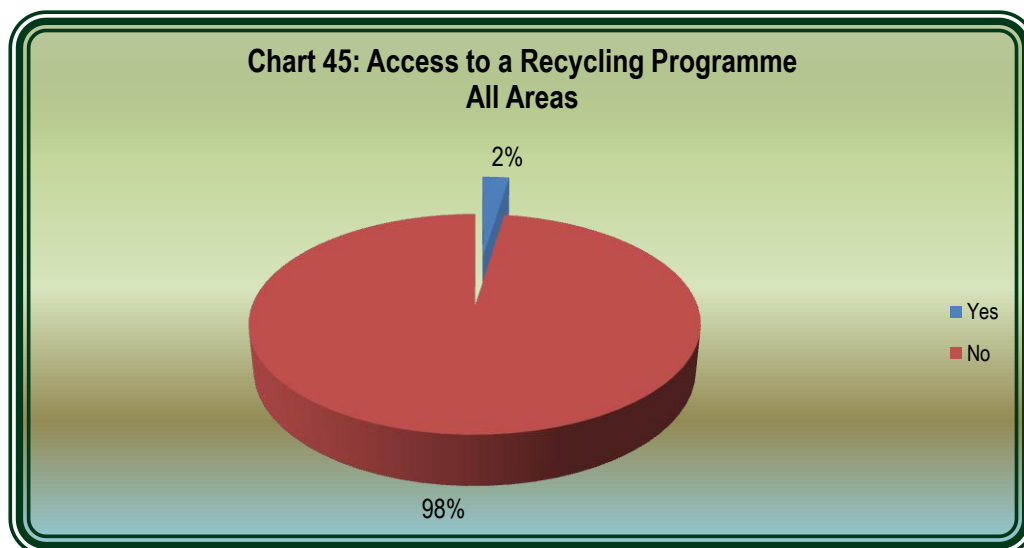


Source: Table 57

**Table 58: Access to a Recycling Programme by Geographical Areas**

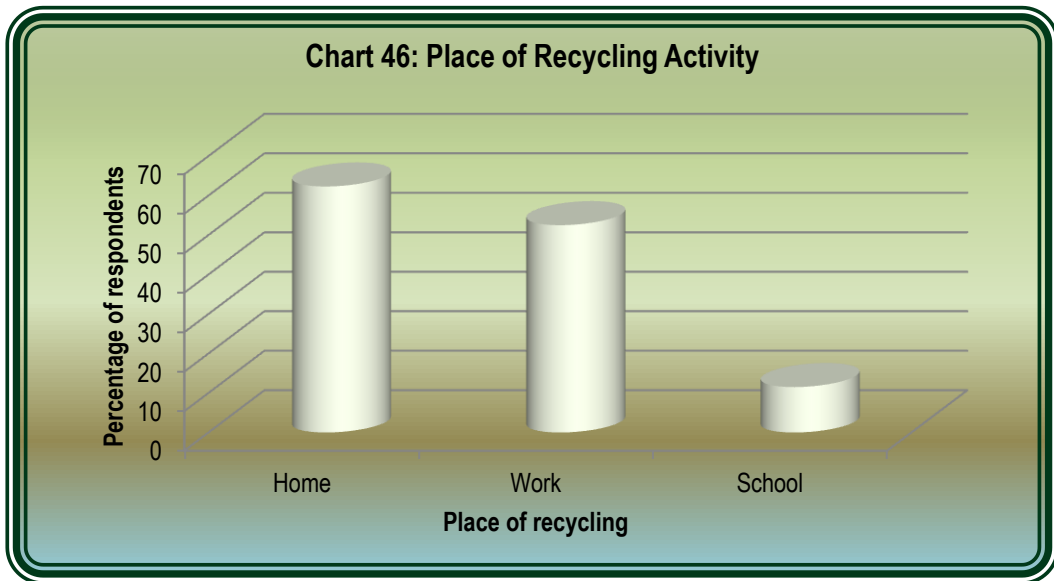
Geographical area	Access		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All areas	100	2	98
Port of Spain	100	2	98
San Fernando	100	1	99
Arima	100	2	98
Point Fortin	100	0	100
Chaguanas	100	3	97
Diego Martin	100	8	92
St. Ann's	100	3	97
Tacarigua	100	4	96
Rest of St. George	100	2	98
Caroni	100	1	99
Victoria	100	1	99
St. Patrick	100	2	98
St. Andrew/St. David	100	0	100
Nariva/Mayaro	100	3	97
Tobago	100	1	99

Overall, a significant majority (98%) of the households surveyed did not have access to a recycling programme (Table 58). Of the 2% that did participate in a recycling programme, 62% and 53% identified home and work respectively as the main places of recycling activity (Table 59). The items recycled consisted mainly of bottles (92%), old clothing (56%) and paper (51%) (Table 60) which were mainly recycled through a central collection point (56%), private collection (31%) and at home (26%) (Table 61).



**Table 59: Place of Recycling Activity**

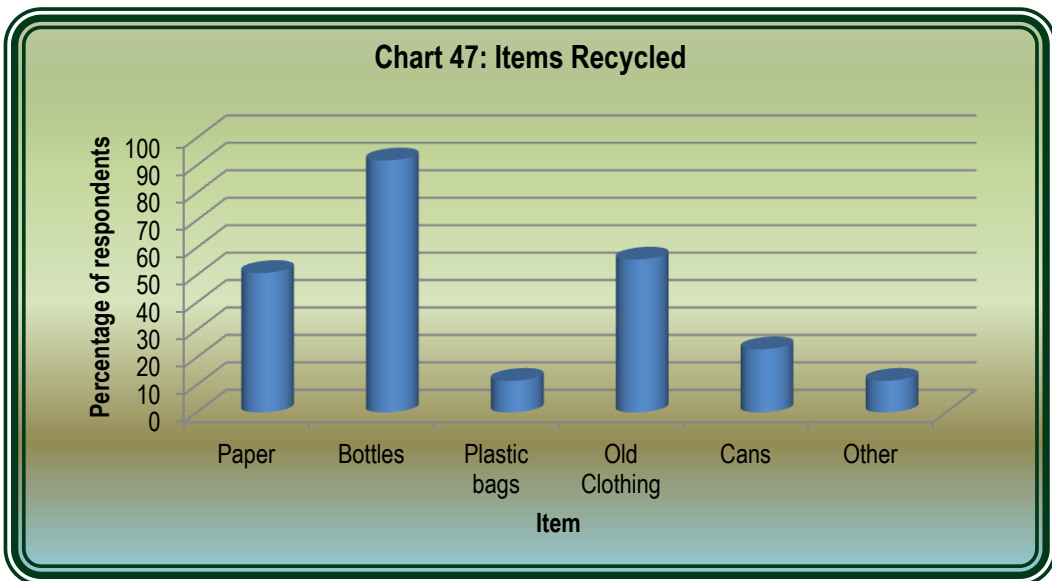
Place of recycling activity	Percentage
	(1)
Home	62
Work	53
School	12



Source: Table 59

**Table 60: Items Recycled**

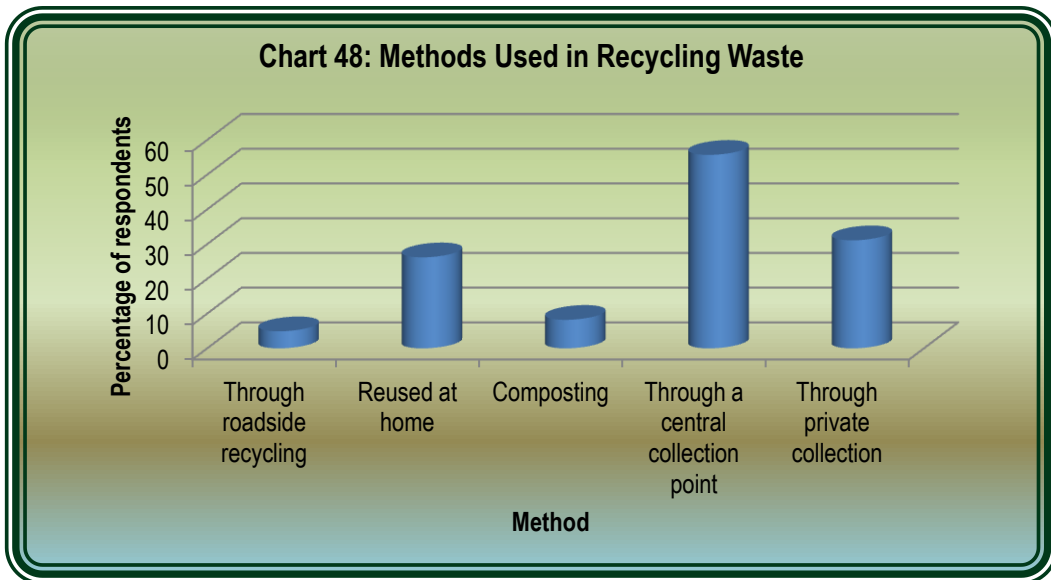
Item	Percentage
Paper	51
Bottles	92
Plastic bags	12
Old Clothing	56
Cans	23
Other	12



Source: Table 60

**Table 61: Methods Used in Recycling Waste**

Method	Percentage
	(1)
Through roadside recycling	5
Reused at home	26
Composting	8
Through a central collection point	56
Through private collection	31

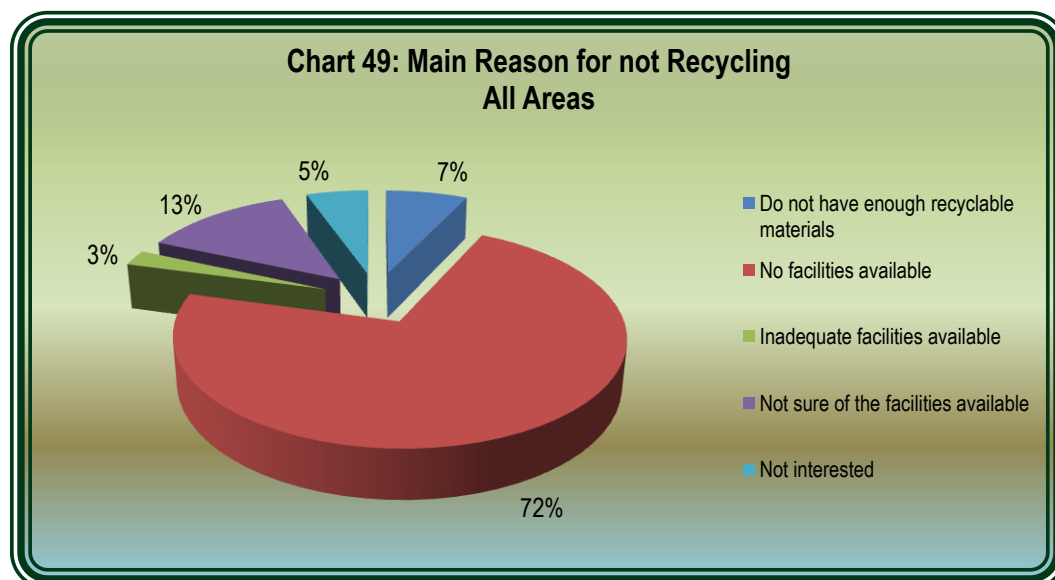


Source: Table 61

**Table 62: Main Reason for not Recycling by Geographical Areas**

Geographical area	Reason						
	Total	Do not have enough recyclable materials	No facilities available	Inadequate facilities available	Not sure of the facilities available	Not interested	
	(1)	(2)	(3)	(4)	(5)	(6)	
			(percentage)				
All areas	100	7	72	2	13	5	
Port of Spain	100	5	69	2	24	0	
San Fernando	100	8	90	0	2	0	
Arima	100	6	51	4	29	10	
Point Fortin	100	4	93	0	0	2	
Chaguanas	100	9	68	2	16	5	
Diego Martin	100	11	56	13	9	11	
St. Ann's	100	6	69	4	15	6	
Tacarigua	100	4	76	1	18	1	
Rest of St. George	100	4	73	2	21	1	
Caroni	100	6	58	3	21	13	
Victoria	100	8	80	1	8	3	
St. Patrick	100	5	89	0	6	0	
St. Andrew/St. David	100	3	79	0	14	4	
Nariva/Mayaro	100	3	89	0	8	0	
Tobago	100	17	54	3	10	17	

The majority (72%) of households that were not engaged in recycling indicated that no facilities were available (Table 62). A review of the data by geographical area, shows that a quarter or more of the respondents in Arima (29%) and Port of Spain (24%) was unsure of the facilities available. The percentage of respondents who were not interested in recycling decreased to 5% in 2013 from 31% in 2008 (Table 63).



**Table 63: Main Reason for not Recycling, 2008 and 2013**

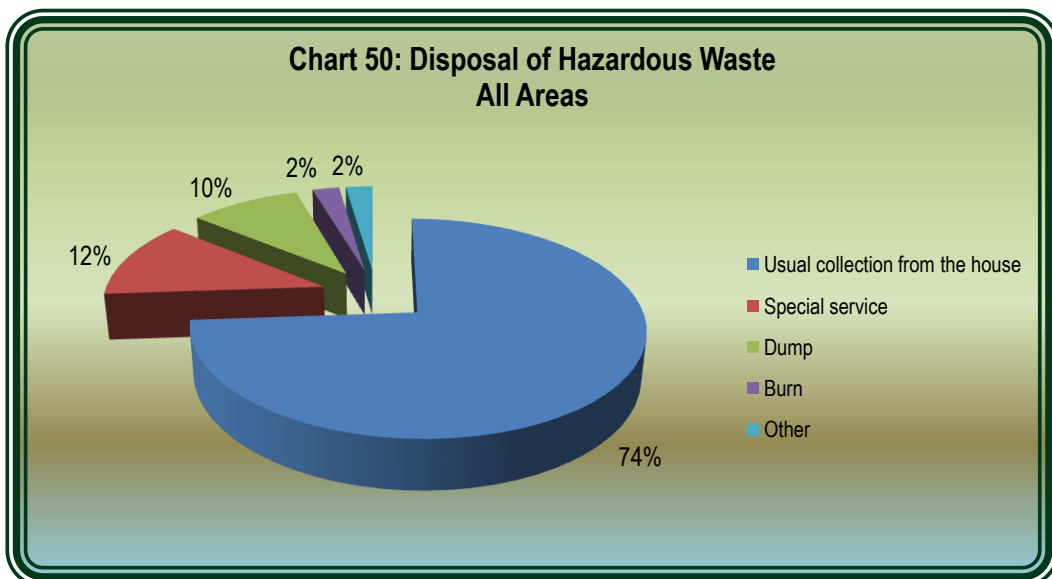
Reason	Year	
	2008	2013
	(1)	(2)
	(percentage)	
Total	100	100
Do not have enough recyclable materials	17	7
No facilities available	38	72
Inadequate facilities available	2	2
Not sure of the facilities available	12	13
Not interested	31	5



**Table 64: Disposal of Hazardous Waste by Geographical Areas**

Geographical area	Method of disposal					
	Total	Usual collection from the house	Special service	Dump	Burn	Other
	(1)	(2)	(3)	(4)	(5)	(6)
	(percentage)					
All areas	100	74	12	10	2	2
Port of Spain	100	75	14	6	3	2
San Fernando	100	71	13	13	1	2
Arima	100	80	12	6	2	0
Point Fortin	100	89	7	2	2	0
Chaguana	100	86	10	2	1	1
Diego Martin	100	65	9	20	1	4
St. Ann's	100	75	13	9	1	1
Tacarigua	100	81	10	5	1	3
Rest of St. George	100	67	17	10	1	5
Caroni	100	72	13	7	4	4
Victoria	100	73	11	12	3	2
St. Patrick	100	63	17	13	6	0
St. Andrew/St. David	100	82	11	4	3	0
Nariva/Mayaro	100	71	21	6	0	2
Tobago	100	74	6	11	4	6

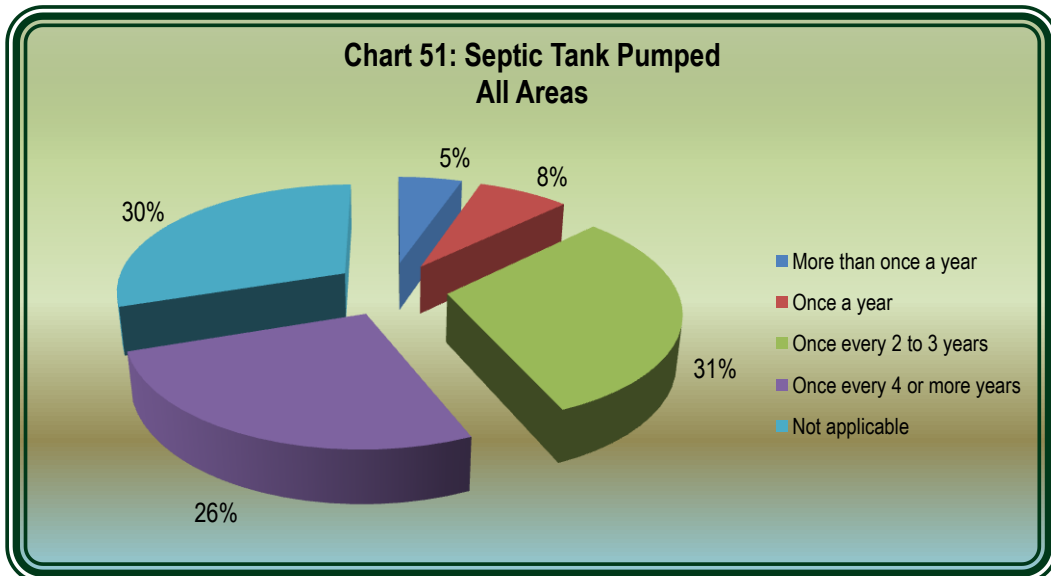
The survey results show that three-quarters (74%) of the households disposed of hazardous waste (batteries, medicins, old tires, paint products, etc.), through the usual garbage collection service from their houses. By geographical area, the data reveal that one-fifth (21%) of the households in Nariva/Mayaro used a special service and a similar proportion (20%) in Diego Martin accessed dumps.



**Table 65: Septic Tank Pumped by Geographical Areas**

Geographical area	Frequency					
	Total	More than once a year	Once a year	Once every 2 to 3 years	Once every 4 or more years	Not applicable
	(1)	(2)	(3)	(4)	(5)	(6)
	(percentage)					
All areas	100	5	8	31	26	30
Port of Spain	100	1	3	18	17	60
San Fernando	100	1	8	34	19	38
Arima	100	4	18	8	24	46
Point Fortin	100	0	11	47	33	9
Chaguanas	100	3	12	33	28	24
Diego Martin	100	27	2	4	29	38
St. Ann's	100	3	7	33	22	37
Tacarigua	100	4	7	24	18	47
Rest of St. George	100	3	9	28	29	32
Caroni	100	6	9	29	34	23
Victoria	100	3	6	48	32	12
St. Patrick	100	2	8	25	41	24
St. Andrew/St. David	100	9	14	43	19	15
Nariva/Mayaro	100	3	5	82	8	3
Tobago	100	6	8	23	22	42

When asked how often their septic tanks were emptied, 31% of the households responded once every two to three years and 26% once every four or more years. Most households that responded not applicable (30%) to this question indicated that their sewer systems were connected to central treatment plants.

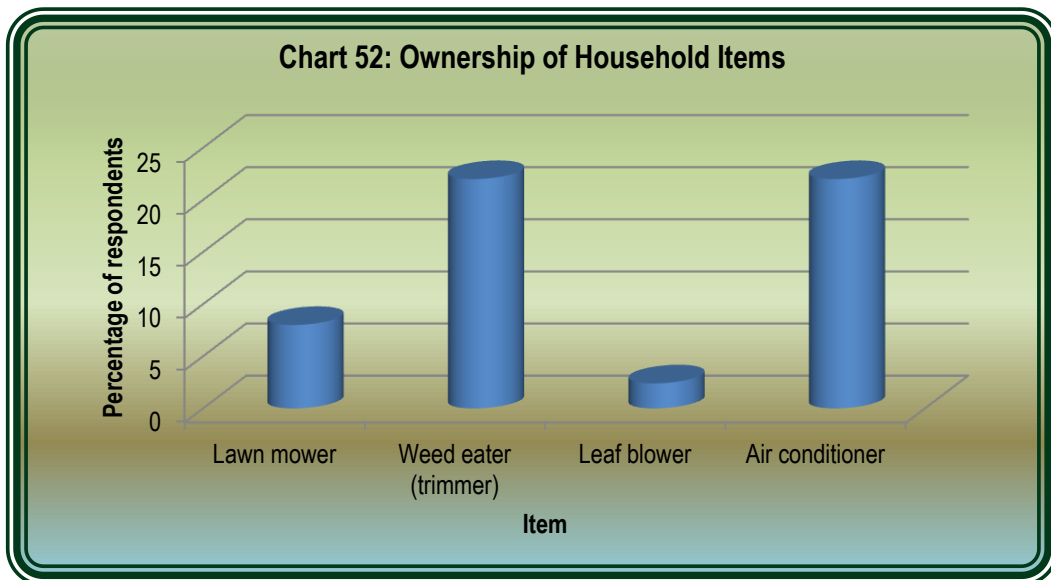


Source: Table 65

**Table 66: Ownership of Household Items**

Item	Percentage of households		
	Total	Yes	No
	(1)	(2)	(3)
Lawn mower	100	8	92
Weed eater (trimmer)	100	22	78
Leaf blower	100	2	98
Air conditioner	100	22	78

In general, most of the households surveyed did not possess any of the items listed above; 22% owned a weed eater and a similar percentage had an air conditioner.

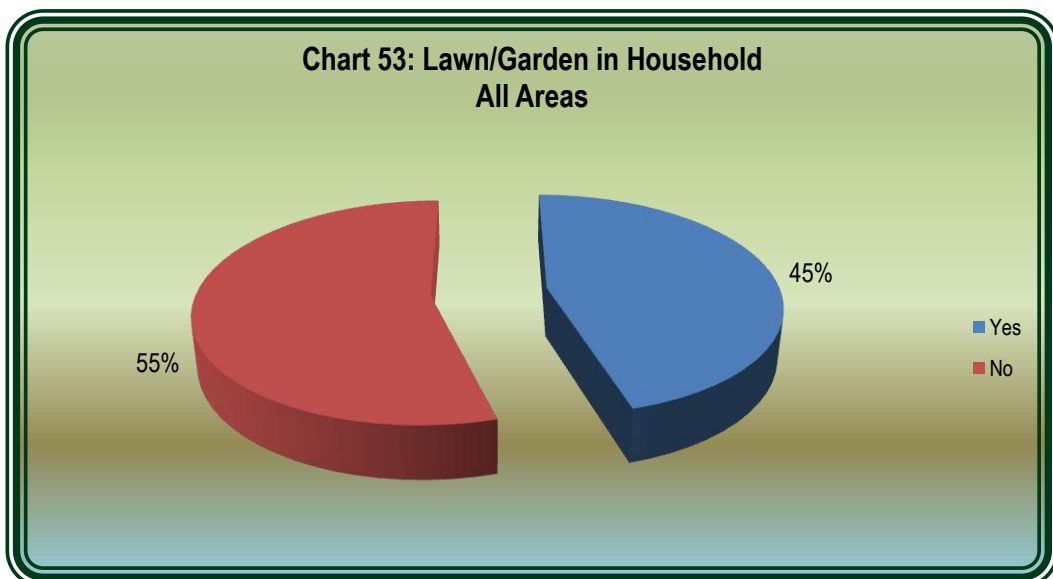


Source: Table 66

**Table 67: Lawn/Garden in Household by Geographical Areas**

Geographical area	Have a lawn/garden		
	Total	Yes	No
	(1)	(2)	(3)
		(percentage)	
All areas	100	46	55
Port of Spain	100	41	59
San Fernando	100	53	47
Arima	100	40	60
Point Fortin	100	42	58
Chaguanas	100	53	47
Diego Martin	100	48	52
St. Ann's	100	29	71
Tacarigua	100	49	51
Rest of St. George	100	49	51
Caroni	100	61	39
Victoria	100	53	47
St. Patrick	100	46	54
St. Andrew/St. David	100	44	56
Nariva/Mayaro	100	46	55
Tobago	100	27	73

The table above shows that less than a half (46%) of the total sample of households that participated in the survey had a lawn or garden. A further examination of the data by geographical area, however, shows that over a half of the households in Caroni (61%), Chaguanas (53%), San Fernando (53%) and Victoria (53%) had owned a lawn or garden.

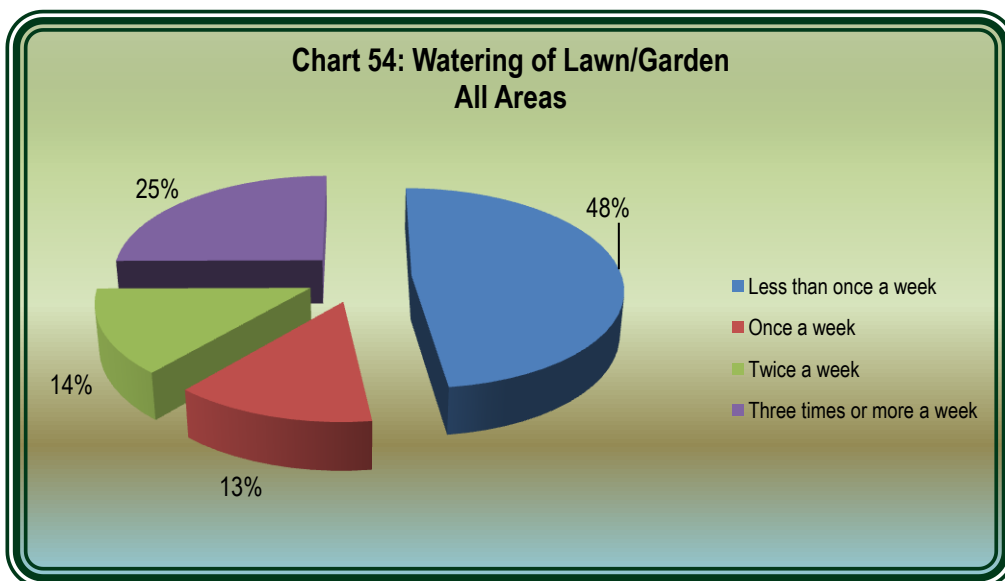


Source: Table 67

**Table 68: Watering of Lawn/Garden by Geographical Areas**

Geographical area	Frequency of watering lawn/garden				
	Total	Less than once a week	Once a week	Twice a week	Three times or more a week
	(1)	(2)	(3)	(4)	(5)
			(percentage)		
All areas	100	48	13	14	25
Port of Spain	100	33	14	11	42
San Fernando	100	32	36	19	14
Arima	100	40	10	35	15
Point Fortin	100	32	26	16	26
Chaguanas	100	36	15	12	37
Diego Martin	100	52	8	8	33
St. Anns	100	31	23	14	31
Tacarigua	100	57	20	2	22
Rest of St. George	100	40	9	11	40
Caroni	100	55	6	12	27
Victoria	100	42	11	28	19
St. Patrick	100	64	8	10	18
St. Andrew/St. David	100	53	6	9	32
Nariva/Mayaro	100	90	7	3	0
Tobago	100	51	13	13	23

Approximately one-half (48%) of the survey participants, especially in Nariva/Mayaro (90%) and St. Patrick (64%), watered their lawns or gardens less than once a week, and a quarter (25%), mainly in Port of Spain (42%) and Rest of St. George (40%), did so three times or more a week.

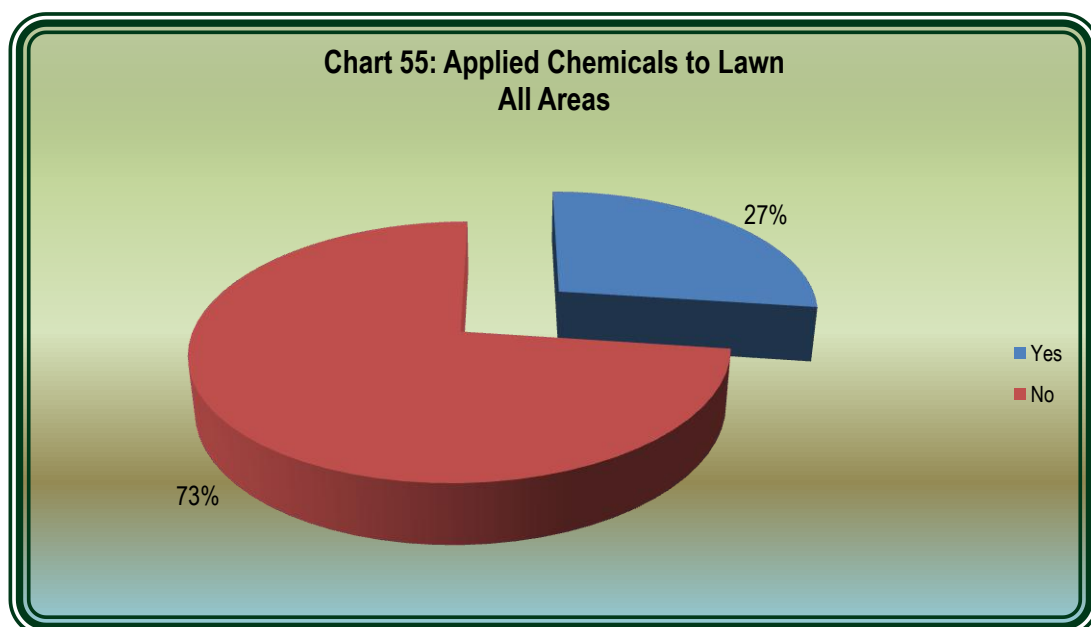


Source: Table 68

**Table 69: Application of Weed Killers, Pesticides, or Fungicides to Lawn or Garden by Geographical Areas**

Geographical area	Applied chemicals to lawn		
	Total (1)	Yes (2) (percentage)	No (3)
All areas	100	27	73
Port of Spain	100	19	81
San Fernando	100	29	71
Arima	100	30	70
Point Fortin	100	11	90
Chaguanas	100	29	71
Diego Martin	100	14	86
St. Ann's	100	33	67
Tacarigua	100	19	81
Rest of St. George	100	35	65
Caroni	100	35	65
Victoria	100	27	73
St. Patrick	100	23	77
St. Andrew/St. David	100	36	64
Nariva/Mayaro	100	47	53
Tobago	100	26	74

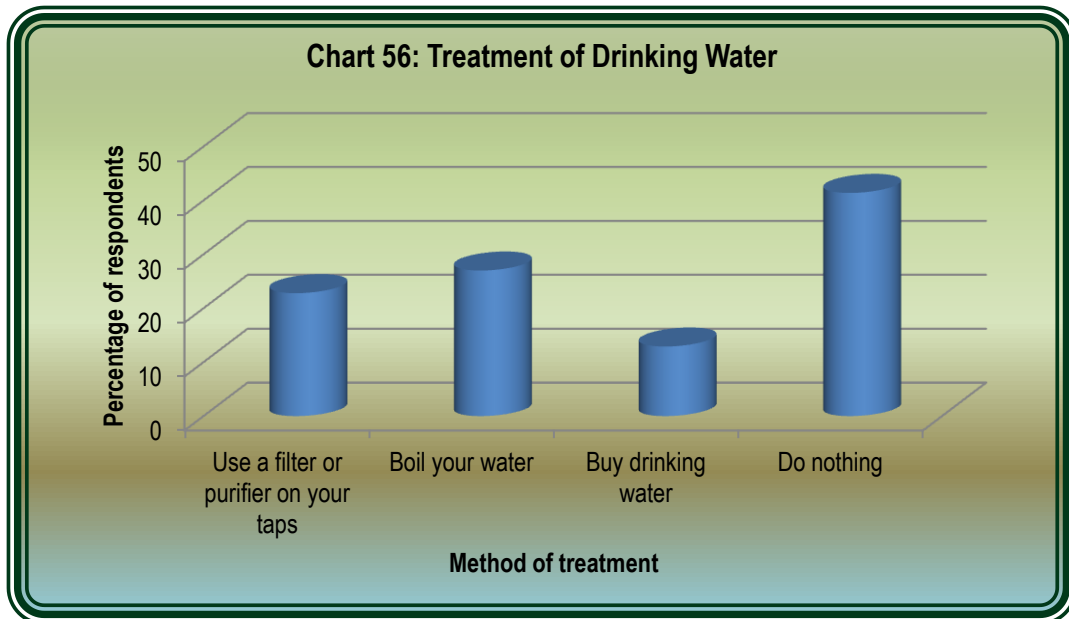
The majority (73%) of responding households did not apply any weed killers, pesticides, or fungicides to their lawns or gardens. The highest percentage of respondents who used such chemicals was observed in Nariva/Mayaro (47%).



**Table 70: Treatment of Drinking Water**

Method of treatment	Percentage		
	Total	Yes	No
	(1)	(2)	(3)
Use a filter or purifier on your taps	100	23	77
Boil your water	100	27	73
Buy drinking water	100	13	87
Do nothing	100	41	59

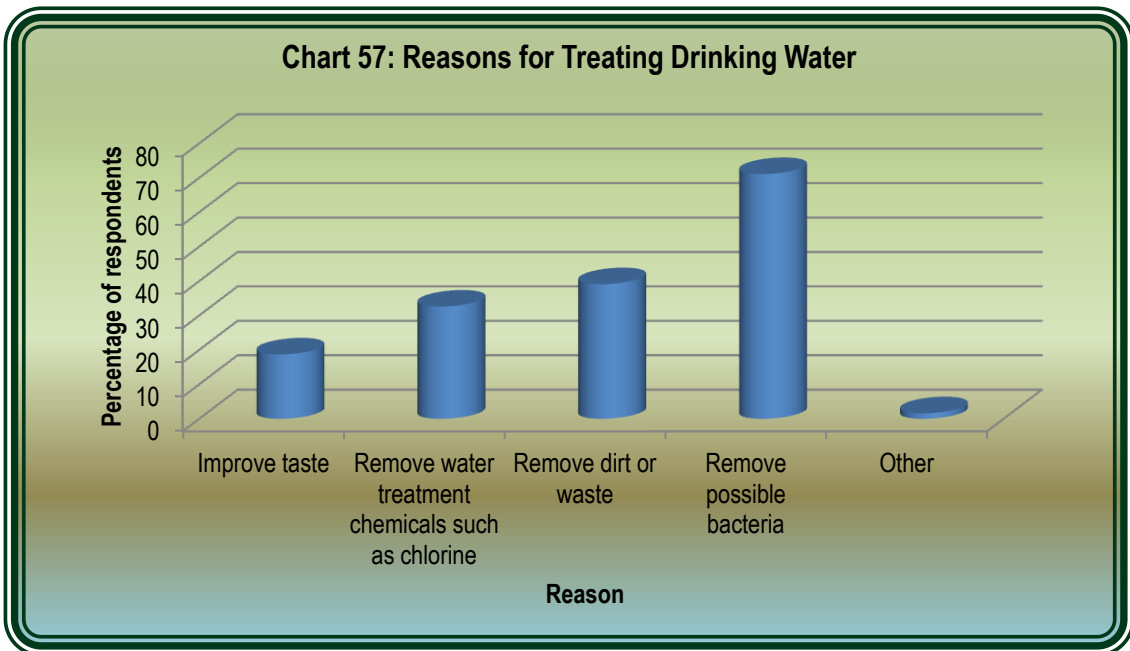
Over a half (59%) of the households surveyed did not treat their drinking water (Table 70). Of the households that treated their drinking water, the majority (71%) did so to remove possible bacteria (Table 71).



Source: Table 70

**Table 71: Reasons for Treating Drinking Water**

Reason	Percentage		
	Total	Yes	No
	(1)	(2)	(3)
Improve taste	100	19	81
Remove water treatment chemicals such as chlorine	100	33	67
Remove dirt or waste	100	39	61
Remove possible bacteria	100	71	29
Other	100	2	98



Source: Table 71