BIODIVERSITY ENABLING ACTIVITY PROJECT
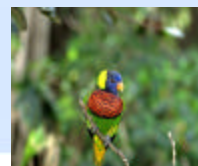
Ministry of Agriculture, Forestry and Fisheries
Castries, St. Lucia

BIODIVERSITY AWARENESS

SURVEY REPORT

Prepared by: Elgitha St. Marthe
Date: June, 2003

BIODIVERSITY ENABLING ACTIVITY PROJECT

Ministry of Agriculture, Forestry and Fisheries
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BIODIVERSITY AWARENESS SURVEY REPORT

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APPENDICES

T AB L E OF C O N T E N T S - *Continued*

APPENDICES

1. INTRODUCTION

During the period September 2002 and November 2002, Working Group III of the Biodiversity Enabling Activity Project within the Ministry of Agriculture, Forestry and Fisheries conducted the Biodiversity Awareness Survey.

In order that this working group achieved its goal, three clearly defined objectives were outlined, namely:

❑ To develop and initiate the implementation of a comprehensive National Biodiversity Education Awareness Plan and Strategy

❑ To assess the Capacity Building needs for the establishment of a Biodiversity Education and Awareness Network

❑ The identification and elaboration of Public Awareness Initiatives to Promote the Clearing House Mechanism (CHM) and raise awareness of mechanisms adopted for the Preservation of Biodiversity related traditional knowledge.

From the above listed objectives were derived a number of specified tasks, which would be the focus for the achievement of the goal. It is from these specific tasks that the survey was one of the activities identified.

The survey would provide the tools for the analysis of Sector and Public Perceptions of the importance of Biodiversity in relation to the sustainable development of the island. To this end, three (3) groups were the target for the collection of this information, namely, individuals at the household level, agencies and natural resource users.

2. AIM and OBJECTIVES

The aim of the survey was to **Assess the Sector and Public Perceptions of the Importance of Biodiversity as it Relates to the Preservation of Biodiversity with Special Emphasis on Traditional Knowledge**.

The objectives were as follows:

➢ Assess the impact of public education awareness programmes on biodiversity related conservation.

➢ Identify target groups for the biodiversity awareness and education plan

➢ Identify areas of concern for the conservation of the island's biological diversity resources.

3. THE QUESTIONNAIRE

The main instrument used for conducting the Biodiversity Awareness Survey was a five (5) part structured questionnaire comprising forty (40) questions (See Appendix B).

Questionnaire Identification
This section of the questionnaire contains information on the Administrative and Enumeration Districts in which the interviews were conducted and the name of the person conducting the interview. Space was allocated for the name of the person checking the questionnaire and the date on which the questionnaire was checked.

Part 1 – Personal Information
This section provided personal data on the respondent, and this would provide the necessary information on the target group(s) for sensitization, as needed.

Part 2 – For Banana Farmers Only
This section was completed for respondents who are banana farmers, and would provide the relevant data on biodiversity conservation practices.

Part 3 – Knowledge on Biodiversity
Information will be acquired in relation to some of the aspects of biodiversity and as indicated assess the respondents knowledge in those areas, indicating their knowledge and understanding of the term biodiversity.

Part 4 – Use of Resources
This section would provide information on the natural resources used by individuals, agencies and resource users, and issues relating to these resources.

Part 5 – Additional Information
This section would seek to obtain information on areas relating to, and affecting the biological diversity on the island; and the steps that can be taken in order to control the negative impact. It would also obtain other related traditional knowledge from persons with that information.

Though the questionnaire was a structured tool, this latter part allowed for some level of discussion whereby the interviewee participated in sharing their opinions on biodiversity.

4. DEFINITIONS

Individuals at the Household level
These comprised persons ages twelve (12) and over residing in a household, with or without direct family link to that household.

Individuals at the Agency level
These comprised persons from both public and private sector organizations, of various functions, ranging from the financial and commercial sectors to government and government related organizations.

Resource Users
These included persons directly involved with the use of natural resources for their daily business operations from the land, sea or river.

5. METHODOLOGY

A simple random sample was used for the data collection exercise at the household level, with the intention that every household member aged twelve (12) and over would be given the opportunity for an interview. The sample used an extraction rate of 1:10 per Administrative District for the entire island, resulting in an estimated 200 households and an expected 646 household members eligible for an interview.

Table A. Estimated Number of Households and Members Sampled

Administrative Districts	No. of HH's to be sampled	Actual No. of HH's Sampled	Estimated No. of HH Questionnaire	Actual No. of HH's Questionnaires
Castries – City	17	17	54	51
Castries – Suburban	33	35	103	81
Castries – Rural	34	48	110	130
Anse La Raye	8	8	26	25
Canaries	2	2	8	7
Soufriere	9	12	31	30
Choiseul	7	7	22	21
Laborie	9	9	31	26
Vieux Fort	17	17	56	49
Micoud	19	26	62	60
Dennery	16	20	51	49
Gros Islet	29	29	93	89
TOTAL	**200**	**230**	**647**	**618**

It should be noted, that although the respondents were classified into three (3) different groups, the same questionnaire was administered to each person with no variation in the questions, however with greater emphasis in specific areas, depending on which group the respondent belonged.

Responses from the agencies were requested mainly on behalf of the organization's role in the area of biodiversity as compared to the individuals at the household level responding to their own perceptions and knowledge.

The resource users responded as individuals or an organization depending on the nature and structure of the business. They were to provide as much information as possible on the type of natural resources used in their operations.

Approximately 618 households on the island were visited, resulting in a 95.6% response rate at the household level. Completed survey questionnaires for the agencies and resource users (referred to as **Institutions** in the table below) totaled 205.

Table B. Total Number of Responses by Households and Institutions			
Administrative Districts	**Households**	**Institutions**	**Total**
Castries City	51	52	**103**
Castries Urban	81	28	**109**
Castries Rural	130	14	**144**
Anse La Raye	25	14	**39**
Canaries	7	0	**7**
Soufriere	30	18	**48**
Choiseul	21	0	**21**
Laborie	26	17	**43**
Vieux Fort	49	16	**65**
Micoud	60	16	**76**
Dennery	49	22	**71**
Gros Islet	89	8	**97**
Total	**618**	**205**	**823**

6.   RESULTS and ANALYSIS

Given the objectives to be achieved it was appropriate that the analysis be based on the following characteristics of the respondents; their age, sex, and level of education mainly by Administrative Districts.

6.1 Personal Information

Of the total respondents, 356 or 43% of the sampled population were from the district of Castries, which as a whole comprised the city, suburban and rural areas. Each represents approximately 12.5%, 13.2% and 17.5 % respectively of the sampled population. Gros Islet and Micoud were the second and third largest sampled districts comprising 96 and 76 respondents respectively.   The least populated district of Canaries accounted for 0.85% of the sampled population.

It is important to note here that the response trend as shown in **Table 1** will be reflected throughout the analysis since the maximum number of respondents came from the district of Castries and the minimum number from the district of Canaries.

Table 1. Number of Respondents by Administrative District and Sex			
Administrative Districts	**Male**	**Female**	**Total**
Castries - City	55	48	103
Castries - Suburban	50	59	109
Castries - Rural	70	74	144
Anse La Raye	20	19	39
Canaries	3	4	7
Soufriere	25	23	48
Choiseul	7	14	21
Laborie	13	30	43
Vieux Fort	31	34	65
Micoud	31	45	76
Dennery	38	33	71
Gros Islet	46	51	97
Total	**389**	**434**	**823**

The sampled population contained 823 persons of which 389 were males and 434 were females, a ratio of 1:1.11, male to females.

Table 2 overleaf shows that 77% of the respondents were between the ages of 12 to 49 years, with the 20 – 29 age range comprising approximately 22%. Respondents in the 60 and over age group represented 6.4% whilst, 7.9% represented the **No Response** age group.

Table 2. Number of Respondents by Age Range and Level of Education						
	Level of Education					
Age Range	**Primary**	**Secondary**	**Tertiary**	**Other**	**No Response**	**Total**
12 - 19	36	112	16	3	2	**169**
20 - 29	41	79	49	7	4	**180**
30 - 39	55	61	28	11	2	**157**
40 - 49	60	25	32	8	4	**129**
50 - 59	32	9	14	5	11	**71**
60 and over	30	4	2	8	9	**53**
N/R	15	10	25	2	12	**64**
Total	**269**	**300**	**166**	**44**	**44**	**823**

Approximately 36.5% or 300 of the respondents had acquired secondary education. This represents the largest category for both males and females interviewed. The second largest level of education was recorded for persons acquiring tertiary education and they accounted for almost 20.2% of the sampled population. An equal representation of sex was noted for this level of education, 83 males and 83 females.

As it relates to the type of occupation and level of education, students comprise the maximum number of respondents recording a total 121, 48 males and 73 females. A recorded number of 75 students were at the secondary education level, either completed or still attending. Almost 78.1% of persons in the Trades category were male workers, who had attained either primary or secondary education.

The maximum number of unemployed persons had attained either primary or secondary education. Results showed that there were particular levels of education associated with certain types of occupation. A typical example is that of agriculture and fishing and the housekeeping sectors, whereby persons employed in these occupations had attained mainly primary education. In relation to the latter, 97.3% were females.

Over 60% of persons employed in the environmental sector, had tertiary education, whilst the majority private sector workers had either secondary or tertiary educational backgrounds.

Table 3. Number of Respondents by Level of Education and Type of Occupation						
	Level of Education					
Type of Occupation	**Primary**	**Secondary**	**Tertiary**	**Other**	**No Response**	**Total**
Education	1	5	14	1		**21**
Students	19	75	20	4	3	**121**
Preschool Teacher	4	8			2	**14**
Primary School Teacher			7		1	**8**
Secondary School Teacher		1	8	2	2	**13**
Librarian			1			**1**
Tourism	4	8	3	1	2	**18**
Agriculture and Fisheries	39	8	9	8	9	**73**
Environmental	2	1	10	3		**16**
Stuatory Body and Other Gov't Departments	3	13	23		1	**40**
Local Government		3	1	1	1	**6**
NGO's		2	5			**7**
Professionals	1	2	5			**8**
Technicians	1	7	3			**11**
Private sector	19	43	32	9	5	**108**
Media Worker		1	2			**3**
Trades	38	28	7	5	4	**82**
Mauby Users	2				1	**3**
Latayner Users	3	1				**4**
Bamboo Users	4					**4**
Forest Gum	2					**2**
Furniture/Lumber	3	3				**6**
Farine Producers	5	1			1	**7**
Sea Egg Producers		1				**1**
Pottery Makers	2	1		1		**4**
Leather and Craft	4	1	1			**6**
Housekeeping	49	18	2	1	3	**73**
Self Employed	7	1	3			**11**
Retired	3	2	1	2	1	**9**
Other Services	3					**3**
Other Labour	2	2				**4**
Unemployed	42	54	5	4	4	**109**
NES					1	**1**
No Response	7	10	4	2	3	**26**
Total	**269**	**300**	**166**	**44**	**44**	**823**

6.2   Knowledge of Biodiversity

Three hundred and seventy four (374) or 45.4% of the 823 respondents had heard of the term Biodiversity. In the entire district of Castries, an overall 51.7% of the respondents had heard of the term, and comprised 64% in the Castries City area and 50% each in the Castries Suburban and Rural areas.

Table 4. Number of Respondents Hearing of the Term Biodiversity by Administrative District				
Administrative Districts	Yes	No	Don't Know	Total
Castries - City	66	34	3	**103**
Castries - Suburban	53	53	3	**109**
Castries - Rural	65	79		**144**
Anse La Raye	22	17		**39**
Canaries	2	5		**7**
Soufriere	30	17	1	**48**
Choiseul	4	17		**21**
Laborie	22	21		**43**
Vieux Fort	21	42	2	**65**
Micoud	26	50		**76**
Dennery	19	40	12	**71**
Gros Islet	44	52	1	**97**
Total	**374**	**427**	**22**	**823**

With the exception of the districts of Soufriere, Anse La Raye and Laborie, the remaining districts had less than 50% of their sampled population hearing of the term. This was very prevalent in the district of Choiseul where only 19% of the respondents had heard of the term.

Persons hearing of the term were within the age group of 20 – 49, 60.9% belonged to the No Response age group and 68% of the total respondents hearing of the term comprised persons with secondary and tertiary education.

One hundred and seventy nine (179) persons had heard of the term through the media that is the television or the radio. A mere 4% had heard of the term, whilst attending a workshop or seminar of some sort, and 13.4% in other places or were not sure where they had heard the term.

Only 18 persons had heard the term at their place of employment. The remaining 74 persons or 9% of the population had heard of the term at school, these individuals were mainly persons who had attained secondary or tertiary education.

Of the 45.4% of the population who had heard the term Biodiversity, less than 25% had a precise understanding of the term, yet most persons were able to provide part of the concept. Some of these explanations cited ranged from being, directly related to agriculture and the environment including the ecosystem, to the relationship with plants and animals and their interactions with each other.

Table 5. Number of Respondents who Have Heard of the Term Biodiversity by Level of Education						
Place First Heard Term	**Primary**	**Secondary**	**Tertiary**	**Other**	**N/R**	**Total**
School	6	35	30	3		**74**
Radio	34	24	30	2	6	**96**
Television	18	39	21	4	1	**83**
Workshop	4	2	8	1		**15**
Reading	2	1	8	6	1	**18**
News	7	7	4	2		**20**
Employment	1	3	11	3		**18**
Other	9	8	10	1	5	**33**
Not Sure	2	5	8	1	1	**17**
Total	**83**	**124**	**130**	**23**	**14**	**374**

Fig. 1

Persons Hearing of the Term Biodiversity
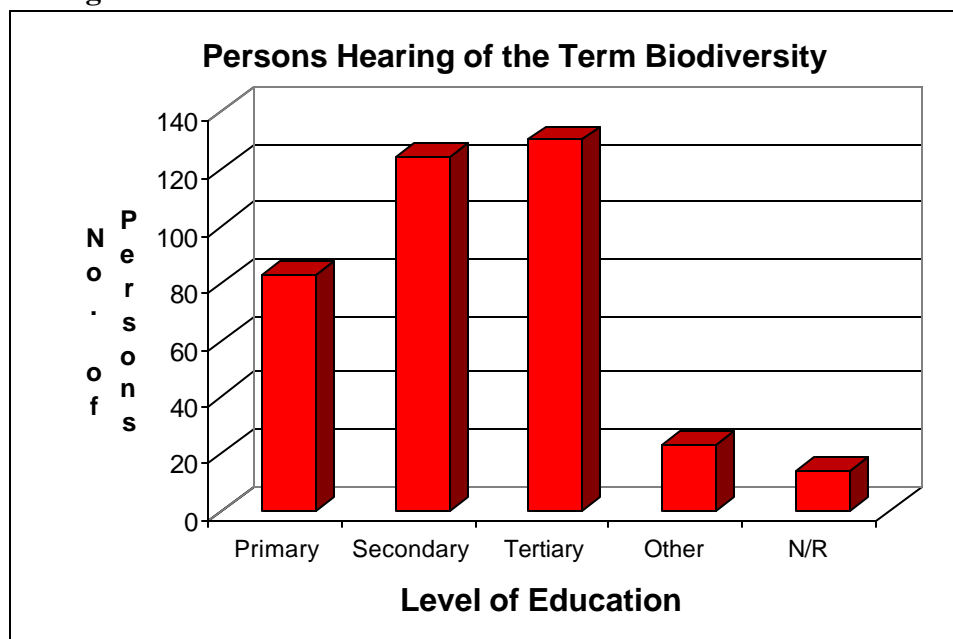
As it relates to the environment mention was made of its importance, utilization, protection existence, sustenance and preservation of all that exist therein.

Some persons had heard of the term but had not tried to find out its meaning and were not able to give an explanation, and there were others who just did not know.

While 201 females and 173 males had heard of the term biodiversity, only 30 of the females and 50 of the males had participated in one way or another in some form of discussion on biodiversity. The age range for the males who participated in any form of discussion on biodiversity was 30 – 49, and for the females it varied throughout, since so few of the sampled females had participated in any form of discussion on biodiversity.

Fig. 2
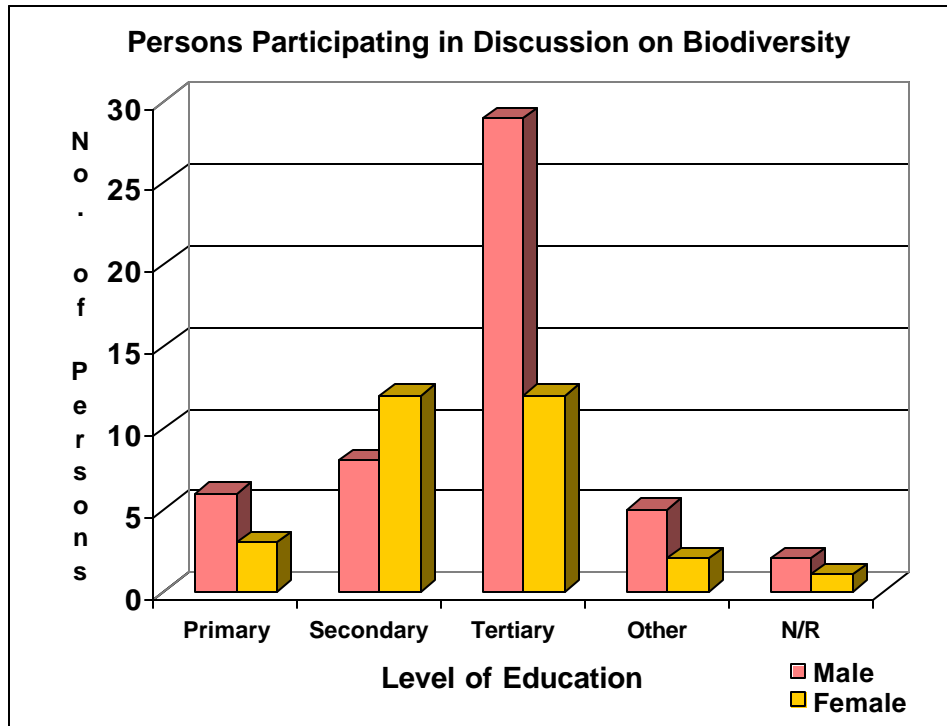
The level of education attained by these persons involved in discussions on biodiversity was tertiary and to a lesser extent the secondary level. Only 9 of the individuals were at the primary level of which 8 were within the 12 to 19 age range.

6.2.1   Use of Rivers

More males than females responded to the question **"Do you have reason to use any of our rivers?"** The age ranges of these persons were 12 to 49 with very few, in fact, only 7 of the 60 and over age range had any reason to use the rivers.

Just over 70.6% of the males and 75% of the females using the river have primary and secondary education. Persons with Tertiary education using the river accounted for only 17.2%.

Almost one third of the respondents who use the river only for bathing purposes, and an additional 24.5% use the rivers for bathing and washing, together with other activities. Eight of the persons interviewed reported using the river for mixing pesticides, while a small number reported use of the river for pleasure.

Just over 70.6% of the males and 75% of the females using the river have primary and secondary education. Persons with Tertiary education using the river accounted for only 17.2%.

Table 6. Number of Respondents by Administrative District with Reasons to Use Rivers				
Administrative Districts	**Yes**	**No**	**N/R**	**Total**
Castries - City	24	76	3	**103**
Castries - Suburban	33	74	2	**109**
Castries - Rural	62	82	0	**144**
Anse La Raye	33	6	0	**39**
Canaries	4	2	1	**7**
Soufriere	11	37	0	**48**
Choiseul	5	16	0	**21**
Laborie	3	40	0	**43**
Vieux Fort	26	39	0	**65**
Micoud	41	35	0	**76**
Dennery	34	33	4	**71**
Gros Islet	38	59	0	**97**
Total	**314**	**499**	**10**	**823**

Table 7. Number of Respondents by Administrative District and Sex with Reasons to Use Rivers

Administrative Districts	Male	Female	Total
Castries - City	18	6	**24**
Castries - Suburban	22	11	**33**
Castries - Rural	34	28	**62**
Anse La Raye	16	17	**33**
Canaries	2	2	**4**
Soufriere	8	3	**11**
Choiseul	1	4	**5**
Laborie	3	0	**3**
Vieux Fort	15	11	**26**
Micoud	17	24	**41**
Dennery	22	12	**34**
Gros Islet	22	16	**38**
Total	**180**	**134**	**314**

Almost one third of the respondents used the river for the purpose of bathing only, and an additional 24.5% use the rivers for bathing and washing, and other activities. Eight of the persons interviewed reported using the river for mixing pesticides, while a small number reported use of the river for pleasure.

Table 8. Number of Respondents Reporting
Reasons for Use of Rivers

Reason for Use of Rivers	Number of Responses
Bathing Only	103
Washing Only	21
Irrigation	18
Spraying Pesticides	8
Fishing	12
Domestic Use	15
Cleaning	5
Pleasure	18
Bathing and Washing	47
Bathing and Other	30
Other	14
Not Stated	23
Total	**314**

It was indicated that the use of the river for Domestic Use and Cleaning purposes was undertaken in the absence of tap water. A few persons of the farming community made use of the river for irrigation purposes, and in most instances this occurred due to the close proximity of the farm to this source of water supply.

6.2.2 Attitudes to Swamps

Over 60% of the respondents think that swamps are important, 11.5% did not know whether they were important or not and the remaining 209 thought that swamps were not important. Of the individuals responding, more males than females thought that swamps were important. More than 50% at all levels of education thought that swamps were important, with the exception of the females with primary education and those whose education level was no stated.

The district of Canaries reported an overall negative response to the question and the districts of Micoud, Dennery and Anse La Raye had responses of less than 50% of their sample size.

Persons stating that swamps were not important did so with reasons. One of the most significant reasons cited was the danger to human beings by the breeding of mosquitoes in the swamps. On the other hand, there was a range of reasons given why persons thought that swamps were important. These ranged, from a source of water supply or habitat for plants and animals to a medium for the cultivation of crops, more specifically the dasheen plant (**Table A11** provides a list of the reasons given by respondents why swamps are important).

**Table 9. Number of Respondents who Thinks that
Swamps are Important**

Administrative Districts	Yes	No	Don't Know	Total
Castries - City	81	14	8	**103**
Castries - Suburban	68	29	12	**109**
Castries - Rural	101	29	14	**144**
Anse La Raye	19	18	2	**39**
Canaries	0	7	0	**7**
Soufriere	33	9	6	**48**
Choiseul	14	3	4	**21**
Laborie	32	5	6	**43**
Vieux Fort	31	27	7	**65**
Micoud	35	32	9	**76**
Dennery	40	18	13	**71**
Gros Islet	65	18	14	**97**
Total	**519**	**209**	**95**	**823**

6.2.3 Attitudes to Forest

Almost 98% of the sampled population, that is, 804 persons thought that the forests were important, 12 did not know whether the forests were important and the remaining 7 thought that the forests were not important. As it pertains to the last four (4) of these persons were from the District of Dennery of which 2 belonged to the 12 – 19 age group, and 1 each belonging to the No Response age group.

**Table 10. Number of Respondents who Thinks
that Forests are Important**

Administrative Districts	Yes	No	Don't Know	Total
Castries - City	102	0	1	**103**
Castries - Suburban	109	0	0	**109**
Castries - Rural	143	0	1	**144**
Anse La Raye	39	0	0	**39**
Canaries	7	0	0	**7**
Soufriere	45	1	2	**48**
Choiseul	20	1	0	**21**
Laborie	41	0	2	**43**
Vieux Fort	61	1	3	**65**
Micoud	76	0	0	**76**
Dennery	66	4	1	**71**
Gros Islet	95		2	**97**
Total	**804**	**7**	**12**	**823**

Apart from the non-positive response by 19 of the persons interviewed on the importance of the forests, persons at all levels of education throughout the island were able to give very precise reasons why the forests are important.

The reasons ranged from the providing of fresh air (oxygen production and carbon dioxide removal by plants), the main source of water supply and the factors affecting the forest, to a habitat for plants and protected species.

With the reasons listed in **Table A14** it is important to document that these responses are as of a direct result of the forestry conservation awareness programmes undertaken over the last 25 years. This indicates that the concept of forest conservation and forest life is still clear in the minds of persons.

6.3 Use of Resources

In relation to Question 29, **"Are you or your organization involved in any activity that utilizes resources extracted from the Land, Sea or River?"** the number of positive responses was only 337 or 41.9% of the sampled population, of which 54% were males and 46% females. Approximately 62% of these persons, that is 208, were between the ages of 20 to 49 years. A total of 130 reporting the use of natural resources extracted either from the land, sea or river had attained primary education, 97 had attained secondary education and 71 tertiary education.

Table 11. Number of Respondents Involved in Activities
that Utilizes Resources Extracted from the Land
Sea or River

Administrative Districts	Yes	No	No Response	Total
Castries - City	21	77	5	**103**
Castries - Suburban	55	49	5	**109**
Castries - Rural	60	81	3	**144**
Anse La Raye	32	7	0	**39**
Canaries	5	2	0	**7**
Soufriere	31	10	7	**48**
Choiseul	4	16	1	**21**
Laborie	19	19	5	**43**
Vieux Fort	18	43	4	**65**
Micoud	27	48	1	**76**
Dennery	38	30	3	**71**
Gros Islet	27	67	3	**97**
Total	**337**	**449**	**37**	**823**

It can be seen here that there is a direct relationship between education and occupation. This scenario of persons using natural resources with primary and secondary education are involved in activities such are crafts, trade, agro-processing, agriculture and fishing.

Fig. 3
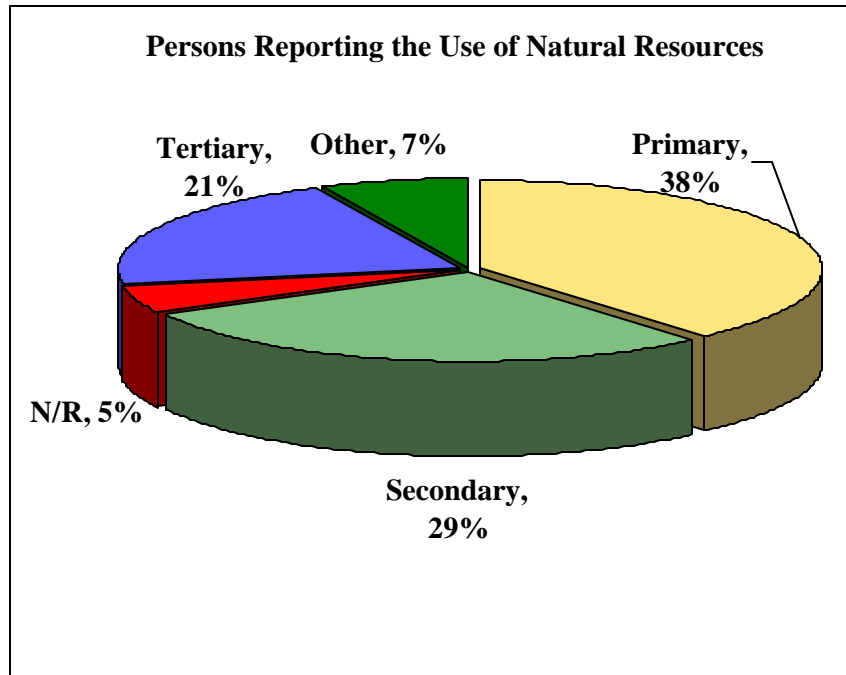
The level of response expected for the above stated question did not come into realization, as the results showed that less than half the respondents used natural resources. In principle, this reported circumstance is highly unrealistic, as the use of natural resources is a part of our daily lives. With this result it is affirmed that persons are not knowledgeable of what is meant or comprises natural resources.

6.3.1 Types of Resources Used, by Whom and Abundance
Various types of natural resources used by the respondents were recorded; these included food crops, sea foods (coral reef included) and livestock, which is used for consumption both for home use and for sale. As it relates to sale, it was indicated, that the former were used in both the primary and secondary states. For example, flowers were used for beautification purposes and had the same end use as the aforementioned.

Persons classified as resource users were engaged in the use of natural resources such as bamboo, latanye, clay, forest tree (for wood), river stones, sand and sea shells.   These extracted resources were used mainly at the secondary level for the production of other goods, made mainly for sale.

Of the 337 respondents reporting the utilization of natural resources extracted from the land, sea or river, only 52 had difficulty in obtaining the raw material. The persons most affected were the resource users. The main reasons highlighted by these persons were the inaccessibility of the resources due to distance especially within the forest, and the scarcity of the resources due to its depletion.

Table 12. Number of Respondents by Administrative District having Difficulty in Obtaining Natural Resource Material

Administrative Districts	Yes	No	No Response	Total
Castries - City	7	51	45	**103**
Castries - Suburban	8	97	4	**109**
Castries - Rural	10	119	15	**144**
Anse La Raye	2	32	5	**39**
Canaries	0	7	0	**7**
Soufriere	7	40	1	**48**
Choiseul	0	21	0	**21**
Laborie	4	38	1	**43**
Vieux Fort	2	58	5	**65**
Micoud	6	69	1	**76**
Dennery	4	63	4	**71**
Gros Islet	2	90	5	**97**
Total	**52**	**685**	**86**	**823**

6.3.2 Herbal Medicines

The use of herbal medicine was reported by 61.2% of the responding population, a total of 240 males and 264 females. All districts with the exception of Canaries had over 50% of their respondents using herbal medicine, and with the exception of the 12 – 19 age range, all other age ranges had over 55% of respondents using herbal medicine, the most significant natural resource used, and for a variety of purposes.

Fig. 4

Persons Reporting the Use of Herbal Medicine
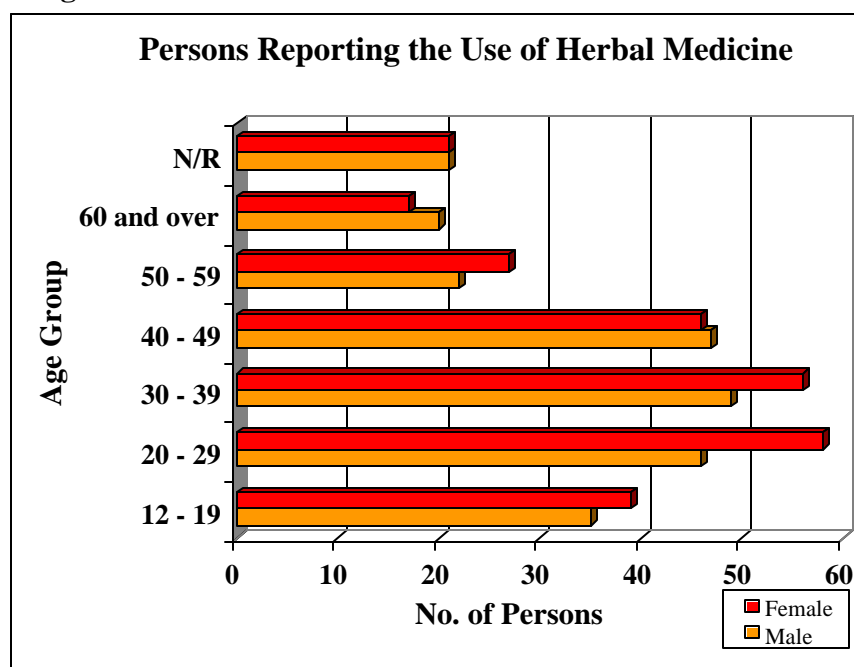
Persons who attained primary education showed a greater tendency to the use of herbal medicine as compared to the other educational levels, though females attaining secondary education accounted for almost 19% of the population using herbal medicine, recording the highest number among the different age groups.

The main reason why it was reported that more females used herbal medicine stems from the fact that mothers have introduced herbal medicine to their daughters as a means of providing relief and for stomach pains caused specifically by the menstrual cycle.

A wide range of uses of herbs for medicinal purposes was given by persons interviewed indicating that the traditional use of herbs for medicinal purposes still exists (**Table A19** provide a listing of herbs and their uses).

6.3.3 Scarce Plants and Animals

Approximately 500 of the surveyed population indicated that they have identified plant or animal species that have become scarce in the last ten (10) years. Most of those persons were over the age of 30, although 46% and 54.4% of the 12 to 19 and 20 to 29 age range respectively were able to identify the scarce species.

In the district of Choiseul only 1 of the 7 males and 4 of the females were able to identify scarce species of one kind or another, whilst in the district of Canaries only 14.3% of the respondents were able to identify scarce species. The results show an overall rate of between 63.4% and 72.9% of persons being able to identify scarce species.

Table 13. Number of Respondents who Identified Plants, Animals or Fish that have Become Scarce

Administrative Districts	Yes	No	Don't Know	Total
Castries - City	83	10	10	**103**
Castries - Suburban	72	13	24	**109**
Castries - Rural	89	30	25	**144**
Anse La Raye	23	12	4	**39**
Canaries	1	5	1	**7**
Soufriere	32	5	11	**48**
Choiseul	5	4	12	**21**
Laborie	22	14	7	**43**
Vieux Fort	31	20	14	**65**
Micoud	40	27	9	**76**
Dennery	43	15	13	**71**
Gros Islet	59	25	13	**97**
Total	**500**	**180**	**143**	**823**

In assessing the classification of the scarce species, it was found that animals accounted for 97, plants 124 and fish 70 different species. At least 100 respondents reported the scarcity of jack-spaniards, locally known as the *Jep*; 89 butterflies, 43 indicated dragonflies and 40 wasps. A number of bird types were recorded as being scarce animal specie s.

In the plant category, 14 respondents stated that *shining bush* (locally known as *zeb a kuws*) used mainly for cooling had become scarce in the last ten (10) years, including the hibiscus flower plant. Sea eggs and crabs, Twee Twee, Crayfish and guppies were some of the species of the fish category recorded as being scarce.

Table 14. Number of Respondents by Administrative District District Identifying Scarce Species by Type

Administrative Districts	Animals	Plants	Fish	Total
Castries - City	71	33	38	142
Castries - Suburban	65	19	16	100
Castries - Rural	76	26	31	133
Anse La Raye	22	12	13	47
Canaries	1	1	1	3
Soufriere	26	4	8	38
Choiseul	5	0	0	5
Laborie	14	8	6	28
Vieux Fort	21	14	8	43
Micoud	31	8	11	50
Dennery	31	7	18	56
Gros Islet	55	15	14	84
Total	**418**	**147**	**164**	**729**

Table 15. Number of Respondents who Thinks that the Scarce Species Should be Protected

Administrative Districts	Yes	No	Don't Know	Total
Castries - City	78	8	17	**103**
Castries - Suburban	48	51	10	**109**
Castries - Rural	83	47	14	**144**
Anse La Raye	23	4	12	**39**
Canaries	1	6	0	**7**
Soufriere	30	17	1	**48**
Choiseul	5	16	0	**21**
Laborie	20	20	3	**43**
Vieux Fort	27	34	4	**65**
Micoud	27	37	12	**76**
Dennery	40	26	5	**71**
Gros Islet	53	40	4	**97**
Total	**435**	**306**	**82**	**823**

Although the number of respondents identifying scarce species was 60.8%, not all of those persons favored the protection of the scarce species, in fact, just less than 53% agreed to the protection of these species. The reasons given for non protection is that some of these species are harmful and dangerous to human beings. The given examples were snakes, jack spaniards and some poisonous plants.

6.4 Importance of Biodiversity to Country

Persons responding to the question **"Is Biodiversity Important to you or your Country?"** country totaled 556 and were almost equally spread between the male and female respondents. A very low rate of response was noted for the districts of Dennery and Choiseul, recording 26.8% and 28.6% respectively. In the above mentioned districts, this low level of response was evident among the females of all ages.

Table 16. Number of Respondents who Thinks that Biodiversity is Important

Administrative Districts	Yes	No	Don't Know	Total
Castries - City	88	0	15	**103**
Castries - Suburban	88	0	21	**109**
Castries - Rural	100	5	39	**144**
Anse La Raye	36	0	3	**39**
Canaries	6	0	1	**7**
Soufriere	35	0	13	**48**
Choiseul	6	0	15	**21**
Laborie	19	2	22	**43**
Vieux Fort	58	0	7	**65**
Micoud	42	1	33	**76**
Dennery	19	3	49	**71**
Gros Islet	59	0	38	**97**
Total	**556**	**11**	**256**	**823**

About 36.7% of the respondents who thinks that biodiversity is important had attained secondary education, 27.3% primary education and 138 or 83.1% of the 166 tertiary education. The data clearly shows that persons with tertiary education, would have been exposed to at least some of the concepts of biodiversity and responded positively to the question.

6.4.1 Industrial Threat to Biodiversity

The data collected showed that there are a number of industries that pose a threat to biodiversity, yet only 41.8% of the responding population indicated so. A total of 372 respondents did not know whether there were any industries which pose a threat to biodiversity. This response was expected, and can be viewed on the basis that these individuals did not have any understanding of the concepts of biodiversity, since prior to this question most of them had not even heard of the term.

Fig. 5

Percentage of Persons who Thinks that Industries Pose a Threat to Biodiversity
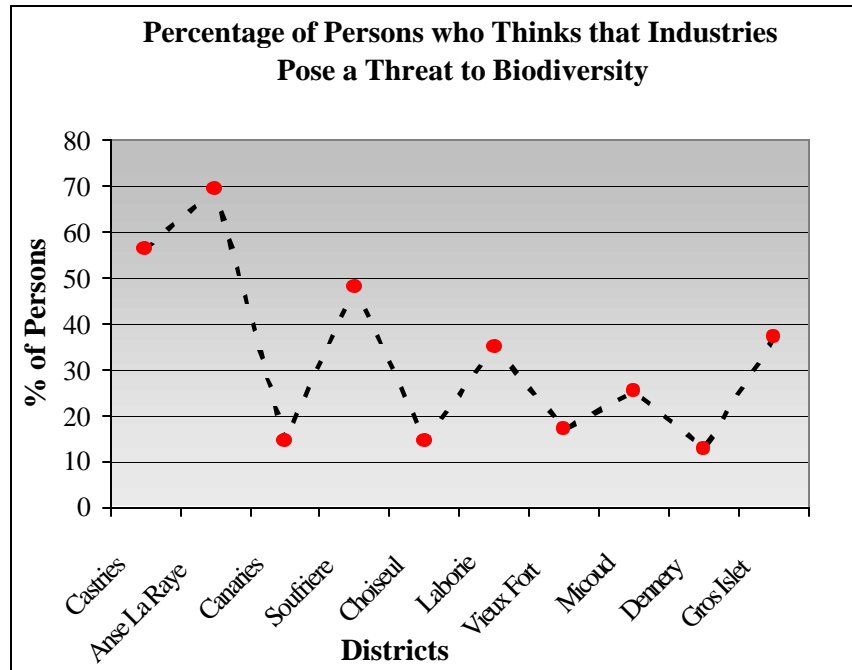
There are four (4) main types of industries identified by persons as being a threat to biodiversity. They are the Agricultural (Banana Production), Tourism, Manufacturing and the Construction Industries. Persons were concerned about the manner in which members of the public disposed of their garbage and the almost inevitable use of non-biodegradable materials such as plastic.

With respect to the agriculture industry, concerns were reported on the use and negative impact of chemicals such as pesticides, weedicides and herbicides to name a few, on the environment. Respondents made mention specifically of the seepage of these chemicals into underground and river waters, and its devastating impact both on human beings and other life forms such as the sea creatures. They further explained that farms located along the boundaries of rivers should be closely monitored, as they are the most direct source for the contamination. It was also stated that some farmers make use of rivers for the disposal of unused farm material and the cleaning up of farming implements.

In order that farmers are able to expand their area for planting, they have adopted a radical method of cutting and burning trees, especially forest trees and those on slope lands, without any regard for the problems that this will cause in relation to deforestation and soil erosion respectively.

The over harvesting of fish was another concern, hence the reason for the almost near extinction of lobster and turtles. The blasting of fish with the use of dynamite has caused severe losses to marine life.

As it relates to the tourism industry persons were highly critical of the impact of the huge structures erected along the beach or coastline, including the destruction of vegetation along the coast to facilitate these structures. There is also the disruption of marine life, when these structures are erected. A typical example is the limited space now available for turtles in these areas, to lay their eggs.

The indiscriminate disposal of waste, more specifically sewer waste and waste from the cruise ships has caused greater contamination to our coastal waters. The increased demand for use of the beach for bathing and other sporting activities is one of the problems cited by respondents. On the other hand this industry has posed indirect stress on some of our natural resources.

The main concern raised about the effects of the manufacturing industry on biodiversity has to do with the pollution caused by the smoke, fumes and other chemical substances emitted during the production of the goods and the disposal of waste. Some of the waste material flows into the rivers and seas, thus causing further damage to marine life.

In assessing the comments made on the construction industry, it was noted that in order for this industry to survive, there must be a compromise on the environment and some areas of biodiversity. The main area of concern is the cutting of trees to facilitate the construction of buildings and roads resulting in the following effects:

- displacement and loss of animal life and habitats
- deforestation
- soil erosion and in some instances land slippage
- damage and loss of flora (including endangered species)
- air and water pollution

Sand mining was listed as an area which poses a threat to biodiversity, as it is potentially damaging to the coastline and the disruption of marine and other coastal life forms.

Generally all industries of one kind or another have the greatest negative impact on marine life due to the fact that most waste material from the industries find their way, into the waterways (rivers and seas) at any point in time.

6.4.2 Protection and Maintenance of Biodiversity

Responses concerning the protection and maintenance of St. Lucia's biodiversity were purposefully detailed by the respondents, and were categorized into three (3) focus areas, namely sensitization, education and legislation.

In the area of sensitization it was reported that persons should be made more aware of the impact of some of their everyday activities undertaken, which has negative impact on our environment and biodiversity. In this instance the explanation of the term '*environment*' is the key word to start the process of understanding.

At the education stage a more indepth knowledge on the protection and maintenance of biodiversity should be transferred. In relation to legislation, the government and other associated organizations and agencies should ensure that old legislation be reviewed, newer ones implemented and the existing applicable ones be enforced.

6.5   Banana Farmers and Conservation Practices

Of the 40 respondents recorded as banana farmers, 65% practice one or more methods of conservation. The most popular practiced method of conservation is the use of contour drains reported by 19 of the 26 banana farmers. Although the number of banana farmers reported in the survey was insignificant, it can be assumed that most banana farmers do practice conservation methods of some form or the other. This indicates that good agricultural practices are carried out at the farm level, and this is essential to the conservation of the biological resources.

**Table 17.   Total Number of Banana Farmers by
Administrative Districts Practicing
Methods of Conservation**

Administrative Districts	Number of Banana Farmers	Number Practicing Conservation
Castries - City	2	2
Castries - Suburban	1	0
Castries - Rural	12	5
Anse La Raye	3	2
Laborie	1	0
Vieux Fort	3	0
Micoud	6	6
Dennery	11	10
Gros Islet	1	1
Total	**40**	**26**

7.   LIMITATIONS

Though the content of the questionnaire was pertinent to the aim of the survey, while conducting the analysis it was found that some follow up questions were needed in order to clearly achieve the objective of assessing the impact of public education awareness programmes on biodiversity related conservation. The reason for this is that respondents had little or no understanding of the term biodiversity and so did not provide all the information necessary.

The inclusion of a question in the section on **Knowledge of Biodiversity,** to persons responding **Yes** to *Question 6* of the questionnaire, could have provided an ideal situation for the analysis of the transfer of knowledge (more specifically traditional knowledge) on biodiversity from parent to child.

Data collected for *Questions 9 to 18* of the questionnaire was compiled but further indepth analysis was not done as the number of respondents fell below 20% of the sampled population. This level of response will not allow for sound practical analysis.

8.   CONCLUSION

On completion of the analysis it was apparent that, despite the fact, that less than fifty percent (50%) of the sampled population had heard of the term biodiversity and less than forty percent (40%) had understood the term, that persons had knowledge of some of the concepts. The latter was concluded, from the level of response to the questions relating to the forests, swamps and the importance of biodiversity to the country (**Table A28**).

A further step was taken by using Pearson's Correlation formula to find out if there exists a relationship between the factors relating to biodiversity which will determine the extent of the respondents' perception on the importance of biodiversity. The results showed that the closest relationship existing between the selected factors was between the importance of biodiversity to the respondent/country and the threat posed by industries to biodiversity (**Table A29**).

In an effort to understand the reasons for the results obtained for the districts of Choiseul and Dennery, an inquiry was carried out, to ensure that no invalid assumptions were made on the results. As was found, these results can be attributed to two issues. First, it would seem that the sampled persons in these districts were in the minority as it relates to their knowledge of the concepts of biodiversity, or secondly these persons were either unwilling to provide accurate information. It is important to note here, that in each of these two (2) districts a number of project activities relating to the aspects of conservation and preservation of natural resources, were undertaken and communities members were involved from their conceptualization to completion.

As it relates to the district of Choiseul these activities were conducted under the St. Lucia Rural Enterprise Project (SLREP) and in the district of Dennery under the Mabouya Valley development Project.

Most notable, mention can be made here of the activities (these are apart, from the activities completed in the earlier years of the project) recently conducted under the latter project namely:

➤ Establishment of the Watershed Management Action Force (WMAF)
➤ Fond d'or Heritage and Historical Park
➤ River Bank Protection – The restoration of 2 miles of river including the
         planting of trees for the maintenance of soil stabilization.
➤ The creation of an Environmental Club
➤ Beach and river cleanups
➤ Mabouya Valley Farmers Association – Dealing mainly with family farming where
         the knowledge and experience of both
         traditional and modern farming practices
         are transferred from the older to the
         younger family members.

In summary, the activities of these projects geared sensitization and education programmes in the areas of environmental conservation, protection and enhancement, solid waste management, land management to habilitate effects of bad agricultural practices and the sustainable use of natural resources.

Notwithstanding some of the contrasting results obtained in some areas, it must be acknowledged that the sensitization and education programmes on the conservation and preservation of the forest and the environment, conducted by the Forestry Department of the Ministry of Agriculture over the last fifteen to twenty five (15-25) years has had a great impact on the population. It is also apparent that most persons have retained the knowledge acquired during that period, and the only concern is the application of that information in their daily living.

9.   RECOMMENDATIONS

This survey was rather instructive in the manner in which the results reflected specific areas which are needed to be addressed for the achievement of its aim and objectives. The areas identified were grouped into three (3) main categories namely, sensitization, education and legislation.

In the areas of sensitization and education, the commencement of an islandwide campaign with emphasis on the districts of Choiseul and Dennery is the first activity to be identified. The programmes during that campaign will target the entire population of all ages, preschoolers to the elderly, and in all areas of occupation, including the unemployed on the island.

The medium for sensitizing and educating the public should be mainly by way of the media that is, the radio and television. The use of flyers, brochures and billboards at strategic locations, examples, bus stops, along bus routes and, in the vicinities of community centers and churches, will be an effective means of getting the message to the masses. The aforementioned should encompass all the aspects of biodiversity and should also be simple enough for interpretation to preschoolers and by illiterate persons.

The use of the media for the dissemination of information to sensitize and educate members of the public would focus on the following areas of concern:

- ➢ the meaning of the term Biodiversity
- ➢ the various aspects which comprise the concept of Biodiversity
- ➢ the definition of natural resources
- ➢ the identification of natural resources and methods used for their conservation and preservation.
- ➢ the promotion of the importance of swamps especially in areas where they are located
- ➢ the promotion on ways to use the rivers to ensure their protection
- ➢ the provision of information on the factors which have negative impacts both on the river and on man as it is being used
- ➢ promote the conservation of scarce species, as it relates to the land, sea or river
- ➢ the illustration of the relationship between industries and their impact on biodiversity

The use of the radio and television would provide the environment for panel discussions at all levels (to include call in programmes), the airing of catchy but meaningful jingles (no more than two) to convey the message pertaining to issues and concerns of biodiversity and, news item and articles providing more in depth information on the relevant areas of concern to biodiversity.

Emphasis should be placed on enhancing the newspaper articles produced by the Biodiversity Enabling Activity Project of the Ministry of Agriculture, Forestry and Fisheries, making them more appealing to the non-reading populace.

In the districts where lack of knowledge about biodiversity is a grave concern, one of the most effective means of conveying the biodiversity concepts apart from the above mentioned is the use of focus groups and community meetings. These settings will provide community members with the avenue for greater participation and discussion on issues of biodiversity. For the education of persons in these communities, the recommended activities should comprise teaching the concepts, panel discussions, open forums and the use of talent, specifically the use of folk culture in the form of dance, song and drama, to convey some of these concepts. At the school level in these communities, teachers, apart from teaching the concepts to the children should engage them in competitive activities to ensure that they have actually understood the concepts. These should include crossword puzzles, word finds, essay writing and art, on issues relating to biodiversity.

At the occupational level, more specifically in the areas where persons use natural resources, it will be necessary to work closely with the resource users so that they can use traditional knowledge among other information in conserving the natural resources. In some areas the concern will be greater especially where these natural resources are either being depleted or have become scarce.

In relation to industries, construction, manufacturing, tourism and agriculture to name a few, agencies have to be taught the effects of their activities on the biological diversity of the island in its totality, in order that adjustments be made to their operations.

On the issue of legislation, it is very important that systems be put in place for the implementation and enforcement of existing laws relating to the aspects of biodiversity; and the immediate creation of new laws to address the most critical concerns of the islands biological diversity.

In order that the legislative issues be dealt with favourably, a number of committees should be formed representing all stakeholders of the various components of biodiversity. These committees are expected to identify all areas of their concern which are affected without the existence of legislation.

A main legislative committee should also be formed comprising at least one member of each of the other committees and at least two (2) persons from the legal profession. The main function of this committee is for the review of all laws identified by the smaller committees needing either implementation, enforcement or the creation of newer ones. The committee is also expected, where necessary to integrate legislation for effective implementation.

Another aspect of the legislative process is the recommendation of specialized training for law enforcers on the importance of biodiversity and its areas of greatest concern. This will ensure that these persons become more knowledgeable and sensitive to the biological diversity issues of the island and should be more vigilant in enforcing the laws when necessary.

This brings the recommendation for legislation even further to an important element of law enforcement.   This matter is the key which will guarantee the success of newly formed and already implemented laws.   It must be ascertained that adequate systems are put in place for the facilitation of proper enforcement.

Public education or more so, thorough sensitization on the existence of the se laws and the penalties associated with the disregard of the conservation and preservation of the island's biological diversity, should be given precedence, prior to their enforcement.

Given that our biological resources are being utilized, exploited and consumed to the point of non existence, it is very critical that the populace is sufficiently informed and educated on these issues in order to stop the rate of resource depletion.

APPENDIX

SAINT LUCIA

MINISTRY OF AGRICULTURE, FORESTRY AND FISHERIES

BIODIVERSITY ENABLING ACTIVITY PROJECT

SURVEY QUESTIONNAIRE

QUESTIONNAIRE IDENTIFICATION.

ADMINISTRATIVE DISTRICT		ENUMERATION DISTRICT					*Household No.*	*QUESTIONNAIRE No.*

Address: _____

Name of Enumerator: _____

Date of Interview: _____

Checked by: _____   **Date Checked** _____

PERSONAL INFORMATION

1. Name: (if organization, write name of organization also) _____

2. Sex: Male: [1]   Female: [2]

3. Age: 12 – 19 [1]   20 – 29 [2]   30 – 39 [3]

    40 – 49 [4]   50 – 59 [5]   60+ [6]

4. Where do you live? _____

5. Occupation (Type of operation of business, if ogranisation): _____

6. Do you have any children?   Yes [1]   No [2]   No Response [3]
    (If No 0r No Response go to Q. 8)

7. How many children do you have?   _____

8. What is the highest level of Education you have attained?

    Primary [1]   Secondary [2]   Tertiary [3]   Other [4]   No Response [5]

9. Do you practice any form of agriculture?   Yes [1]   No [2]   No Response [3]
    (If No 0r No Response go to Q. 19)

10. What areas in agriculture/farming are you involved in?

    Crop Production [1]   Livestock Production [2]   Fish Farming [3]   No Response [4
    ]

    a. Are you a Banana Farmer?   Yes [1]   No [2]   No Response [3]
        (If No 0r No Response go to Q. 19)

    ****

FOR BANANA FARMERS ONLY

11. How long have you been a banana farmer? _____ Years

12. Is the land: Owned [1]   Rented [2]   Family Land [3]

    Squatting [4]   Other [5]   No Response [6]

13. What is the size of the farm? [_____.____] (acres)

    a. Where is the farm located? _____

28

14. How many Banana trees/plants do you have planted? _____

15. Is your farm situated near a :-   River [1]   Forested Area [2]   Main Road [3]

16. What type of vegetation existed on the farm before it became a Banana Farm?

    _____

17. Do you practice any methods of conservation?   Yes [1]   No [2]   No Response [3]
    (If No 0r No Response go to Q. 19)

18. What methods of conservation do you practice?   Contour Drains [1]   Grass Barriers [2]

    Stone Barriers [3]   Terraces [4]   Contour Planting [5]   Contour Ridging [6]

    Mulching   [7]   Other [8]

    ****

KNOWLEDGE OF BIODIVERSITY

19. Have you heard of the term "**Biodiversity**"? Yes [1]   No [2]   Don't Know [3]
    (If No 0r No Response go to Q. 23)

20. Where did you first hear of the term? _____

21. What do you understand by the term "**Biodiversity**"? _____

    _____

    _____

22. Have you participated in any discussion on "**Biodiversity**"? Yes [1] No [2] No Response [3]

23. Do you have reason to use any of our rivers?   Yes [1]   No [2]   No Response [3]
    (If No 0r No Response go to Q. 25)

24. Which river do you use and for what purpose? _____

    _____

25. Do you think that swamps are important?   Yes [1]   No [2]   Don't Know [3]
    (If No 0r Don't Know go to Q. 27)

26. Why do you think that swamps are important? _____

    _____

27. Do you think that forests are important?   Yes [1]   No [2]   Don't Know [3]
    (If No 0r Don't Know go to Q. 29)

28. Why do you think that forests are important? _____

    _____

    _____

    _____

    ****

USE OF RESOURCES

29. Are you or your organization involved in any activity that utilizes resources extracted from the
    Land, Sea or River?   Yes [1]   No [2]   No Response/Don't Know [3]
    (If No 0r No Response/Don't Know go to Q. 32)

30. Which resources do you use and for what purpose?

Resource	Users – Primary, (Pri) Secondary (Sec) or Both (Both)			Product	Purpose	Primary End Use of Product – Home Use (HU), Sale (Sale) or Both (Both)		
	Pri	Sec	Both			HU	Sale	Both

31. Do you or your organization have any difficulty in obtaining any Plant or Natural Resources for
    your business? Yes [1]   No [2]   No Response/Don't Know [3]   (If Yes, please specify)

    _____

    _____

32. Do you use herbal medicine? Yes [1]   No [2]   No Response/Don't Know [3]
    (If No 0r No Response/Don't Know go to Q. 34)

33. Which plant/plants do you use and for what purpose?

Name of Plant	Use/Purpose

34. Can you identify any plants, animals (including insects) or fish that has become scare in the last ten years? Yes [1]   No [2]   Don't Know [3]   (If No 0r Don't Know go to Q. 36)

ANIMALS	PLANTS	FISH

35. Do you think that they (i.e the Plants, Animals and Fish Listed) should be protected?

    Yes [1]   No [2]   Don't Know [3]

ADDITIONAL INFORMATION

36. Is Biodiversity important to you and/or your country?   Yes [1]   No [2]   Don't Know [3]

37. Do you think that any industry/industries in St. Lucia pose a threat to Biodiversity?

    Yes [1]   No [2]   Don't Know [3]   (If No 0r Don't Know go to Q. 39)

38. Name the industry/industries and give details: _____

    _____

    _____

    _____

39. How do you suggest we protect/maintain our biodiversity? _____

    _____

    _____

    _____

    _____

40. Is there any additional information that you can provide as it relates to biodiversity in St. Lucia? Please state?

    _____

    _____

    _____

    _____

END INTERVIEW

THANK RESPONDENT

Enumerator's Comments : _____

_____

_____

_____

Table A1. Number of Responses by Administrative District, Sex and Level of Education

Level of Education/ Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	5	15	25	13	2	7	2	4	12	11	22	10	**128**
Secondary	17	23	28	3	0	9	1	4	9	9	12	16	**131**
Tertiary	30	6	10	1	0	7	1	3	3	5	3	14	**83**
Other	1	4	5	1	0	2	1	2	3	2	1	3	**25**
No Response	2	2	2	2	1	0	2	0	4	4	0	3	**22**
Total Male	**55**	**50**	**70**	**20**	**3**	**25**	**7**	**13**	**31**	**31**	**38**	**46**	**389**
Female													
Primary	6	24	23	10	2	6	7	9	13	17	9	15	**141**
Secondary	22	20	30	6	1	11	3	12	14	18	16	16	**169**
Tertiary	15	11	13	0	0	3	2	7	6	4	5	17	**83**
Other	0	4	5	1	0	2	0	0	0	4	2	1	**19**
No Response	5	0	3	2	1	1	2	2	1	2	1	2	**22**
Total Female	**48**	**59**	**74**	**19**	**4**	**23**	**14**	**30**	**34**	**45**	**33**	**51**	**434**
Total	**103**	**109**	**144**	**39**	**7**	**48**	**21**	**43**	**65**	**76**	**71**	**97**	**823**

Table A2. Number of Respondents by Sex and Type of Occupation

Type of Occupation	Sex		Total
	Male	**Female**	
Education	5	16	**21**
Students	48	73	**121**
Preschool Teacher	2	12	**14**
Primary School Teacher	2	6	**8**
Secondary School Teacher	8	5	**13**
Librarian		1	**1**
Tourism	11	7	**18**
Agriculture and Fisheries	50	23	**73**
Environmental	12	4	**16**
Departments	20	20	**40**
Local Government	3	3	**6**
NGO's	5	2	**7**
Professionals	5	3	**8**
Technicians	10	1	**11**
Private sector	51	57	**108**
Media Worker	3		**3**
Trades	64	18	**82**
Mauby Users	1	2	**3**
Latayner Users	3	1	**4**
Bamboo Users	4		**4**
Forest Gum	1	1	**2**
Furniture/Lumber	6		**6**
Farine Producers	3	4	**7**
Sea Egg Producers		1	**1**
Pottery Makers	1	3	**4**
Leather and Craft	3	3	**6**
Housekeeping	2	71	**73**
Self Employed	3	8	**11**
Retired	3	6	**9**
Other Services	2	1	**3**
Other Labour	2	2	**4**
Unemployed	46	63	**109**
NES	1		**1**
No Response	9	17	**26**
Total	**389**	**434**	**823**

Table A3. Total Number of Respondents by Administrative Districts, Sex and Age Range Hearing of the Term Biodiversity

| Age Range | Administrative Districts | | | | | | | | | | | | Table Total |
	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	
Male													
12 - 19	1	4	6	0	0	1	0	0	0	2	2	2	**18**
20 - 29	8	7	4	2	0	0	1	1	4	5	0	3	**35**
30 - 39	6	6	4	0	0	6	0	3	0	2	2	4	**33**
40 - 49	8	2	9	3	0	7	1	2	3	1	1	2	**39**
50 - 59	3	2	2	2	0	1	0	2	1	1	2	1	**17**
60 and over	2	0	1	2	0	0	0	0	1	1	2	1	**10**
No Response	6	5	2	0	0	0	0	0	1	1	1	5	**21**
Total Male	**34**	**26**	**28**	**9**	**0**	**15**	**2**	**8**	**10**	**13**	**10**	**18**	**173**
Female													
12 - 19	2	4	6	3	1	2	1	2	1	1	2	4	**29**
20 - 29	5	6	11	4	0	3	0	4	2	3	4	5	**47**
30 - 39	12	7	8	3	0	4	0	4	4	3	1	4	**50**
40 - 49	4	3	8	0	0	5	1	1	3	3	0	8	**36**
50 - 59	2	1	3	2	1	0	0	3	0	0	1	3	**16**
60 and over	1	0	1	0	0	1	0	0	0	1	0	1	**5**
No Response	6	6	0	1	0	0	0	0	1	2	1	1	**18**
Total Female	**32**	**27**	**37**	**13**	**2**	**15**	**2**	**14**	**11**	**13**	**9**	**26**	**201**
Total	**66**	**53**	**65**	**22**	**2**	**30**	**4**	**22**	**21**	**26**	**19**	**44**	**374**

Table A4. Total Number of Respondents by Administrative Districts, Sex and Level of Education Hearing of the Term Biodiversity

Level of Education/Sex	Administrative Districts												Table Total
	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	
Primary	2	5	8	5	0	3	0	2	3	5	5	1	**39**
Secondary	5	10	10	2	0	6	0	2	4	2	2	4	**47**
Tertiary	26	5	8	1	0	5	1	3	2	3	2	11	**67**
Other	0	4	1	1	0	1	1	1	1	0	1	2	**13**
No Response	1	2	1	0	0	0	0	0	0	3	0	0	**7**
Total Male	**34**	**26**	**28**	**9**	**0**	**15**	**2**	**8**	**10**	**13**	**10**	**18**	**173**
Primary	3	4	11	7	1	1	1	0	6	5	1	4	**44**
Secondary	11	10	14	5	1	9	1	8	3	3	6	6	**77**
Tertiary	13	10	10	0	0	3	0	6	2	3	1	15	**63**
Other	0	3	2	1	0	2	0	0	0	0	1	1	**10**
No Response	5	0	0	0	0	0	0	0	0	2	0	0	**7**
Total Female	**32**	**27**	**37**	**13**	**2**	**15**	**2**	**14**	**11**	**13**	**9**	**26**	**201**
Total	**66**	**53**	**65**	**22**	**2**	**30**	**4**	**22**	**21**	**26**	**19**	**44**	**374**

Table A5. Total Number of Respondents by Administrative District, Sex and Age Range Participating in Discussion on Biodiversity

Age Range/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Administrative Districts													
Male													
12 - 19	0	0	0	0	0	0	0	0	0	1	0	1	**2**
20 - 29	3	1	0	0	0	0	0	1	0	1	0	1	**7**
30 - 39	5	1	1	0	0	1	0	2	0	0	0	1	**11**
40 - 49	6	1	2	1	0	3	0	1	0	0	0	1	**15**
50 - 59	0	1	0	0	0	0	0	2	0	1	1	0	**5**
60 and over	0	0	0	1	0	0	0	0	0	0	1	0	**2**
No Response	2	4	0	0	0	0	0	0	0	0	0	2	**8**
Total Male	**16**	**8**	**3**	**2**	**0**	**4**	**0**	**6**	**0**	**3**	**2**	**6**	**50**
Female													
12 - 19	0	0	0	1	1	0	1	1	0	1	0	1	**6**
20 - 29	1	1	0	2	0	0	0	0	0	1	1	0	**6**
30 - 39	1	2	0	0	0	1	0	1	0	0	0	0	**5**
40 - 49	1	0	1	0	0	0	0	0	1	0	0	0	**3**
50 - 59	1	0	0	0	0	0	0	2	0	0	0	1	**4**
60 and over	0	0	0	0	0	0	0	0	0	0	0	0	**0**
No Response	3	1	0	1	0	0	0	0	0	1	0	0	**6**
Total Female	**7**	**4**	**1**	**4**	**1**	**1**	**1**	**4**	**1**	**3**	**1**	**2**	**30**
Total	**23**	**12**	**4**	**6**	**1**	**5**	**1**	**10**	**1**	**6**	**3**	**8**	**80**

Table A6. Total Number of Respondents by Administrative District, Sex and Level of Education Participating in Discussion on Biodiversity

Level of Education/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	1	0	0	1	0	1	0	2	0	0	1	0	6
Secondary	1	2	0	1	0	1	0	1	0	1	0	1	8
Tertiary	13	4	2	0	0	2	0	3	0	1	1	3	29
Other	0	2	1	0	0	0	0	0	0	0	0	2	5
No Response	1	0	0	0	0	0	0	0	0	1	0	0	2
Total Male	**16**	**8**	**3**	**2**	**0**	**4**	**0**	**6**	**0**	**3**	**2**	**6**	**50**
Female													
Primary	0	0	0	1	0	0	0	0	0	1	0	1	3
Secondary	1	0	0	3	1	1	1	2	1	0	1	1	12
Tertiary	5	2	1	0	0	0	0	2	0	2	0	0	12
Other	0	2	0	0	0	0	0	0	0	0	0	0	2
No Response	1	0	0	0	0	0	0	0	0	0	0	0	1
Total Female	**7**	**4**	**1**	**4**	**1**	**1**	**1**	**4**	**1**	**3**	**1**	**2**	**30**
Total	**23**	**12**	**4**	**6**	**1**	**5**	**1**	**10**	**1**	**6**	**3**	**8**	**80**

Table A7. Number of Respondents by Administrative District, Sex and Age Range with Reasons to Use Rivers

Age Range/Sex	Administrative Districts												Table Total
	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	
Male													
12 - 19	1	5	9	1	0	4	0	0	6	4	5	7	**42**
20 - 29	3	4	7	1	0	0	1	1	2	5	5	6	**35**
30 - 39	7	7	5	2	0	2	0	1	2	1	5	3	**35**
40 - 49	5	2	6	5	0	0	0	0	2	3	4	2	**29**
50 - 59	0	0	0	4	1	2	0	0	2	3	2	0	**14**
60 and over	0	0	1	3	0	0	0	1	0	0	1	0	**6**
No Response	2	4	6	0	1	0	0	0	1	1	0	4	**19**
Total Male	**18**	**22**	**34**	**16**	**2**	**8**	**1**	**3**	**15**	**17**	**22**	**22**	**180**
Female													
12 - 19	1	0	10	3	0	1	2	0	6	9	5	5	**42**
20 - 29	1	2	5	5	1	0	1	0	1	5	2	2	**25**
30 - 39	2	4	5	3	0	1	1	0	1	1	1	3	**22**
40 - 49	0	1	7	2	1	0	0	0	2	3	1	2	**19**
50 - 59	0	2	0	3	0	0	0	0	0	4	1	3	**13**
60 and over	0	0	0	0	0	1	0	0	0	0	0	0	**1**
No Response	2	2	1	1	0	0	0	0	1	2	2	1	**12**
Total Female	**6**	**11**	**28**	**17**	**2**	**3**	**4**	**0**	**11**	**24**	**12**	**16**	**134**
Total	**24**	**33**	**62**	**33**	**4**	**11**	**5**	**3**	**26**	**41**	**34**	**38**	**314**

Table A8. Total Number of Responses by Administrative District, Sex and Level of Education with Reasons to Use Rivers

Level of Education	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	1	5	11	11	1	3	0	0	4	8	11	8	**63**
Secondary	3	11	14	1	0	4	1	2	5	5	8	10	**64**
Tertiary	13	4	6	1	0	1	0	0	1	3	2	2	**33**
Other	1	2	3	1	0	0	0	1	3	0	1	1	**13**
No Response	0	0	0	2	1	0	0	0	2	1	0	1	**7**
Total Male	**18**	**22**	**34**	**16**	**2**	**8**	**1**	**3**	**15**	**17**	**22**	**22**	**180**
Female													
Primary	1	3	7	10	1	1	2	0	4	8	2	6	**45**
Secondary	2	3	14	6	0	1	1	0	5	13	5	6	**56**
Tertiary	3	4	4	0	0	0	1	0	2	1	3	3	**21**
Other	0	1	2	0	0	1	0	0	0	1	2	0	**7**
No Response	0	0	1	1	1	0	0	0	0	1	0	1	**5**
Total Female	**6**	**11**	**28**	**17**	**2**	**3**	**4**	**0**	**11**	**24**	**12**	**16**	**134**
Total	**24**	**33**	**62**	**33**	**4**	**11**	**5**	**3**	**26**	**41**	**34**	**38**	**314**

Table A9. Number of Respondents by Administrative District, Sex and Age Range who Thinks that Swamps are Important

Age Range/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	3	6	11	0	0	2	0	0	5	3	5	8	**43**
20 - 29	7	10	9	0	0	1	2	2	2	3	7	9	**52**
30 - 39	16	8	7	1	0	6	0	3	2	1	4	7	**55**
40 - 49	9	2	14	3	0	7	1	3	4	1	7	4	**55**
50 - 59	3	2	3	3	0	1	1	2	2	2	2	2	**23**
60 and over	3	0	2	4	0	1	0	1	1	3	3	1	**19**
No Response	6	5	6	0	0	0	0	0	1	2	1	5	**26**
Total Male	**47**	**33**	**52**	**11**	**0**	**18**	**4**	**11**	**17**	**15**	**29**	**36**	**273**
Female													
12 - 19	3	7	13	1	0	2	4	5	2	6	5	7	**55**
20 - 29	6	6	10	2	0	4	3	4	2	2	2	4	**45**
30 - 39	11	8	11	2	0	5	1	6	3	1	2	5	**55**
40 - 49	5	4	7	0	0	3	1	2	6	3	0	5	**36**
50 - 59	2	4	4	1	0	0	1	4	0	3	1	4	**24**
60 and over	1	1	2	1	0	1	0	0	1	4	1	1	**13**
No Response	6	5	2	1	0	0	0	0	0	1	0	3	**18**
Total Female	**34**	**35**	**49**	**8**	**0**	**15**	**10**	**21**	**14**	**20**	**11**	**29**	**246**
Total	**81**	**68**	**101**	**19**	**0**	**33**	**14**	**32**	**31**	**35**	**40**	**65**	**519**

Table A10. Total Number of Respondents by Administrative Districts, Sex and Level of Education who Thinks that Swamps are Important

Level of Education/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	5	5	18	8	0	5	0	4	7	4	17	5	**78**
Secondary	12	16	20	0	0	6	1	3	3	4	8	15	**88**
Tertiary	28	6	9	1	0	6	1	3	3	2	3	13	**75**
Other	1	4	4	0	0	1	1	1	3	1	1	2	**19**
No Response	1	2	1	2	0	0	1	0	1	4	0	1	**13**
Total Male	**47**	**33**	**52**	**11**	**0**	**18**	**4**	**11**	**17**	**15**	**29**	**36**	**273**
Female													
Primary	3	9	14	3	0	3	5	5	7	7	2	9	**67**
Secondary	13	13	20	3	0	7	2	8	5	8	6	9	**94**
Tertiary	14	10	9	0	0	3	2	7	2	3	2	11	**63**
Other	0	3	5	1	0	2	0	0	0	2	1	0	**14**
No Response	4	0	1	1	0	0	1	1	0	0	0	0	**8**
Total Female	**34**	**35**	**49**	**8**	**0**	**15**	**10**	**21**	**14**	**20**	**11**	**29**	**246**
Total	**81**	**68**	**101**	**19**	**0**	**33**	**14**	**32**	**31**	**35**	**40**	**65**	**519**

Table A11. Reasons Given why Swamps are Important

1. A breeding place for certain plants and animals

2. A habitat for certain living creatures (bird, fish, insects and animals).

3. A source of keeping water

4. A source of water for animals

5. An alternative source of water for the rivers

6. A home for the Zandji or the crayfish

7. A source of medicine – the leeches found there can be use for treating blood clots

8. A home for certain types of fish

9. A protection of life forms

10. Acts as a barrier against waves on the coastline.

11. Balances the ecosystem

12. Can be used for irrigation

13. Can be used for fish farming

14. Eco-balancing of nature

15. Environment for micro-organisms

16. Good for the environment

17. Good for vegetation – planting of crops such as dasheen, watercress, flowers and rice

18. Helps reefs, it traps or reduces the amount of silt that goes down to the sea.

19. Keeps the environment fresh

20. Provides food for some living creatures (birds and animals).

21. Supplies water to water plants especially in the dry season

22. Small fish remain there before going into the sea

23. To preserve all species which inhabit any given ecosystem

24. They are natural soak-away for water.

25. They add minerals to the soils

26. They contribute to plant and animal growth

27. They preserve our marine life

28. They provide wood for charcoal

29. Use for swimming by ducks

Table A12. Total Number of Respondents by Administrative District, Sex and Age Range who Thinks that Forests are Important

Age Range/Sex	Administrative Districts												
	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	5	9	18	2	1	4	0	0	9	5	9	14	**76**
20 - 29	10	16	13	2	0	1	2	3	5	11	8	10	**81**
30 - 39	16	11	8	2	0	7	1	3	3	2	7	7	**67**
40 - 49	10	3	15	5	0	7	1	3	5	3	7	4	**63**
50 - 59	3	4	3	4	1	2	1	2	3	5	2	2	**32**
60 and over	4	2	5	5	0	1	1	2	2	3	3	2	**30**
No Response	7	5	8	0	1	1	0	0	3	2	1	7	**35**
Total Male	**55**	**50**	**70**	**20**	**3**	**23**	**6**	**13**	**30**	**31**	**37**	**46**	**384**
Female													
12 - 19	4	11	20	3	1	3	4	5	6	9	10	11	**87**
20 - 29	9	14	15	5	1	4	3	8	9	11	6	11	**96**
30 - 39	17	12	17	3	0	5	4	5	6	6	5	9	**89**
40 - 49	4	9	11	2	1	7	1	4	6	6	3	9	**63**
50 - 59	3	5	5	4	1	0	2	6	0	5	2	4	**37**
60 and over	3	1	2	1	0	3	0	0	3	6	1	1	**21**
No Response	7	7	3	1	0	0	0	0	1	2	2	4	**27**
Total Female	**47**	**59**	**73**	**19**	**4**	**22**	**14**	**28**	**31**	**45**	**29**	**49**	**420**
Total	**102**	**109**	**143**	**39**	**7**	**45**	**20**	**41**	**61**	**76**	**66**	**95**	**804**

Table A13. Total Number of Respondents by Administrative Districts, Sex and Level of Education who Thinks that Forests are Important

Level of Education/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	5	15	25	13	2	7	1	4	11	11	22	10	**126**
Secondary	17	23	28	3	0	9	1	4	9	9	11	16	**130**
Tertiary	30	6	10	1	0	6	1	3	3	5	3	14	**82**
Other	1	4	5	1	0	1	1	2	3	2	1	3	**24**
No Response	2	2	2	2	1	0	2	0	4	4	0	3	**22**
Total Male	**55**	**50**	**70**	**20**	**3**	**23**	**6**	**13**	**30**	**31**	**37**	**46**	**384**
Female													
Primary	6	24	22	10	2	6	7	8	12	17	7	14	**135**
Secondary	21	20	30	6	1	11	3	11	13	18	15	15	**164**
Tertiary	15	11	13	0	0	3	2	7	6	4	5	17	**83**
Other	0	4	5	1	0	2	0	0	0	4	2	1	**19**
No Response	5	0	3	2	1	0	2	2	0	2	0	2	**19**
Total Female	**47**	**59**	**73**	**19**	**4**	**22**	**14**	**28**	**31**	**45**	**29**	**49**	**420**
Total	**102**	**109**	**143**	**39**	**7**	**45**	**20**	**41**	**61**	**76**	**66**	**95**	**804**

Table A14. Reasons given why Forests are Important

1   A form of attraction for tourist and locals - Sightseeing

2   A place for planting because it is not dry

3   A home for animals and birds – wildlife

4   All waterfalls starts in the forest

5   An umbrella for the water catchment

6   Aids in keeping the atmosphere clean and healthy

7   Absorb carbon dioxide and in so doing combat greenhouse effect and global warming.

8   As a shelter for people

9   Balance the eco-system

10   Balances gases in the air

11   Climate control

12   Deforestation affect the water supply – No forest no water

13   Environmental Health

14   Forest trees acts as a wind barrier

15   Fresh air

16   For the hydrological cycle

17   For the sustenance of industries – provides wood, and gum

18   Helps to prevents landslides

19   Habitat for rare animals and birds

20   Have very fertile soils

21   It also acts as a form of conservation

22   It is the centre of life

23   It is part of nature

24   It is the line of survival on earth

25   It supplies us with food, wood and protects the ozone layer

26   It has economical value – tourism

27   It provides protection from the sun

Table A14. Reasons given why Forests are Important - *Continued*

28	It shelters water and swamps, mangroves and agricultural areas
29	Is the main source of the water supply
30	Keeps soils fresh and provides a stable water source
31	Our main resources lie within the boundaries of the forest.
32	Place for relaxation and the enjoyment of nature
33	Providing oxygen and removing carbon dioxide
34	Serves as water catchment areas
35	Some plants found in the forest can be used as medicine
36	The beauty of St. Lucia is in the forest
37	The forest provides lumber
38	The home of the parrot our national bird
39	The plants provides us with oxygen
40	The trees prevents soil erosion
41	The trees provides water for the rivers
42	The origin of different forms of life
43	They are cleansers for air reduction of carbon dioxide
44	Use for exploration
45	Use to protect the watertable
46	Water and wildlife conservation and protection

Table A15. Number of Respondents by Administrative District, Sex and Age Range Involved in Activities that Utilizes Natural Resources Extracted from the Land, Sea or River

Age Range/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	0	2	9	0	0	3	0	0	1	3	4	2	**24**
20 - 29	3	7	6	2	0	1	1	1	2	4	4	1	**32**
30 - 39	3	5	3	2	0	5	1	2	2	2	5	3	**33**
40 - 49	5	1	9	5	0	4	0	3	2	3	7	1	**40**
50 - 59	0	4	1	4	1	2	0	2	1	3	1	0	**19**
60 and over	2	2	2	4	0	1	0	1	1	2	2	1	**18**
No Response	2	3	3	0	1	0	0	0	1	1	1	4	**16**
Total Male	**15**	**24**	**33**	**17**	**2**	**16**	**2**	**9**	**10**	**18**	**24**	**12**	**182**
Female													
12 - 19	0	3	4	1	1	2	0	0	2	0	5	1	**19**
20 - 29	1	10	3	4	0	2	0	2	0	1	3	5	**31**
30 - 39	2	6	8	3	0	5	1	2	1	2	2	3	**35**
40 - 49	0	6	8	2	1	4	0	3	4	4	1	4	**37**
50 - 59	0	1	3	3	1	0	1	3	0	0	2	1	**15**
60 and over	0	0	1	1	0	2	0	0	1	1	1	1	**8**
No Response	3	5	0	1	0	0	0	0	0	1	0	0	**10**
Total Female	**6**	**31**	**27**	**15**	**3**	**15**	**2**	**10**	**8**	**9**	**14**	**15**	**155**
Total	**21**	**55**	**60**	**32**	**5**	**31**	**4**	**19**	**18**	**27**	**38**	**27**	**337**

Table A16. Number of Respondents by Administrative Districts, Sex and Level of Education Involved in Activities that Utilizes Natural Resources Extracted from the Land, Sea or River

Level of Education/Sex	Administrative Districts												Table Total
	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	
Male													
Primary	2	9	10	11	1	6	1	4	4	6	18	3	**75**
Secondary	4	7	11	2	0	6	1	2	2	6	4	1	**46**
Tertiary	9	4	8	1	0	3	0	3	1	2	1	5	**37**
Other	0	3	3	1	0	1	0	0	2	1	1	3	**15**
No Response	0	1	1	2	1	0	0	0	1	3	0	0	**9**
Total Male	**15**	**24**	**33**	**17**	**2**	**16**	**2**	**9**	**10**	**18**	**24**	**12**	**182**
Female													
Primary	1	7	11	7	2	4	1	2	3	6	5	6	**55**
Secondary	1	12	9	5	1	6	0	3	4	1	7	2	**51**
Tertiary	3	8	7	0	0	3	0	4	0	1	2	6	**34**
Other	0	4	0	1	0	2	0	0	0	0	0	1	**8**
No Response	1	0	0	2	0	0	1	1	1	1	0	0	**7**
Total Female	**6**	**31**	**27**	**15**	**3**	**15**	**2**	**10**	**8**	**9**	**14**	**15**	**155**
Total	**21**	**55**	**60**	**32**	**5**	**31**	**4**	**19**	**18**	**27**	**38**	**27**	**337**

Table A17. Number of Respondents by Administrative Districts Reporting the Use of Herbal Medicine by Sex and Age Range

Age Range/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	1	1	15	0	0	3	0	0	4	4	4	3	**35**
20 - 29	7	9	8	1	0	1	1	1	1	5	6	6	**46**
30 - 39	15	8	6	0	0	7	0	1	3	1	6	2	**49**
40 - 49	8	1	10	4	0	4	1	2	5	2	7	3	**47**
50 - 59	1	1	2	4	1	1	2	2	2	4	1	1	**22**
60 and over	0	2	3	5	0	2	1	1	2	1	1	2	**20**
No Response	4	5	6	0	0	1	0	0	2	1	1	1	**21**
Total Male	**36**	**27**	**50**	**14**	**1**	**19**	**5**	**7**	**19**	**18**	**26**	**18**	**240**
Female													
12 - 19	2	3	8	0	0	3	3	1	2	8	4	5	**39**
20 - 29	8	10	8	3	0	3	2	4	2	7	3	8	**58**
30 - 39	13	6	13	2	0	3	2	4	2	3	3	5	**56**
40 - 49	3	5	9	1	1	4	1	3	6	4	2	7	**46**
50 - 59	1	2	3	4	0	0	2	5	0	4	1	5	**27**
60 and over	2	1	2	1	0	3	0	0	1	5	1	1	**17**
No Response	4	6	1	1	0	0	0	0	1	1	3	4	**21**
Total Female	**33**	**33**	**44**	**12**	**1**	**16**	**10**	**17**	**14**	**32**	**17**	**35**	**264**
Total	**69**	**60**	**94**	**26**	**2**	**35**	**15**	**24**	**33**	**50**	**43**	**53**	**504**

Table A18. Total Number of Respondents by Administrative Districts Reporting the Use of Herbal Medicine by Sex and Level of Education

Level of Education/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	4	11	16	9	0	5	1	3	7	9	18	4	**87**
Secondary	11	8	22	1	0	8	1	3	5	4	6	8	**77**
Tertiary	20	4	6	1	0	4	0	1	1	2	1	3	**43**
Other	1	3	4	1	0	2	1	0	3	1	1	3	**20**
No Response	0	1	2	2	1	0	2	0	3	2	0	0	**13**
Total Male	**36**	**27**	**50**	**14**	**1**	**19**	**5**	**7**	**19**	**18**	**26**	**18**	**240**
Female													
Primary	5	10	17	6	1	4	5	5	7	13	4	10	**87**
Secondary	14	12	15	3	0	7	2	6	5	13	7	11	**95**
Tertiary	12	8	6	0	0	3	1	5	2	2	3	11	**53**
Other	0	3	5	1	0	2	0	0	0	3	2	1	**17**
No Response	2	0	1	2	0	0	2	1	0	1	1	2	**12**
Total Female	**33**	**33**	**44**	**12**	**1**	**16**	**10**	**17**	**14**	**32**	**17**	**35**	**264**
Total	**69**	**60**	**94**	**26**	**2**	**35**	**15**	**24**	**33**	**50**	**43**	**53**	**504**

Table A19. Names of Herbs and their Traditional Medicinal Uses

Name of Herb	Medicinal Use of Herbs
Alatou Kay	Purging, Cooling
Aloe	Cooling, Purging, Face Cleanser, Body Cleanser, Skin Cleanser, Inflammation, Good for the blood, Tea, Colds, Headaches
Annis	Gas
Balye Doure	Bathing, Rash, Colds, Diabetes
Bab Chat	Stones
Basilik	Colds, Beverages, Tea, Bellyache, Indigestion, Food, Soaps, Perfumes, Gas
Bayleaf	Sore Throat, Beverage, Tea, Bellyache, Purging, Cleansing, Hair Treatment, In Stew, Stimulant
Biat	Tea
Bwa Den	Tea, Beverage, Digestive Ailment
Boujon Gwiyav	Bellyache
Bwa Kasav	Cold
Cactus	Cooling
Kafe	Imprudent
Carrot Water	Purging, Cooling
Celery	Seasoning, Cooking
Chamomile	Bellyache, Headache, Beverage, Imprudent, Tea,Indigestion, Sore Throat, Colds, Bad Stomach, Bless, Cuts & Bruises, Fever, Internal Injury, Soothing
Chapantye	Colds, Internal Injury, Tea, Flu, Headache, Bellyache, Bad Stomach, Bless, Sinus, Rheumatism
Chaspawe	Cooling, Pain
Kawaktelezom	Colds, Tea, Ground Itch, Athletes Foot, Colds
Chini Twef	Bellyache, Upset Stomach, Gas Pain, Cold, Flu, Fever
Chichima/Turmeric	Bless, Food, Chest Pain, Internal Bruises, Inflammation, Pain, Tea, Cooking, Cold
Chinaback	Fever, Imprudent
Chives	Seasoning
Cinnamon/Canelle/Spice	Tea, Bellyache, Cooking, Period Pain, Seasoning
Sitwonel	Gas, Beverage, Flu, Fever
Clove	Tea
Kokomcoolie	Chest cold, Blood Pressure, Inflammation, Cleanser
Coconut	Oil for hair, Water as Cooling
Komfwe	Skin treatment
Kosol	beverage
Die ee	Sore throats
Diten	Cooking
Ditepeyi	Colds, flu

Continued Overleaf

Table A19. Names of Herbs and their Traditional Medicinal Uses

Name of Herb	Medicinal Use of Herbs
Djapana	Coughs, Colds, Flu, Headache, Bellyache, Tea, Imprudent, Beverage, Gas, Bruises
Douvan douvan	Belly ache
Eucalyptus	High Fever
Ti Fey	Tea, Colds, Flu
Fey douvan	High Blood Pressure, Colds, Flu, Baths
Lavjete	Tea
Fivedarken	Gas
Fle wen new	Diabetes
Flewi hibiscus	Cold
Flewi Noel	Cold
Fon besin	Eues
Fwatas	Asthma
Garlic/Skin	Gas, Upset Stomach
Ginger	Belly aches, Gas (flatulence), Period Pains, Stomach Cramps, Upset Stomach
Gloricida	Heats (rash), Colds, Tea, Bathe
Golden Seal	Colds
Green Tomato	Sore Throat
Gwo diten	Seasoning (Cooking), Tea, Colds, Gas, Shock, Beverage
Guava Leaves	Diahorrea, Bellyache, Menstrual Cramps, Purging, Upset Stomach, Gas Pains
Gwennad	Juice, Eat, Bellyache
Gwen anba fey blan	To get blood hot, Imprudent, High Blood Pressure, Flu, Fever, Tea, Coughing, Cooking, Bellyache, Purging, Cooling, Colds
Imotel	Colds
Internal parts of banana	Healing wounds
Internal parts of macambou	Healing wounds
Internal parts of plantain	Healing wounds
Djewitout	Colds, Flu, Coughs
Jon Cah	Colds
Kalipis	Cold, Fever
Kangolala	Skin treatment
Kayen pepper	Cleansing
Kasialata	Cold, Purging, Rash, Cooling, Cleanser
Konsoud	Cold, fever
Koubawi	Pressure
Koupye	Fever, Colds
Lajwadico	Flu
La fey disiwo	Cold, Flu, Cough, Fever, Imprudent, Tea
Lanie	Tea, Gas

Continued Overleaf

Table A19. Names of Herbs and their Traditional Medicinal Uses

Name of Herb	Medicinal Use of Herbs
Leaf of life	Inflammation, Swelling
Lemon Grass	Flu, Skin Product, Flu, Fever, Tea
Lanmant fanm	Gas, Bellyache
Life Plant	Tea
Lime Leaf/Peel	Colds, Tea, Making Kids Sleep, Headaches, Colds, Coughing, Fever
Lonyongli	Cold
Lowandjet	Beverage
Man better man	Flu, Baths, Fever, Colds, Rash
Marijuana	Beverage, Smoking, Colds, Asthma, Cleansing, Meditation
Martniche	Bless
Mauby	Refreshing drink, Cooling
Mihawkte	Tea
Mint	Tea, Food, Gas Stomach Ache, Colds, Digestion, Flu, Beverage
Neck	Medicine, Food
Noni	Fever, Internal Disorders, Keeping Healthy, Cleansing of the body, Cooling
Noyo	Cold
Nutmeg	Headache, Tea
Okra Flower	Colds
Parsley	Seasoning, Tea
Pachouli	Gas, Perfume Oil, Bellyache, Colds, Tea, Flu
Pepperleaf	Carboncle
Pinaj	Cooking
Plant terre	Eye infections, Bless, Pnemonia, Eye Ailment, Gas, Tea, Colds
Plum tree leaves	Sore throat
Pomegranate	Bellyache, Flu, Imprudent, Gas
Pumpkin Leaves	Tonic
Pwe pwel	Thrush
Roseau	Minor cuts, injury
Rosemary	Beverage, Tea, Cooking, Cleanser, Headache, Gas, Skin, Nerves
Roses	Bellyache
Scallions	cooking
Seat tour	Cold
Seed on the Leaf	Mucus removal
Senna	Purging, Cooling
Chatonbenni	Colds, Tea, Food, Flu, High Fever, Bellyache, Coughing, Gas, Common Cold, Vomitting, Imprudent, Seasoning, Pnemonia, Rheumatism, Draft, Headache, Worms
Shering Pavee	Colds
Shining Bush	Purging, Cooling, Afterbirth, Sore Throat, Colds

Continued Overleaf

Table A19. Names of Herbs and their Traditional Medicinal Uses

Name of Herb	Medicinal Use of Herbs
Simenkontwa	Worms, Bellyache, Tea, Colds, Flu, Headache, Diabetes, Imprudent, Gas,
Sour Orange leaves	Tea, Cold, Flu
Soursop leaves	Cooling, Tea
Soya water	Cleansing of the System
St John's Bush	Cleaning of the Eye
Stinging nettle	Hair and Head Treatment
Sweet Broom	Tea
Tabak djab	Flu, Colds, Tea, Coughs, Fever , Sinus Problems, Bellyache, Gas, Cleanse
Tamarind leaves	Colds, Cooling, Baths
Tean One Gent	Bevereage
Thyme	Colds, Gas, Seasoning, Stomach Pain, Gastroenterist
Tipatat	Cleansing, Purging
Tizan	Colds, Tea
Tobacco	Cold, Asthma
Twa tas	Colds, Pain, Tea, Internal Inflammation, Fever, Bellyache
Ve venne murt	Tea
Venvenn	Tea
Venvenn lache rat	High blood pressure, Nerves, Colds, Diabetes
Veven Kawaib	Abortion, Cough, Colds
Vi Vin Cayi	Inflamation
Vincorge	Gas
Water grass/Zebgwa	Purge
Watercress	cooling, salad
Weed	smoke
White Onion	Asthma in Children
Wild thyme	Seasoning, Bellyache
Young Guava Leaf	Diarhear, Vomitting
Zeb a fey	Bellyache, Gas Pain, Colds
zeb a kuws	Cooling, Purging, Inflammation, Worm Medicine, Cleanser
Zeb ginnear	Colds
Zo Nive	Fall with strain
Zowey mouton	Colds, Bellyache, Common Cold, Fever

Table A20. Number of Respondents by Administrative Districts, Sex and Age Range Identifying Species that have Become Scarce

Level of Education/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	1	5	12	0	0	1	0	0	4	2	6	7	**38**
20 - 29	9	11	9	1	0	0	0	1	1	5	5	5	**47**
30 - 39	14	10	7	1	0	5	0	3	2	1	5	5	**53**
40 - 49	10	2	11	3	0	4	1	1	3	1	6	3	**45**
50 - 59	3	3	2	4	1	1	0	2	2	3	2	1	**24**
60 and over	3	2	3	4	0	1	0	2	2	1	2	1	**21**
No Response	6	4	3	0	0	0	0	0	1	1	2	5	**22**
Total Male	**46**	**37**	**47**	**13**	**1**	**12**	**1**	**9**	**15**	**14**	**28**	**27**	**250**
Female													
12 - 19	1	5	9	0	0	2	2	1	4	4	7	5	**40**
20 - 29	8	7	7	3	0	4	2	3	3	5	3	6	**51**
30 - 39	13	6	12	2	0	4	0	2	2	2	2	7	**52**
40 - 49	5	7	9	2	0	6	0	3	5	5	0	7	**49**
50 - 59	1	3	1	2	0	0	0	4	0	5	1	4	**21**
60 and over	2	1	2	1	0	3	0	0	2	4	1	0	**16**
No Response	7	6	2	0	0	0	0	0	0	2	1	3	**21**
Total Female	**37**	**35**	**42**	**10**	**0**	**19**	**4**	**13**	**16**	**27**	**15**	**32**	**250**
Total	**83**	**72**	**89**	**23**	**1**	**31**	**5**	**22**	**31**	**41**	**43**	**59**	**500**

Table A21. Number of Respondents by Administrative Districts, Sex and Level of Education Identifying Species that have Become Scarce

Level of Education/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	5	9	16	9	0	3	0	3	5	6	15	7	**78**
Secondary	13	17	17	1	0	6	0	1	4	3	9	9	**80**
Tertiary	28	6	9	1	0	3	0	3	2	2	3	8	**65**
Other	0	4	3	1	0	0	1	2	2	0	1	2	**16**
No Response	0	1	2	1	1	0	0	0	2	3	0	1	**11**
Total Male	**46**	**37**	**47**	**13**	**1**	**12**	**1**	**9**	**15**	**14**	**28**	**27**	**250**
Female													
Primary	4	9	15	5	0	4	2	3	7	10	2	10	**71**
Secondary	15	14	13	4	0	10	1	4	7	10	11	9	**98**
Tertiary	14	9	9	0	0	3	1	6	2	2	2	13	**61**
Other	0	3	4	0	0	2	0	0	0	3	0	0	**12**
No Response	4	0	1	1	0	0	0	0	0	2	0	0	**8**
Total Female	**37**	**35**	**42**	**10**	**0**	**19**	**4**	**13**	**16**	**27**	**15**	**32**	**250**
Total	**83**	**72**	**89**	**23**	**1**	**31**	**5**	**22**	**31**	**41**	**43**	**59**	**500**

Table A22. Number of Respondents by Administrative District, Sex and Age Range who Think that the Scarce Species Should be Protected

Age Range/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	1	3	10	0	0	1	0	0	3	2	4	5	**29**
20 - 29	9	7	6	1	0	0	0	1	1	3	6	5	**39**
30 - 39	15	8	7	1	0	5	0	3	0	1	5	6	**51**
40 - 49	7	1	11	3	0	4	1	1	3	0	6	2	**39**
50 - 59	2	2	2	4	1	1	0	2	2	1	2	1	**20**
60 and over	3	0	3	4	0	1	0	2	1	0	2	1	**17**
No Response	6	3	3	0	0	0	0	0	1	0	1	5	**19**
Total Male	**43**	**24**	**42**	**13**	**1**	**12**	**1**	**9**	**11**	**7**	**26**	**25**	**214**
Female													
12 - 19	1	5	10	0	0	2	2	1	4	3	7	3	**38**
20 - 29	7	5	7	3	0	3	2	3	3	3	2	6	**44**
30 - 39	13	3	11	2	0	4	0	2	2	2	2	7	**48**
40 - 49	5	3	8	2	0	6	0	1	5	3	0	6	**39**
50 - 59	1	2	1	2	0	0	0	4	0	5	1	4	**20**
60 and over	2	1	2	1	0	3	0	0	2	3	1	0	**15**
No Response	6	5	2	0	0	0	0	0	0	1	1	2	**17**
Total Female	**35**	**24**	**41**	**10**	**0**	**18**	**4**	**11**	**16**	**20**	**14**	**28**	**221**
Total	**78**	**48**	**83**	**23**	**1**	**30**	**5**	**20**	**27**	**27**	**40**	**53**	**435**

Table A23. Number of Respondents by Administrative Districts, Sex and Level of Education who Thinks that the Scarce Species Should be Protected

Level of Education/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
Primary	5	4	14	9	0	3	0	3	4	3	16	5	**66**
Secondary	12	11	15	1	0	6	0	1	2	2	6	9	**65**
Tertiary	25	5	8	1	0	3	0	3	2	1	3	8	**59**
Other	0	3	3	1	0	0	1	2	1	0	1	2	**14**
No Response	1	1	2	1	1	0	0	0	2	1	0	1	**10**
Total Male	**43**	**24**	**42**	**13**	**1**	**12**	**1**	**9**	**11**	**7**	**26**	**25**	**214**
Female													
Primary	4	4	14	5	0	4	2	1	7	6	1	7	**55**
Secondary	15	10	13	4	0	9	1	4	7	9	10	9	**91**
Tertiary	13	8	9	0	0	3	1	6	2	2	3	12	**59**
Other	0	2	4	0	0	2	0	0	0	3	0	0	**11**
No Response	3	0	1	1	0	0	0	0	0	0	0	0	**5**
Total Female	**35**	**24**	**41**	**10**	**0**	**18**	**4**	**11**	**16**	**20**	**14**	**28**	**221**
Total	**78**	**48**	**83**	**23**	**1**	**30**	**5**	**20**	**27**	**27**	**40**	**53**	**435**

Table A24. Number of Respondents by Administrative District, Sex and Age Range who Thinks that Biodiversity is Important

Age Range/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	1	8	14	1	0	4	0	0	9	3	1	4	**45**
20 - 29	10	13	9	2	0	1	2	2	3	5	1	5	**53**
30 - 39	15	11	5	2	0	5	1	3	3	1	3	5	**54**
40 - 49	10	2	14	5	0	7	1	1	5	2	2	3	**52**
50 - 59	3	2	1	4	1	1	0	2	3	3	2	2	**24**
60 and over	2	0	5	4	0	1	0	0	2	3	2	1	**20**
No Response	7	5	2	0	1	0	0	0	3	2	1	5	**26**
Total Male	**48**	**41**	**50**	**18**	**2**	**19**	**4**	**8**	**28**	**19**	**12**	**25**	**274**
Female													
12 - 19	3	9	14	3	1	2	1	3	7	5	3	9	**60**
20 - 29	6	10	8	5	1	4	0	2	7	3	1	7	**54**
30 - 39	16	9	12	3	0	5	1	3	5	3	2	5	**64**
40 - 49	4	8	8	2	1	5	0	0	7	3	0	6	**44**
50 - 59	2	5	5	4	1	0	0	3	0	5	1	4	**30**
60 and over	2	1	2	0	0	0	0	0	3	2	0	1	**11**
No Response	7	5	1	1	0	0	0	0	1	2	0	2	**19**
Total Female	**40**	**47**	**50**	**18**	**4**	**16**	**2**	**11**	**30**	**23**	**7**	**34**	**282**
Total	**88**	**88**	**100**	**36**	**6**	**35**	**6**	**19**	**58**	**42**	**19**	**59**	**556**

Table A25. Total Number of Respondents by Administrative District, Sex and Level of Education who Thinks that Biodiversity is Important

Level of Education/Sex	Administrative Districts												Table Total
	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	
Male													
Primary	4	7	17	12	1	5	1	2	11	7	8	3	**78**
Secondary	13	22	17	3	0	7	1	2	7	5	1	7	**85**
Tertiary	30	6	9	1	0	6	1	3	3	2	2	13	**76**
Other	0	4	5	1	0	1	1	1	3	1	1	2	**20**
No Response	1	2	2	1	1	0	0	0	4	4	0	0	**15**
Total Male	**48**	**41**	**50**	**18**	**2**	**19**	**4**	**8**	**28**	**19**	**12**	**25**	**274**
Female													
Primary	6	13	17	10	2	1	0	0	12	6	0	7	**74**
Secondary	15	19	20	6	1	10	2	6	13	10	5	12	**119**
Tertiary	15	11	6	0	0	3	0	5	4	3	2	13	**62**
Other	0	4	5	1	0	2	0	0	0	2	0	1	**15**
No Response	4	0	2	1	1	0	0	0	1	2	0	1	**12**
Total Female	**40**	**47**	**50**	**18**	**4**	**16**	**2**	**11**	**30**	**23**	**7**	**34**	**282**
Total	**88**	**88**	**100**	**36**	**6**	**35**	**6**	**19**	**58**	**42**	**19**	**59**	**556**

Table A26. Number of Respondents by Administrative District, Sex and Age Range who Thinks That Industries Pose a Threat to Biodiversity

Age Range/Sex	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	Table Total
Male													
12 - 19	0	4	9	0	0	3	0	0	2	3	1	3	**25**
20 - 29	10	8	4	2	0	0	2	2	1	1	0	3	**33**
30 - 39	15	11	5	1	0	4	0	3	0	0	1	3	**43**
40 - 49	9	2	7	4	0	3	0	1	1	0	1	3	**31**
50 - 59	3	2	2	3	0	1	0	2	0	2	2	0	**17**
60 and over	2	0	2	3	0	1	0	0	0	1	1	0	**10**
No Response	7	5	1	0	0	0	0	0	1	0	0	3	**17**
Total Male	**46**	**32**	**30**	**13**	**0**	**12**	**2**	**8**	**5**	**7**	**6**	**15**	**176**
Female													
12 - 19	2	3	9	2	1	2	1	0	1	4	1	5	**31**
20 - 29	6	5	4	5	0	2	0	2	1	2	1	4	**32**
30 - 39	12	6	10	3	0	3	0	2	1	0	1	3	**41**
40 - 49	4	3	6	0	0	3	0	0	3	2	0	5	**26**
50 - 59	2	3	2	3	0	0	0	3	0	2	0	3	**18**
60 and over	0	1	1	0	0	1	0	0	0	0	0	0	**3**
No Response	7	5	1	1	0	0	0	0	0	2	0	1	**17**
Total Female	**33**	**26**	**33**	**14**	**1**	**11**	**1**	**7**	**6**	**12**	**3**	**21**	**168**
Total	**79**	**58**	**63**	**27**	**1**	**23**	**3**	**15**	**11**	**19**	**9**	**36**	**344**

Table A27. Total Number of Respondents by Administrative District, Sex and Level of Education who Thinks Industries Pose a Threat to Biodiversity

Level of Education/Sex	Administrative Districts												Table Total
	Castries City	Castries Suburban	Castries Rural	Anse La Raye	Canaries	Soufriere	Choiseul	Laborie	Vieux Fort	Micoud	Dennery	Gros Islet	
Male													
Primary	3	6	8	9	0	2	0	2	1	2	2	1	**36**
Secondary	12	14	11	2	0	4	1	2	1	3	1	3	**54**
Tertiary	29	6	8	1	0	5	1	3	1	0	2	10	**66**
Other	1	4	2	0	0	1	0	1	1	0	1	1	**12**
No Response	1	2	1	1	0	0	0	0	1	2	0	0	**8**
Total Male	**46**	**32**	**30**	**13**	**0**	**12**	**2**	**8**	**5**	**7**	**6**	**15**	**176**
Female													
Primary	1	4	10	7	0	1	0	0	1	4	0	2	**30**
Secondary	13	8	13	6	1	7	1	2	4	4	3	6	**68**
Tertiary	15	10	6	0	0	1	0	5	1	2	0	12	**52**
Other	0	4	4	0	0	2	0	0	0	0	0	1	**11**
No Response	4	0	0	1	0	0	0	0	0	2	0	0	**7**
Total Female	**33**	**26**	**33**	**14**	**1**	**11**	**1**	**7**	**6**	**12**	**3**	**21**	**168**
Total	**79**	**58**	**63**	**27**	**1**	**23**	**3**	**15**	**11**	**19**	**9**	**36**	**344**

Table A28. Summary of Percentage Responses of Selected Biodiversity Concepts for Sampled Population by Administrative Districts

Administrative Districts	Total Sampled	Heard of the Term Bio-diversity	%	Do you have Reason to Use the Rivers	%	Are Swamps Important	%	Are Forests Important	%	Do you Use Herbal Medicine	%	Do you think that Scarce Species Should be	%	Is Bio-diversity Important to you or your Country	%	Are Industries a Threat to Bio-diversity	%
Castries - City	103	66	8.0	24	2.9	81	9.8	102	12.4	69	8.4	78	9.5	88	10.7	79	9.6
Castries - Suburban	109	53	6.4	33	4.0	68	8.3	109	13.2	60	7.3	48	5.8	88	10.7	58	7.0
Castries - Rural	144	65	7.9	62	7.5	101	12.3	143	17.4	94	11.4	83	10.1	100	12.2	63	7.7
Anse La Raye	39	22	2.7	33	4.0	19	2.3	39	4.7	26	3.2	23	2.8	36	4.4	27	3.3
Canaries	7	2	0.2	4	0.5	0	0.0	7	0.9	2	0.2	1	0.1	6	0.7	1	0.1
Soufriere	48	30	3.6	11	1.3	33	4.0	45	5.5	35	4.3	30	3.6	35	4.3	23	2.8
Choiseul	21	4	0.5	5	0.6	14	1.7	20	2.4	15	1.8	5	0.6	6	0.7	3	0.4
Laborie	43	22	2.7	3	0.4	32	3.9	41	5.0	24	2.9	20	2.4	19	2.3	15	1.8
Vieux Fort	65	21	2.6	26	3.2	31	3.8	61	7.4	33	4.0	27	3.3	58	7.0	11	1.3
Micoud	76	26	3.2	41	5.0	35	4.3	76	9.2	50	6.1	27	3.3	42	5.1	19	2.3
Dennery	71	19	2.3	34	4.1	40	4.9	66	8.0	43	5.2	40	4.9	19	2.3	9	1.1
Gros Islet	97	44	5.3	38	4.6	65	7.9	95	11.5	53	6.4	53	6.4	59	7.2	36	4.4
Total	**823**	**374**	**45.4**	**314**	**38.2**	**519**	**63.1**	**804**	**97.7**	**504**	**61.2**	**435**	**52.9**	**556**	**67.6**	**344**	**41.8**

Table A29. Pearson's Correlation of factors Relating to Biodiversity

Concepts of Biodiversity	Term Bio-diversity	Use of Rivers	Swamps are Important	Forest are Important	Use of Herbal Medicine	Protecting Scarce Species	Importance of Bio-diversity	Industries a Threat to Bio-diversity
Term Bio-diversity	1	0.054	0.218	0.092	0.065	0.202	0.356	0.384
Use of Rivers	-0.054	1	0.031	0.021	0.147	0.065	0.047	0.055
Swamps are Important	0.218	0.256	1	0.151	0.187	0.228	0.276	0.031
Forest are Important	0.092	0.021	0.151	1	0.077	0.13	0.101	0.114
Use of Herbal Medicine	0.065	0.147	0.187	0.077	1	0.233	0.099	0.118
Protecting Scarce Species	0.202	0.065	0.256	0.13	0.233	1	0.271	0.351
Importance of Bio-diversity	0.356	0.047	0.228	0.101	0.099	0.271	1	0.508
Industries a Threat to Biodiversity	0.384	0.055	0.276	0.114	0.118	0.351	0.508	1

Table A30. Number of Banana Farms by Administrative District and Type of Conservation Methods Practiced

Administrative Districts	Contour Drains	Grass Barriers	Stone Barriers	Terraces	Contour Planting	Contour Ridging	Mulching	Other	Total
Castries - City	1	1	1	1	1	1	1	1	**8**
Castries - Suburban									**0**
Castries - Rural	2	1		1	1		1	1	**7**
Anse La Raye			2	2					**4**
Laborie									**0**
Vieux Fort									**0**
Micoud	6		1	1				1	**9**
Dennery	9	2			1				**12**
Gros Islet	1								**1**
Total	**19**	**4**	**4**	**5**	**3**	**1**	**2**	**3**	**41**

Table A31. Number of Respondents Reporting Scarce Species by Type

Administrative Districts	Type of Species					
	Animals	**Birds**	**Fish**	**Plants**	**Insects**	**Not Specified**
Castries - City	36	33	59	47	100	1
Castries - Suburban	19	18	35	29	82	0
Castries - Rural	56	36	58	51	64	1
Anse La Raye	24	12	24	15	2	0
Canaries	1	0	2	1	0	0
Soufriere	17	9	11	7	21	0
Choiseul	1	2	0	0	5	0
Laborie	5	3	10	13	9	0
Vieux Fort	17	9	10	22	13	0
Micoud	20	12	14	11	18	0
Dennery	24	8	20	9	9	0
Gros Islet	18	18	19	24	65	0
Total	**238**	**160**	**262**	**229**	**388**	**2**