

Socio-economic monitoring by Caribbean fisheries authorities for Rose Place, St. Vincent

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1. INTRODUCTION

1.1 SOCMON CARIBBEAN

The Socioeconomic Monitoring Guidelines for Coastal Managers in the Caribbean gives an insightful overview of the origins and objectives of SocMon Caribbean, it states that ‘SocMon Caribbean and its companion, the GCRMN Socioeconomic Manual for Coral Reef Management (GCRMN Manual), developed from a need for a greater understanding of the human dimension of coastal and marine resource management. The GCRMN Manual was released in 2000 at the 8th International Coral Reef Symposium in Bali. SocMon Caribbean, and SocMon Southeast Asia (SocMon SEA), which was released in March 2003, were developed to compliment the GCRMN Manual by providing a simpler, more structured set of guidelines, which can then be tailored to site needs. The two documents are meant to be used together – SocMon for the priority variables to assess, the questions to ask and the tables to analyze the data, and the GCRMN Manual for the details of how to do it.

SocMon Caribbean is the product of substantial collaboration among social scientists and coastal managers in the region. In particular the SocMon Caribbean Advisory Board, which is a balance of social scientists and coastal managers, provided significant project direction and technical input. The SocMon Caribbean goals of socioeconomic information, variables and overall structure were developed by building on SocMon SEA during a mini-workshop held in November 2002 in Tulum, Mexico. Leah Bunce (NOAA/WCPA-Marine) and Bob Pomeroy (University of Connecticut) then developed the ideas into this document. The Board includes: Patrick McConney (Chair, University of West Indies, Barbados), Janice Cumberbatch (University of West Indies, Barbados), Lindsay Garbutt (Friends of Nature, Belize), Vijay Krishnarayan (CANARI, Trinidad and Tobago), Demetrio Martinez (MBRS Project, Belize), Andre Miller (Coastal Zone Management Unit, Barbados), Peter Murray (Organization of Eastern Caribbean States, St. Lucia), Ileana Solares Leal (Sian Ka'an Biosphere Reserve, Mexico) and Manuel Valdes-Pizzini (University of Puerto Rico, Puerto Rico).

SocMon Caribbean is part of a continuing regional program to enhance understanding of communities and their relationship to coastal and marine resources. Coordinated by the University of West Indies, socioeconomic training workshops are planned throughout the region for coastal managers to learn how to use SocMon. These workshops will be followed by the development of socioeconomic monitoring programs at participant sites.’

1.2 SITUATION OVERVIEW

Rose Place, the focus of this Saint Vincent and the Grenadines’ SocMon study, is also referred to as Bottom Town. The area is located just outside of Kingstown, the capital city, and is plagued by a number of environmental and social issues [Appendix 1: Map of Rose Place]. The environmental health issues include high volumes of garbage disposed of on the beach and coastal area, blocked drains, mosquitoes and rats. The origin of the garbage is in contention, since many residents claim that the area is used as a dumping ground by others outside of the community. Some of the garbage finds its way to the community via upstream polluters. In addition to garbage, the community’s human fecal waste is improperly disposed on the beach. This fecal waste is a consequence of the lack of proper toilet facilities for residents of the area, as

well as the squatters on the beach. By all indications, the squatters seem to be on the increase, and their increased presence seems to be a source of conflict in the region.

In addition to these concerns, there are several manmade hazards in the area. The habitations of Rose Place are not only in close proximity to each other but also largely wooden. As such, the storage of gasoline in homes is a major concern. The high number of persons who use candles and kerosene lamps as their primary source of light also represents a fire hazard.

Furthermore, the area is plagued by a high level of physical violence, widespread selling (and abuse) of narcotics, teenage pregnancy, child abuse, general poverty and high unemployment; and given these dire realities, Rose Place is stigmatized by the larger community. Understandably, a consequence of this marginalization has been a lack of long-term planning efforts.

At the same time, Rose Place has several positives. It has a thriving fishing industry, the largest in Saint Vincent and the Grenadines. It also has the potential to be developed into a tourist attraction, capitalizing on its coastal and fisheries resources. Similarly, there are several cultural resources in the area that can be developed. Several prominent persons have originated in Rose Place, and these individuals can be used as role models for the present residents.

1.3 GOALS AND OBJECTIVES

The goals and objectives of the Rose Place SocMon were derived on the second day of the Saint Vincent SocMon Caribbean training workshop (3-5 June 2008). Participants articulated the following goals and objectives for monitoring:

Goal:

To gather baseline socioeconomic information, in order to inform development decision-making and enhance the environmental condition of Rose Place.

Objectives:

1. To use the information to guide development of the area, with specific linkages to the fisheries sector and other relevant projects
2. To minimize the risk of environmental hazards and improve safety standards in the area
3. To reduce use conflicts among user groups
4. To improve public awareness of coastal resources and contribute to responsible environmental management and enhanced environmental conditions

1.4 ORGANIZATION OF REPORT

This report is organized in the following sections:

Section	Description
Section 1: Introduction	This section gives an overview of the SocMon process in Saint Vincent and the Grenadines. It places this study within the Caribbean context, by describing SocMon Caribbean and its relationships to other global initiatives. Section 1 also provides a situation overview and presents the goals and objectives of the Rose Place SocMon project.
Section 2:	Here, we provide a detailed account of the methodology of the Rose

Section	Description
<i>Methods</i>	Place SocMon process. It commences with an account of the Saint Vincent SocMon Caribbean training workshop. It then goes on to describe the preparatory activities and the selection of the SocMon team. Secondary data, used to supplement the primary data collected, is presented along with a portrayal of the key informants. The surveying methodology of households is presented in section 2.6. Observations and other methods are described in this section. A narrative of data entry and analysis is presented in 2.7. Finally, this section concludes with a descriptive account of the use and communication of the data collected.
Section 3: <i>Results</i>	The Results chapter begins with a definition of the study location. It then gives a descriptive account of the community and ecological profile of Rose Place. The results of the survey are presented in accordance with the four objectives and corresponding SocMon variables. The results are primarily presented in diagrammatic and graphical form.
Section 4: <i>Discussion and Conclusions</i>	The Discussion and Conclusion chapter discusses the implications of the results. Contrasts and comparisons of the results are made, using data from other sources. Also, possible reasons for differences are stated. The discussion of the data is done according to the main objectives of the study.
Section 5: <i>Recommendations</i>	This section provides a list of recommendations for the continued monitoring and management of the Rose Place area.

2. METHODS

2.1 SOCMON TRAINING

The Saint Vincent SocMon Caribbean Training workshop was conducted during 3– 5 June 2008. The workshop facilitator was Maria Pena who was assisted by Katherine Blackman, both of the University of the West Indies. The objectives of the workshop were to build capacity in socioeconomic monitoring and to develop a sustainable SocMon site-monitoring plan for the chosen area. A background of the entire Fisheries SocMon project, including accounts on funding, duration, project management and its overall goals and objectives was also presented.

The training also focused on the SocMon Caribbean methodology for collecting and analyzing basic socioeconomic data for coastal management. The SocMon Caribbean guidelines and socioeconomic manual were heavily consulted by participants. The four phases of SocMon Caribbean methodology—namely, preparatory activities, planning and reconnaissance, field data collection and data analysis—were explained in detail with the aid of previous studies. Other SocMon projects in the Caribbean were also presented to illustrate the applicability of SocMon.

Participants who represented various stakeholder and government ministries (Appendix 2: List of Participants in SocMon Training Workshop) presented an overview of the chosen area, Rose Place, including its activities and issues. As a consequence of this process, a number of primary issues were identified (Appendix 3: List of Primary Issues Identified in Training Workshop).

Before commencing an onsite visit, participants of the workshop defined the boundaries of the study area and articulated the goals and objectives for monitoring, based on their interests. Initial suggestions for the goals and objectives of the Rose Place SocMon included the following elements (Pena 2008):

- Collecting socioeconomic data
- Reducing safety risks (such as the storage of fuel on the beach)
- Minimizing environmental risk
- Enhancing environmental conditions
- Guiding regulations for putting infrastructural improvements in place

These elements were later refined into the final goals and objectives.

It was also determined that the Saint Vincent and the Grenadines' Fisheries Division of the Ministry of Agriculture and Fisheries would have joint ownership of the SocMon project with the Goodwill Fishermen's Co-operative. Yet, the Goodwill Fishermen's Co-operative would play the lead role. The SocMon team and their responsibilities were also determined.

Finally, a draft-monitoring plan was produced, forming the basis for the socioeconomic monitoring plan for the study area.

2.2 PREPARATORY ACTIVITIES

In preparation for this study, several planning and reconnaissance activities were carried out. The area was visited during the training workshop. Two additional visits were made to assist in the designing of the sampling plan. In addition, a number of planning meetings were held by the SocMon team.

2.3 SOCMON TEAM

The following responsibilities and leadership positions were identified in the training workshop:

Skill / Responsibility on Team	Member and Affiliation
Community Liaison/Leader	Junior Cottle, Community member
Deputy Team Leader	Jennifer Cruickshank, Deputy Team Leader (Fisheries Division)
Community Mobilization/Data Collection	Trava Castello
Communications/Public Relations	Lyndon Moss (Goodwill Fishermen's Cooperative)
Communications/Public Relations	Mark Dennie
Team Support/Local Advisor	Don O'Garro (Community Member)
Data Collection/Questionnaire Design	Lucine Edwards (Fisheries Division CRFM)
Data Collection	Lynette Glasgow
Data Analyst	Cheryl Jardine Jackson
Questionnaire Design	Nyasha Hamilton (Ministry of Health and Environment)
Social Worker/Counseling	Leopold Thomas
Local Advisor	Calvin Lampkin (Goodwill Fishermen's Cooperative)
Questionnaire Design and Data Collection	Dale, Samuel

2.4 SECONDARY DATA

A thorough review was conducted, using documents related to the variables to be monitored. Some of the sources of information were identified during the training workshop. In addition to information on the variables to be monitored, documents on the historical development of Rose Place were consulted. Other information on the coastline of Kingstown, such as its ecology and associated data from governmental fisheries resources, were used as secondary sources of information. Unfortunately, it was concluded from the reviews that secondary sources were insufficient to provide adequate and precise information on the identified variables. Most of the information was dated as well as failed to offer a complete picture of the socioeconomic conditions on the ground.

2.5 KEY INFORMANTS

Possible key informants were identified in the training workshop. Some of these were not consulted because of their busy schedules and the desire to avoid duplication of information. The key informants represented a cross-section of persons knowledgeable about the community, and also represented specific knowledge on key stakeholders (Appendix 4: List of Key Informant Interviews). The information gained from key informants was cross-checked with that of the secondary sources. In many cases, the key informants added more pertinent information than the secondary sources. Again, however, it was agreed that the combination of secondary sources and key informants did not provide enough specific information on the variables of the study.

2.6 SURVEYS OF HOUSEHOLDS

The target population for the survey was residents of Rose Place. Specifically, the focus was heads of households in Rose Place. It was decided by the SocMon team that the information required would be better gained from surveys at the household level. The number of households to be interviewed was decided using the sampling approach of the Global Coral Reef Monitoring Network (GCRMN) Manual (Bunce et al. 2000). From secondary sources that had been consulted, the population of the area was determined to be between 200-300 persons, depending on the source (Grant 2004). The lower estimate of 200 persons was used to determine the number of households to be surveyed. Using the formula in the GCRMN Manual, it was deemed that 40 households was a scientific sample size.

Given the nature of the variables to be monitored, it was also decided that the results needed to be statistically representative of the community. This is especially true, since the goal of the project was to guide development of the area. A random sampling method was determined to be appropriate. A sketch map of the area was drawn using base maps obtained from secondary sources, as well as aerial photographs and satellite images. The assistance of key informants and knowledgeable community members also provided essential information in the formation of the sketch map.

From the map, each occupied house was assigned a number. It was then decided that interviews would be conducted in houses assigned every third number in the numbering system (we surveyed house 1, 4, 7, etc.). This provided a random, geographically representative sample of the community.

The surveys were conducted by two community members who were trained to collect the data (Appendix 5: Outline of Training of Data Collectors). The SocMon team decided that using community members to collect information served many purposes. First, it involved members of the community and hopefully would contribute to increased community participation, if not ownership, of the process and results. Second, it was believed that using community members as data collectors would increase the residents' comfort with the surveyor and improve the accuracy of information collected. The data collectors spent approximately 10 days in the field collecting the data. Each questionnaire was coded with the initials of the surveyor as well as the number of the dwelling surveyed. This was a precautionary measure in case any of the information was not clear to the person analyzing the data. It presented an easy way to verify the information.

The instrument used in the survey was a questionnaire (Appendix 6: Survey Instrument). The questionnaire was designed by three members of the SocMon team. The questionnaire was then presented to the entire SocMon team on multiple occasions via email, and discussed at two meetings of the team. It was modified on several instances to account for the inputs and concerns of the team members and technical advice provided by CERMES. The questionnaire was then pre-tested on three members of the community. Again, modifications were made as community members who participated in the pre-tests expressed concerns about the language, style and arrangement of some of the questions. Final modifications were made after the pre-test. The pre-test also provided valuable information on the priority of issues of the residents.

The questionnaire was divided into six sections. Section 1 sought to collect information on the physical environment of the area and issues of concern to residents. This information was used to fulfill objectives 1 and 4. Section 2 focused on natural resource usage and perceptions, and was instrumental in providing data for objectives 3 and 4. Section 3 addressed household information and is essential in the realization of objectives 1 and 4. Section 4 focused on material style of life and made contributions to objective 1. Sections 5 and 6 dealt with livelihood and economic activities, and demographics. The two sections provided information on baseline socioeconomic and demographic data of Rose Place. This primary information will make a significant contribution to our knowledge of Rose Place, since most of the present data is at least five years old.

The questionnaires consisted of a total of 71 questions. A handful of questions were open-ended, but most were closed, to keep the data entry process as simple as possible.

The final section of the questionnaire consisted of information to be collected by observation. Again, the data collectors were told what to look for. The observation method was used to acquire information mainly on the physical makeup of the respondent's homes. The respondent's gender was also included in this section.

2.8 DATA ENTRY AND ANALYSIS

The data from the various sources were compiled and analyzed to produce this report. The information gathered from the key informants as well as the secondary sources were consulted and analyzed. Field notes from surveyors were also part of the analysis.

The analysis of the quantitative data was done using analysis worksheets. Each questionnaire was given a number code and the information from the questionnaire was input into the analysis sheet in Microsoft Excel. The analysis sheet was then graphed directly in Excel, producing various charts and figures.

2.9 COMMUNICATION FOR USE

The information collected from this SocMon project will be presented in various formats for the intended audiences including policy makers, governmental officials, the international community, the Rose Place community, non-governmental developmental organizations and students and teachers. It is envisaged that the main document will be this report. However, a synopsis of this report will be available in brochure form for members of the community. In addition, there will be several presentations on the findings of this report, including town hall meetings, radio discussions, community meetings and high school presentations. The presentation will be presented in visual slides and a PDF of slides added to project website.

3. RESULTS

3.1 SITE LOCATION

Rose Place, better known as Bottom Town, is located on the northern end of the capital of Saint Vincent and the Grenadines, Kingstown. It is bounded by Tyrell Street (or Back Street) on the north. Its southern boundary is the 68.58-meter to the sea and its eastern boundary is McCoy Street. On the west, the road to Edinboro (via Nine Steps) completes the community. [Appendix 1: Map of Rose Place]

3.1.1 COMMUNITY AND ECOLOGICAL PROFILE OF ROSE PLACE

The area boasts one of the most popular fishing villages in Saint Vincent and the Grenadines, and the only landing site in Kingstown. There are about 105 registered fishing vessels based at the Rose Place landing site. Fishermen at the landing site have expressed some difficulty in the beaching of their boats due to the large number of boats and the limited space available.

According to various estimates, Rose Place has a population of approximately 132 households (Grant 2007). The population is almost equally divided between males and females with 176 males and 163 females (Grant 2007)¹. The population changes regularly over time, because of both in and out migration.

Houses in this community are old and of a 'shanty' nature. The houses indicate neglect and high levels of poverty. In addition, most houses lack proper toilet and garbage disposal facilities.

As mentioned before, the community also has a plethora of social ills, such as high levels of physical violence and crime, the selling of narcotics, drug abuse, teenage pregnancy, child abuse and high unemployment.

There is a dearth of information about the ecology and habitat type of this site. Anecdotal information suggests a mostly sandy habitat. Rose Place was one of the areas in Kingstown that was affected by the recent storm surge from Hurricane Omar. A preliminary assessment has indicated the area suffered from some flooding, erosion and damage to some properties and businesses. Damage assessments are continuing.²

The Organization of Eastern Caribbean States (OECS) Caribbean Community Climate Change Center (CCCCC) has a video monitoring site about 0.3 km away from Rose Place. The monitoring site's purpose is to determine the impact of changing climate on the coral reefs of the area.

There are a total of three city drains and drainage lines at different locations along the beach, as well as one river mouth. During heavy rains, large quantities of debris from upstream run into the area. A sewerage pipeline, which runs close to the Bottom Town area, deposits its waste several miles out into the sea.

¹ This source was used since it was the most current. It should also be noted that the population census gives information on Kingstown not of its component parts.

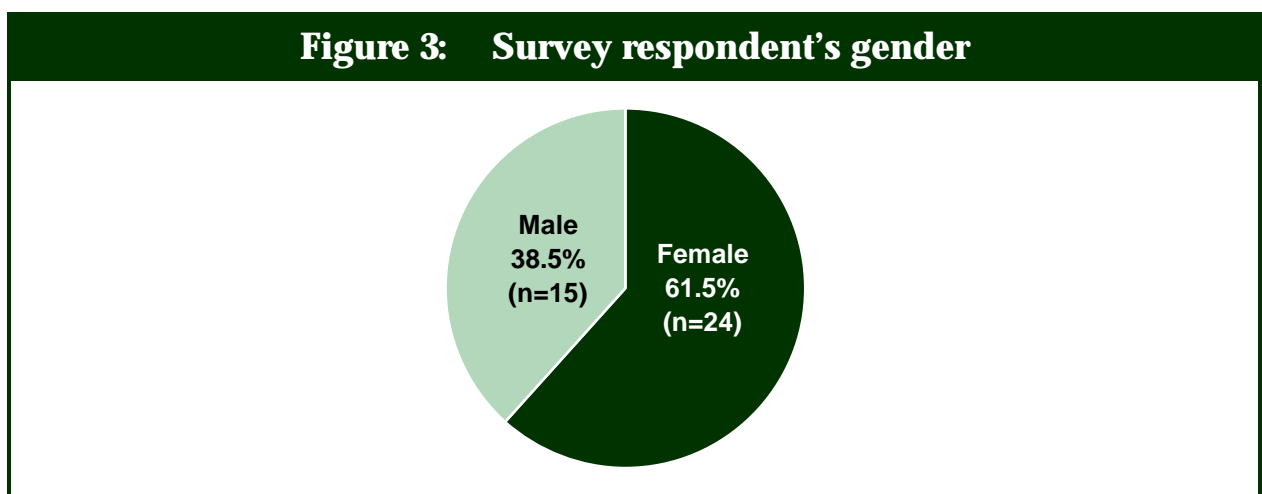
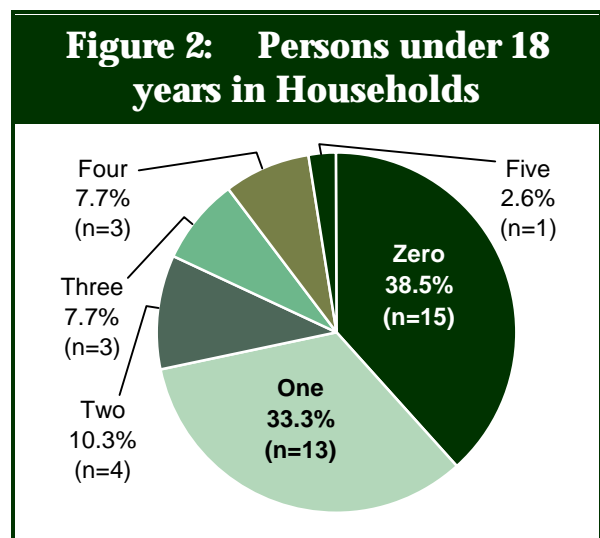
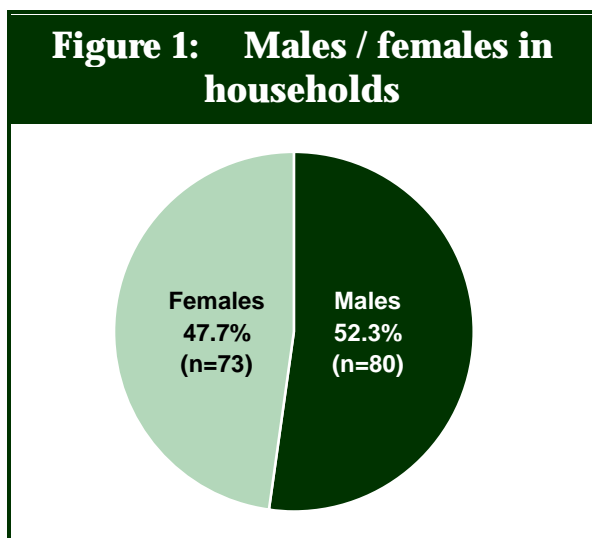
² Caribbean Disaster Emergency Association (2008) http://www.cdera.org/cunews/sitrep/article_2252.php

There are several businesses in the area, including a gas station, a fishermen’s co-operative, a boat yard, a hardware store, shops, and a laundry. Additionally, the youth department building and some churches also share the area. Recently, a shelter for homeless persons was opened.³

3.2 GUIDING DEVELOPMENT IN ROSE PLACE

In achieving the intentions of objective 1 the following variables were deemed important. The variables were household demographics, household livelihood activities, the education levels of residents of the community, housing and living conditions, the major issues affecting Rose Place and the community’s perceptions on governance. This section represents important socioeconomic baseline data that will be essential in future monitoring of the area. The results of the survey of the variables are presented in graphical form below.

3.2.1 HOUSEHOLD DEMOGRAPHICS



³ The Vincentian, Friday Nov 7th 2008.

Figure 4: Survey respondent's position in the household

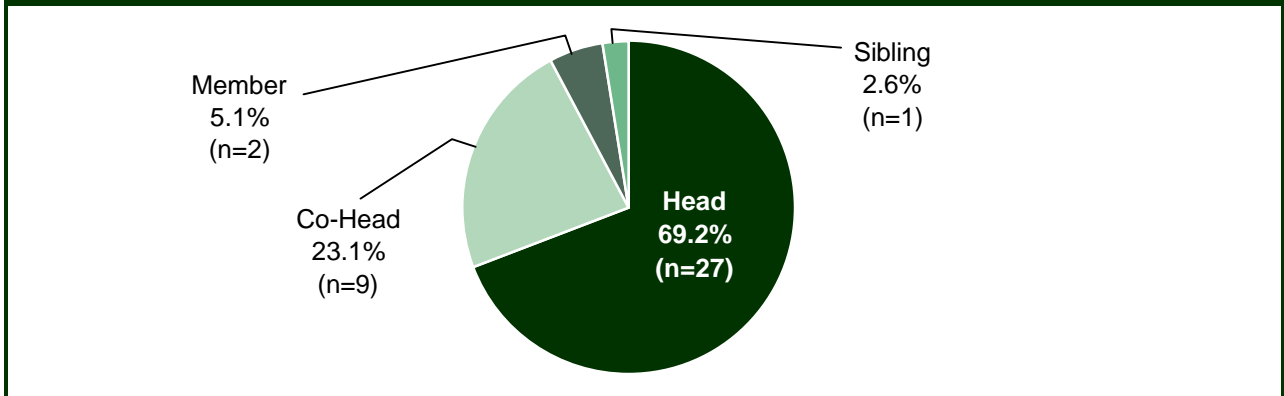


Figure 5: Household size by gender

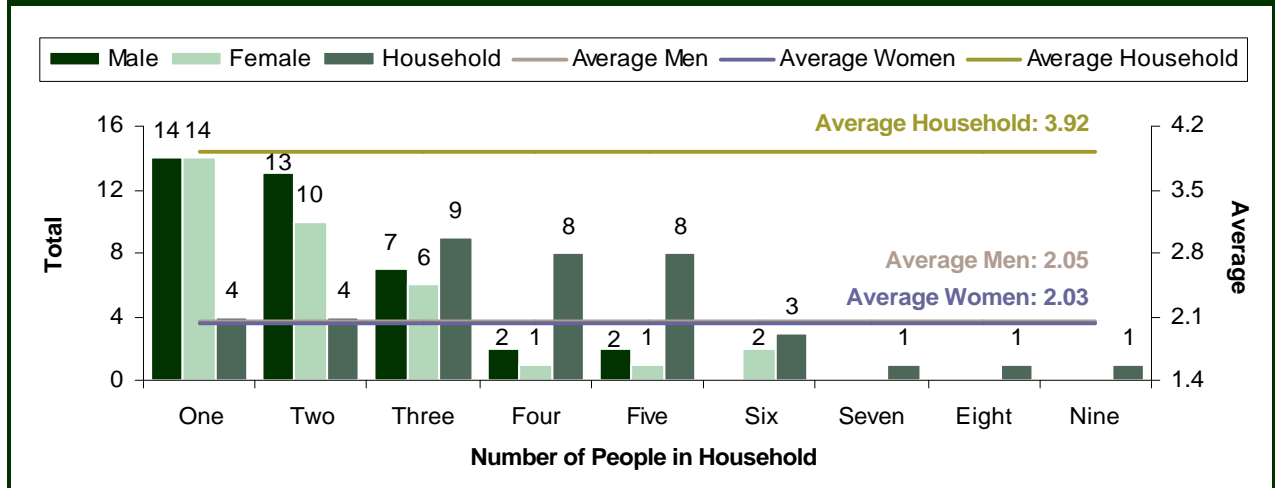


Figure 6: Residence in the community by years

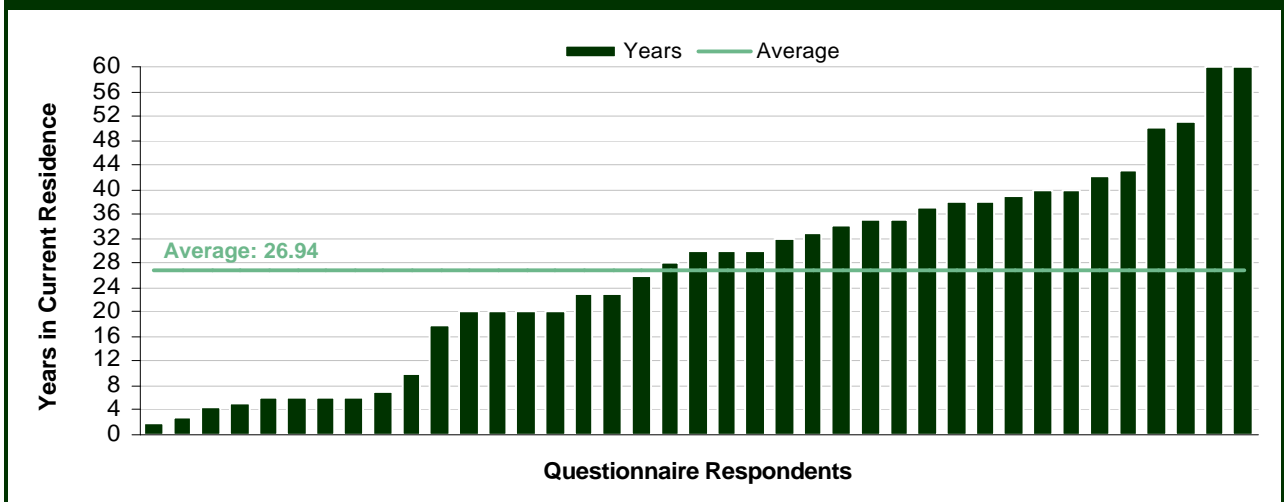
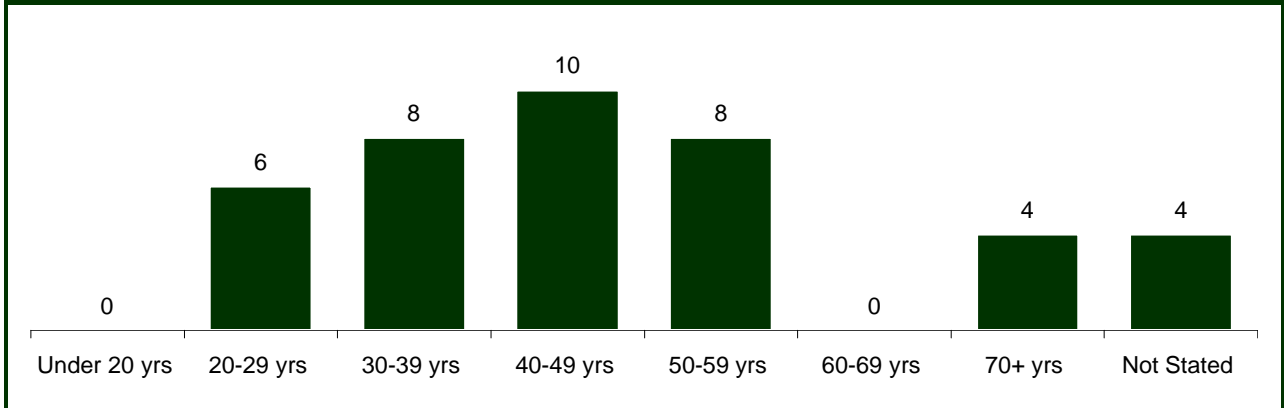


Figure 7: Age of the respondents



3.2.2 HOUSEHOLD LIVELIHOOD ACTIVITIES

Figure 8: Engagement in livelihood activities and location of those activities

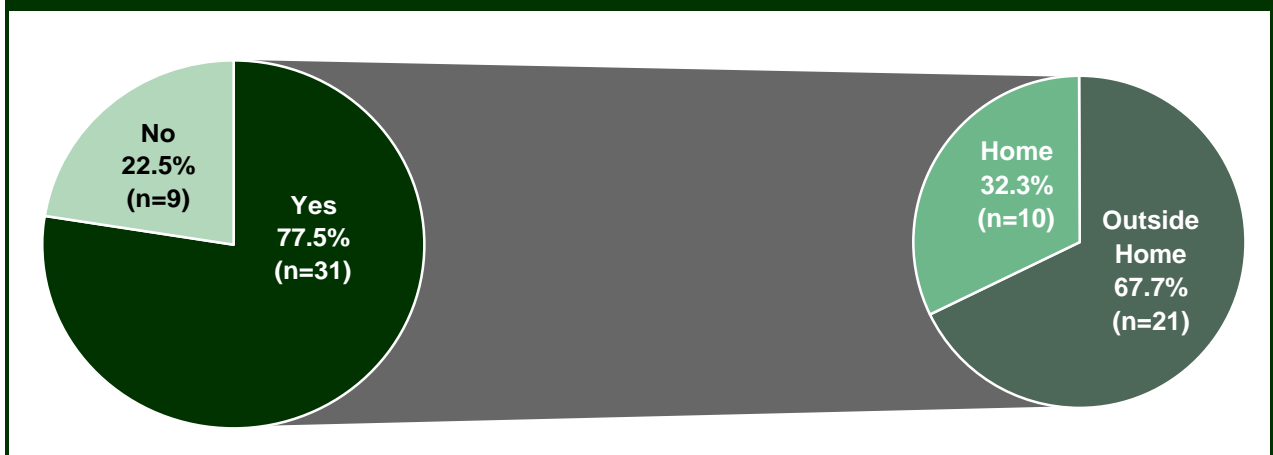


Figure 9: Livelihood Activities of Residents

Primary Livelihood Activity	%	Frequency	Secondary Livelihood Activity	%	Frequency
Fishing	21.9%	7	Vendor	31.3%	5
Government Job	15.6%	5	Gambling	12.5%	2
Shopkeeper	9.4%	3	Mechanic	12.5%	2
Private Sector Worker	9.4%	3	Cleaner	12.5%	2
Vendor	6.3%	2	NIS Income	6.3%	1
Boyfriend Support	6.3%	2	Fishing	6.3%	1
Farming	6.3%	2	Farming	6.3%	1
Welding	3.1%	1	Car Washing	6.3%	1
Janitor	3.1%	1	Taxi Driver	6.3%	1
Mechanic	3.1%	1		100.0%	16
Carpentry	3.1%	1			
Road Supervisor	3.1%	1			
Push Cart	3.1%	1			
Cook	3.1%	1			
Work in Supermarket	3.1%	1			
	100.0%	32			

Figure 10: Income assistance by other members of the household and age of those assisting individuals

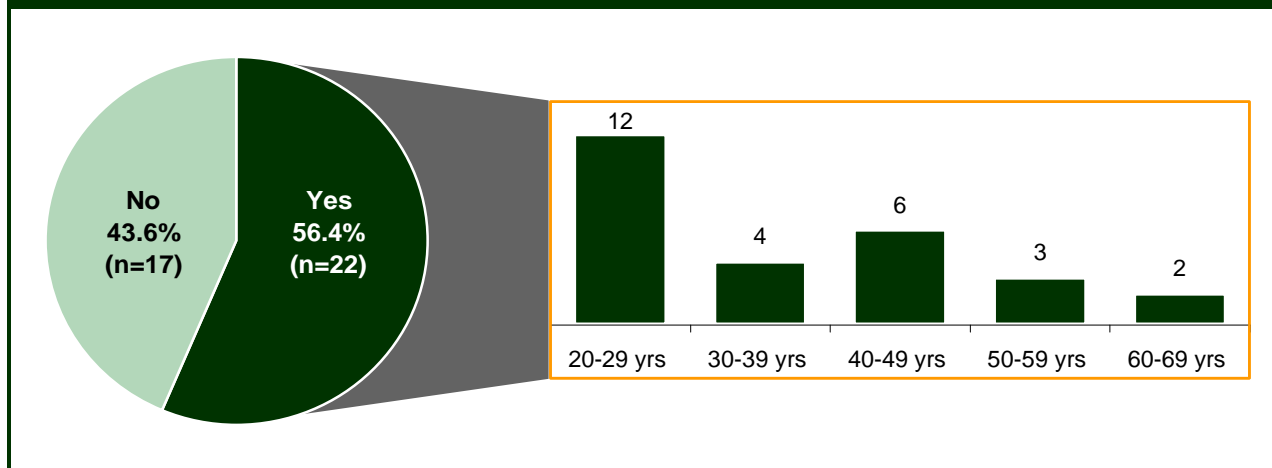
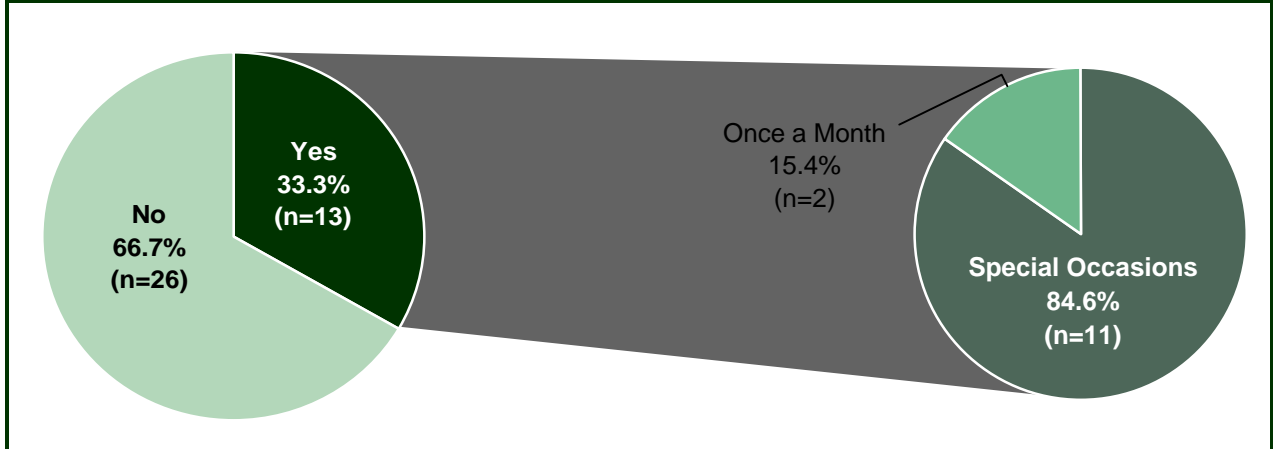
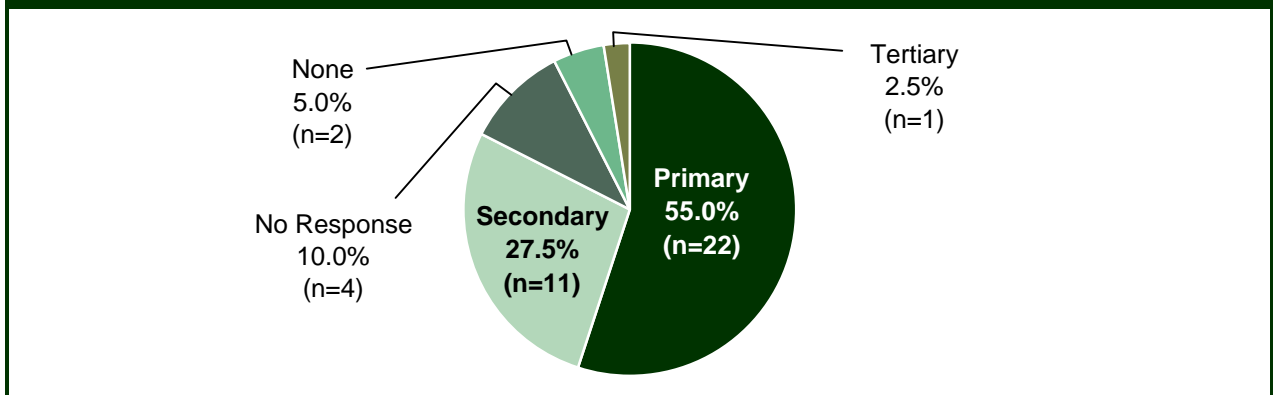


Figure 11: Incidence of foreign remittances and frequency of assistance



3.2.3 EDUCATION LEVELS

Figure 12: Highest level of education of residents surveyed



3.2.4 HOUSING AND LIVING CONDITIONS

Figure 13: Ownership / renting of material goods

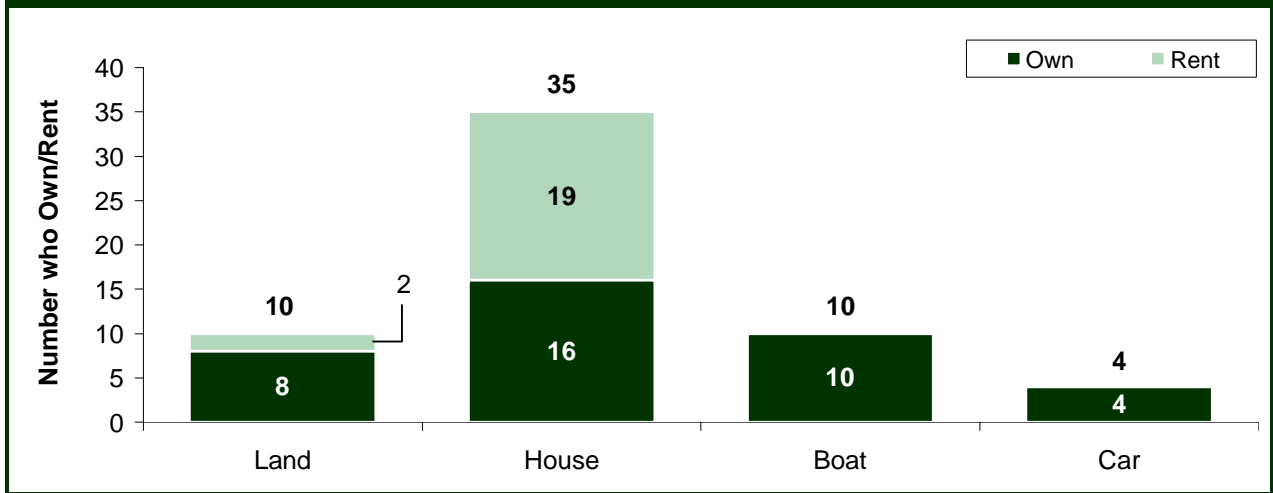


Figure 14: Type of roof of structures in Rose Place

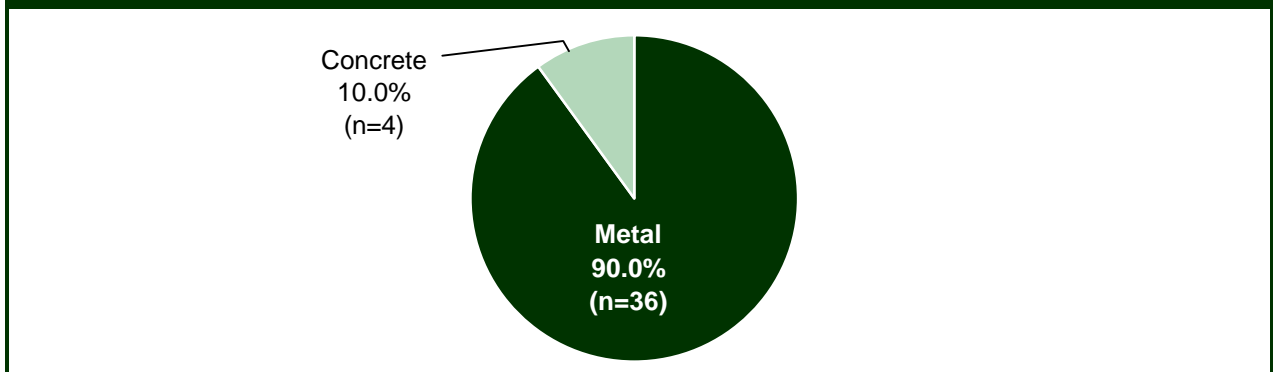


Figure 15: Material of the outside wall of structures

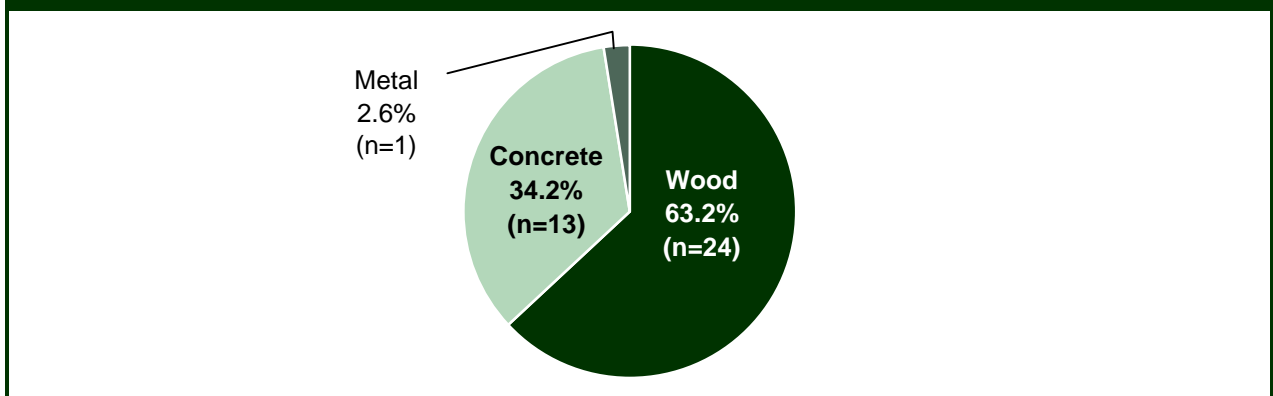


Figure 16: Main sources of power / energy

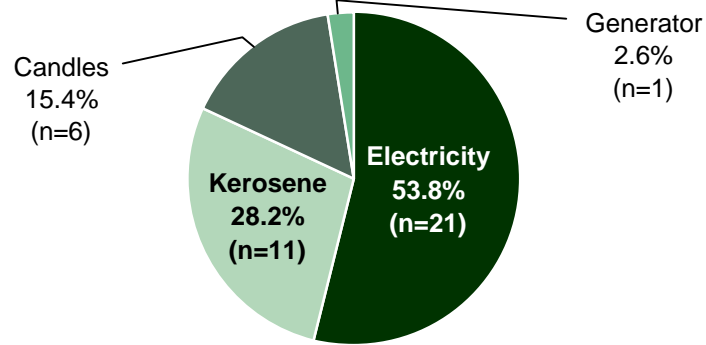


Figure 17: Sources of water for domestic use

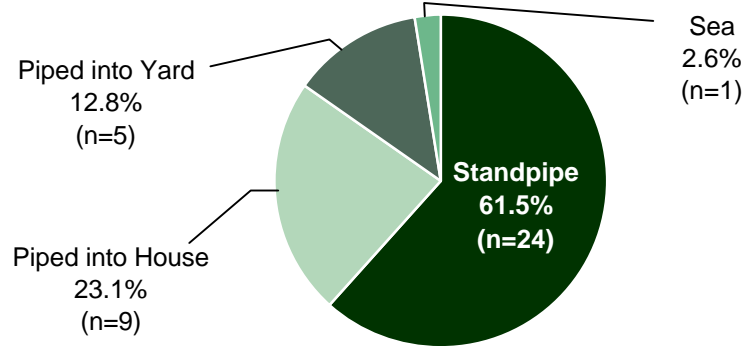
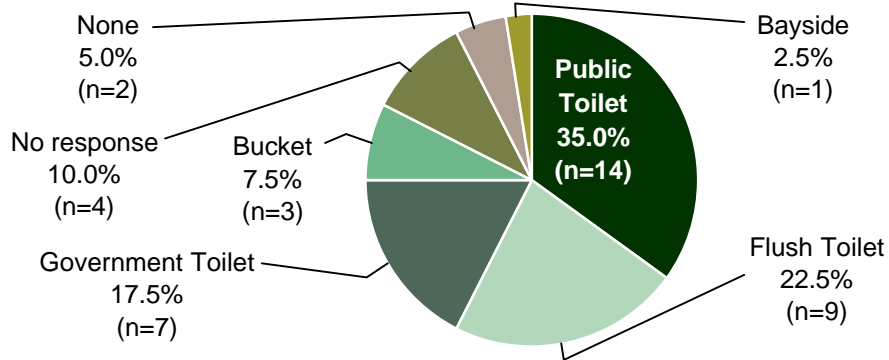
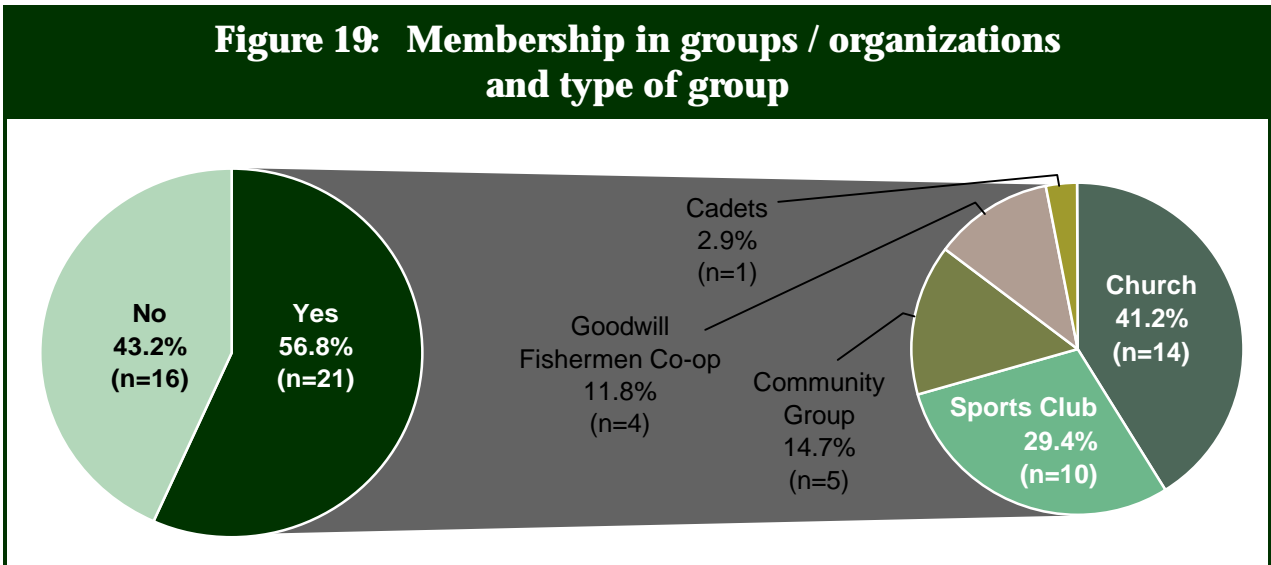


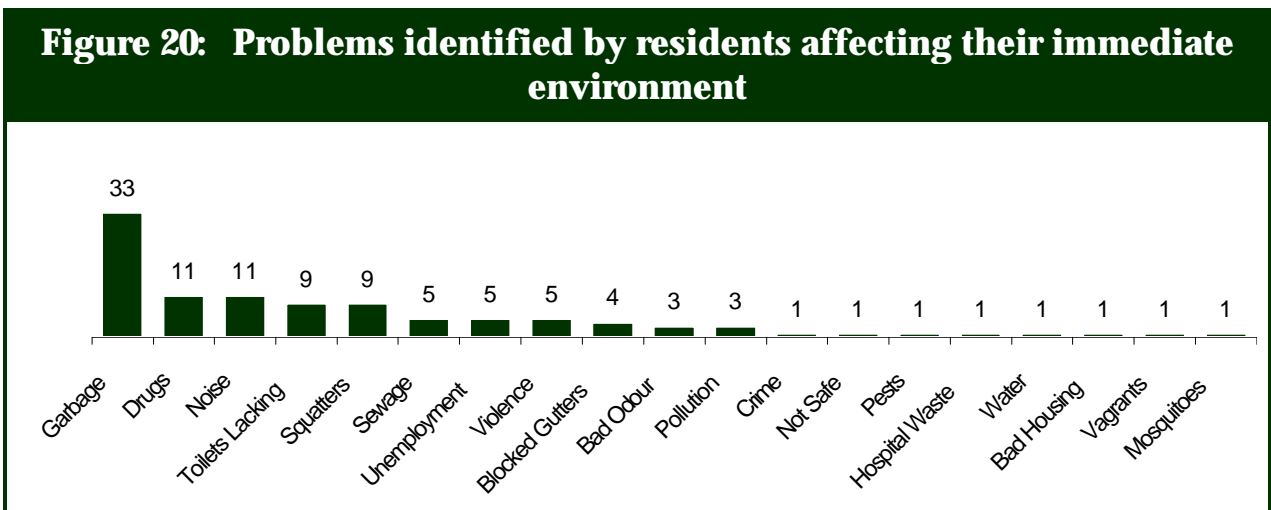
Figure 18: Type of toilet facilities in homes



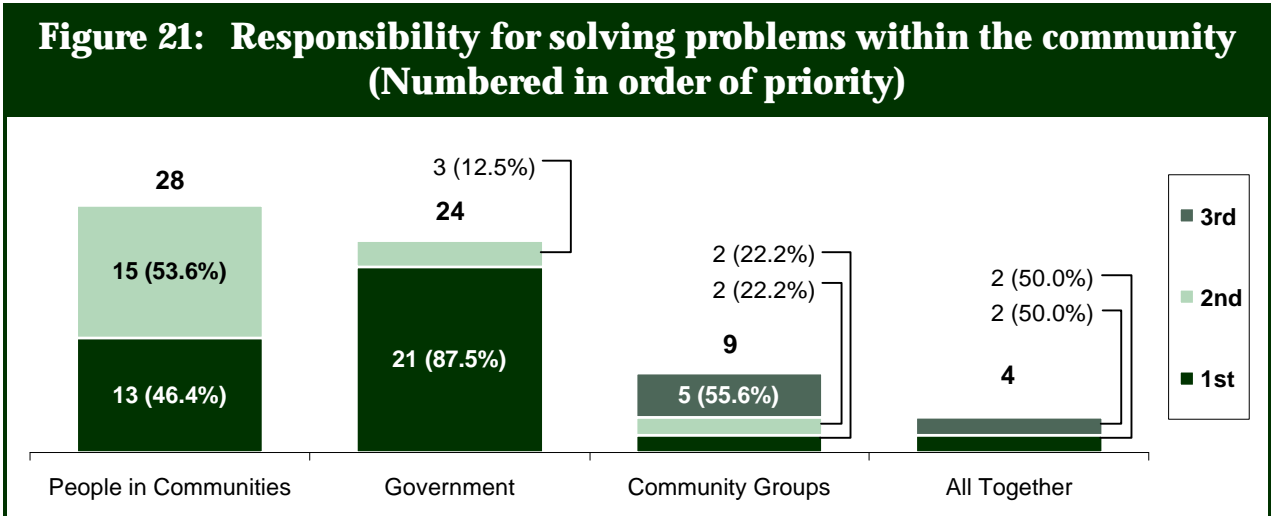
3.2.4 MEMBERSHIP IN COMMUNITY ORGANIZATIONS AND SOCIAL SUPPORT SYSTEMS



3.2.5 MAJOR ISSUES AFFECTING ROSE PLACE



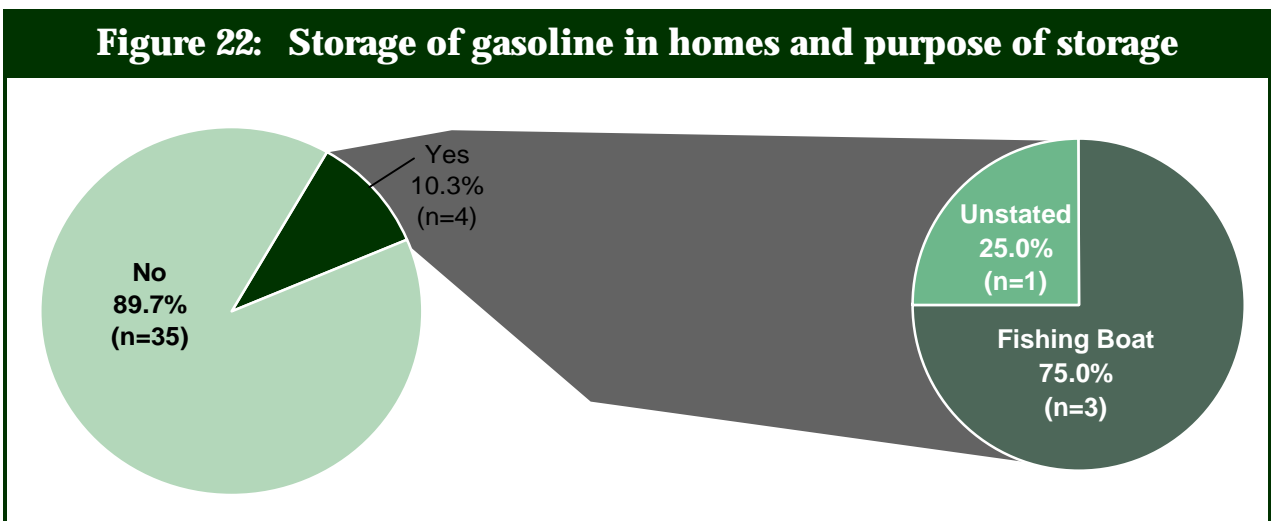
3.2.6 PERCEPTIONS ON GOVERNANCE



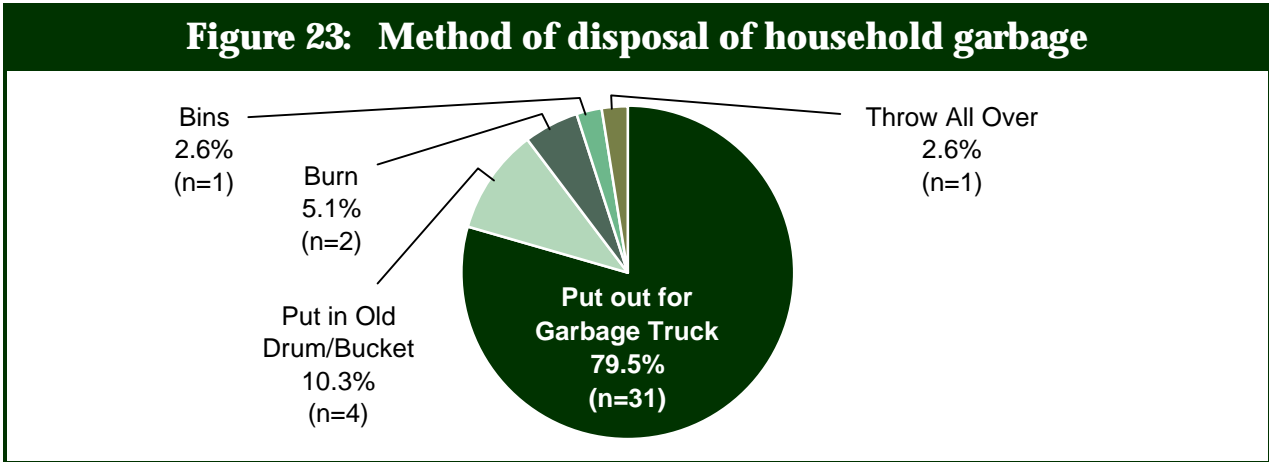
3.3 REDUCING RISKS AND IMPROVING SAFETY STANDARDS IN ROSE PLACE

The collection of information on three variables was identified as applicable to the community in the achievement of the reduction of risks and improving safety standards in the community. The variables are 1) the storage of gasoline in the home, 2) method of household waste disposal and 3) the improper disposal of human fecal waste. The results are presented below.

3.3.1 ENVIRONMENTAL RISKS AND HAZARDS



3.3.2 DISPOSAL OF HOUSEHOLD WASTE



3.3.3 IMPROPER FECAL WASTE DISPOSAL

Residents identified lack of toilet facilities as one of the problems affecting the community (Figure 20, page 22)

3.4 RESOURCE USE CONFLICTS IN ROSE PLACE

Information on resource use conflicts was gathered on the following variables of resource use: coastal livelihood activities, squatting, and environmental justice. The results are presented graphically below.

3.4.1 RESOURCE USE

The use and frequency of the use of the sea is presented below:

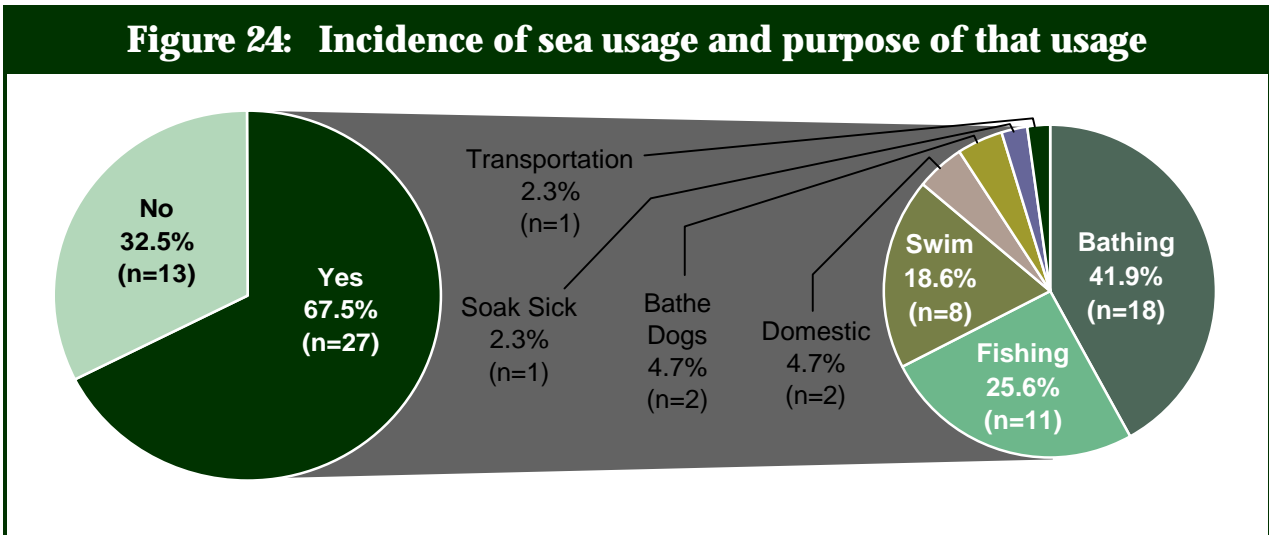
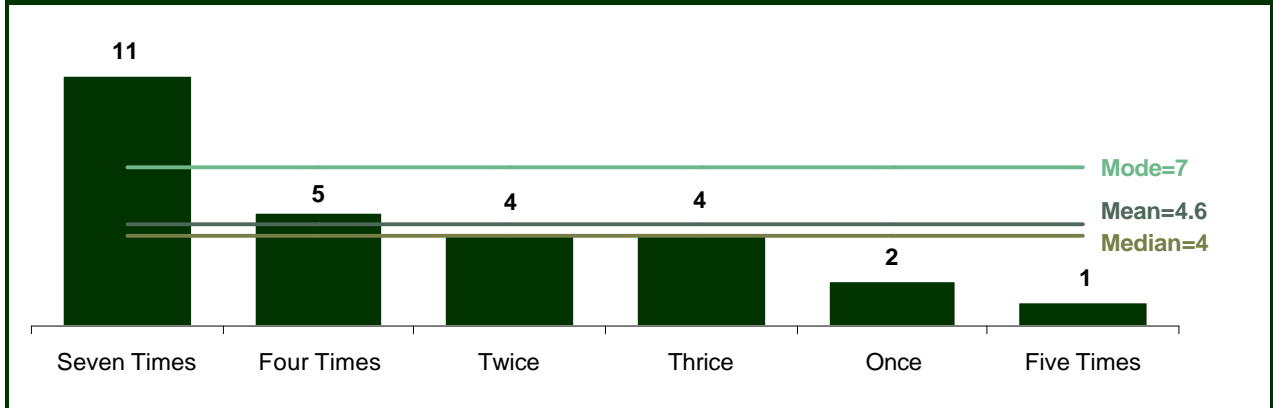


Figure 25: Frequency of use of the sea per week



3.4.2 COASTAL LIVELIHOOD ACTIVITIES

Figure 26: Incidence of fishing and number of years of those who fish

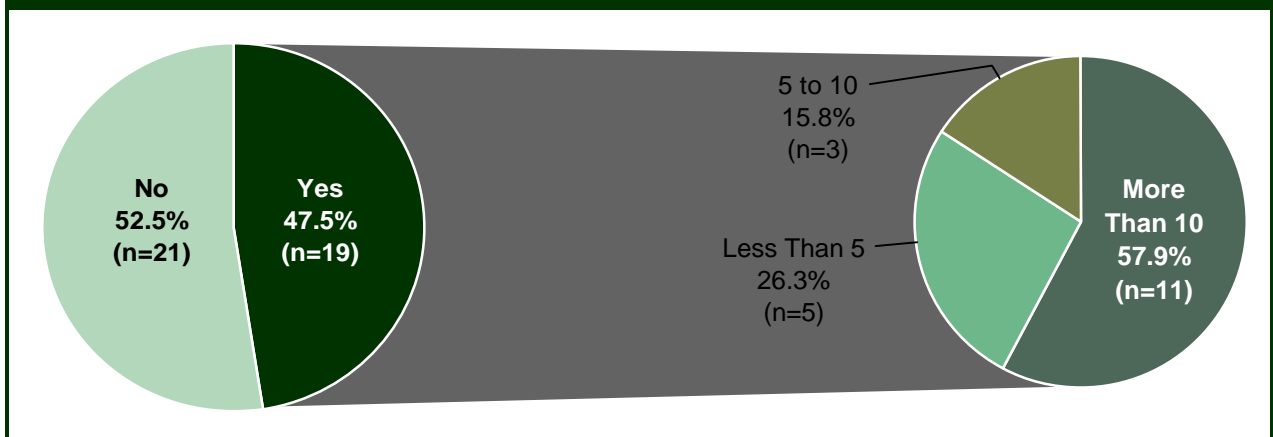


Figure 27: Purpose of fishing

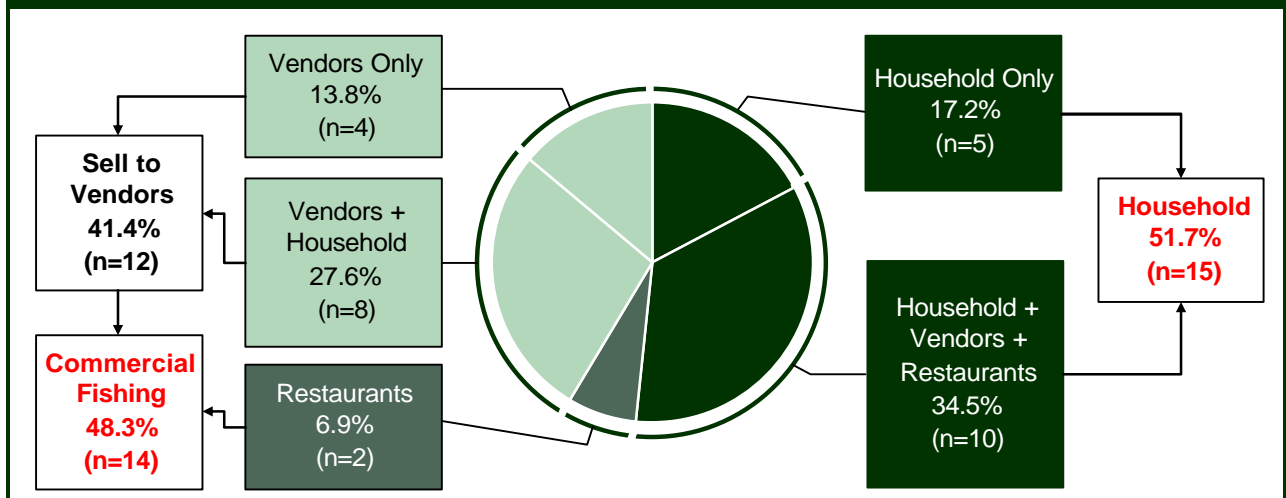


Figure 28: Consumption of fish and frequency per week

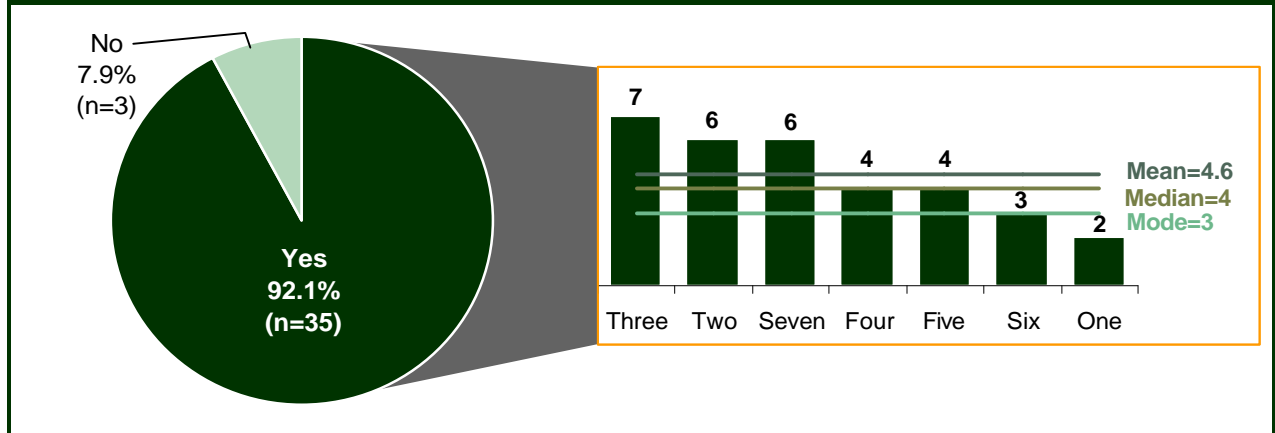
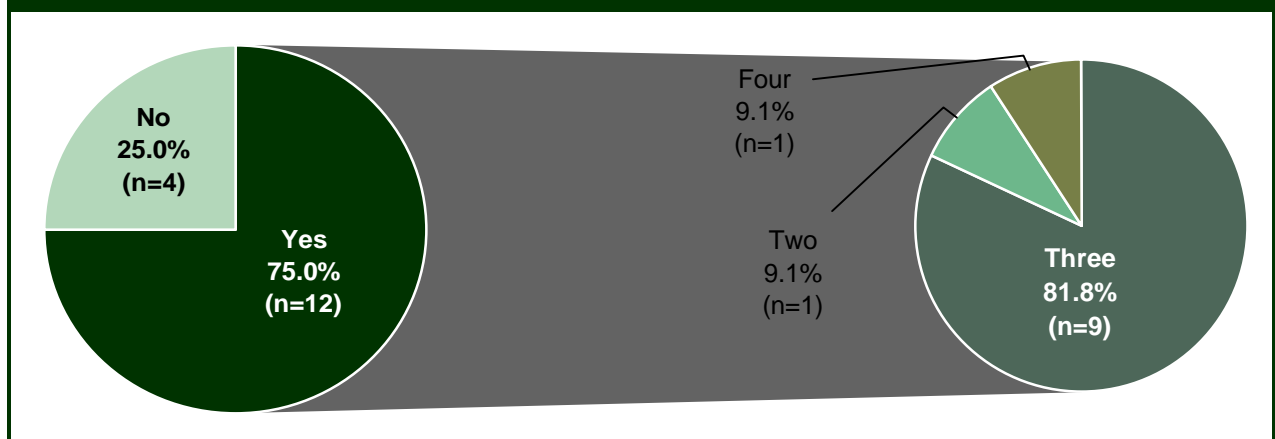


Figure 29: Boat crew membership among those who fish and number in crew



Note: One person did not respond to the follow-up question on how many were in the crew.

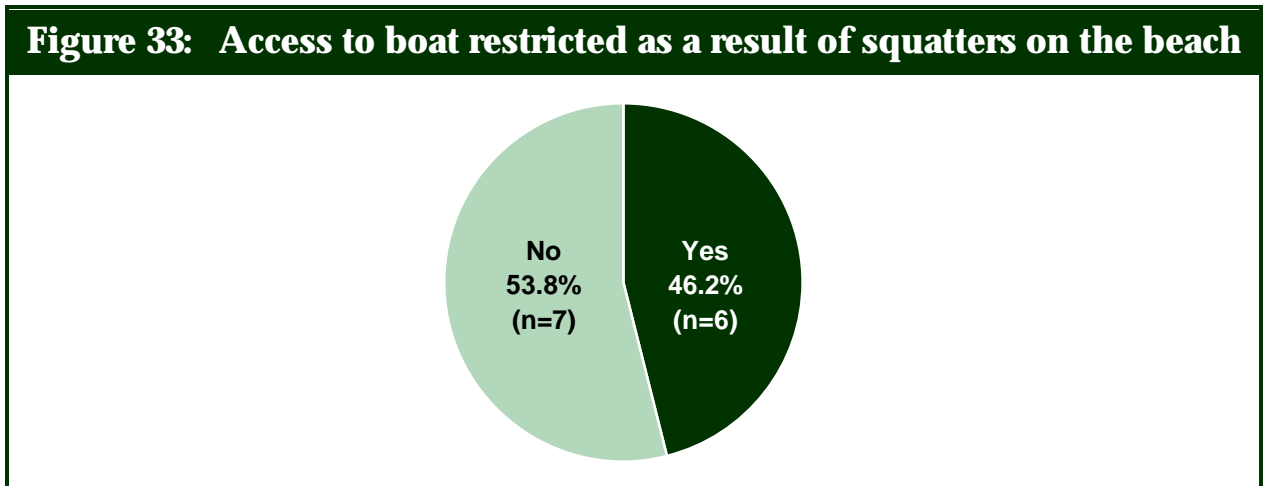
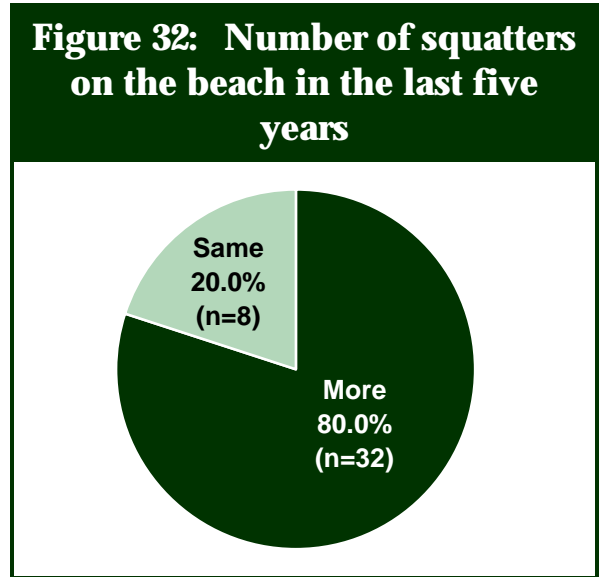
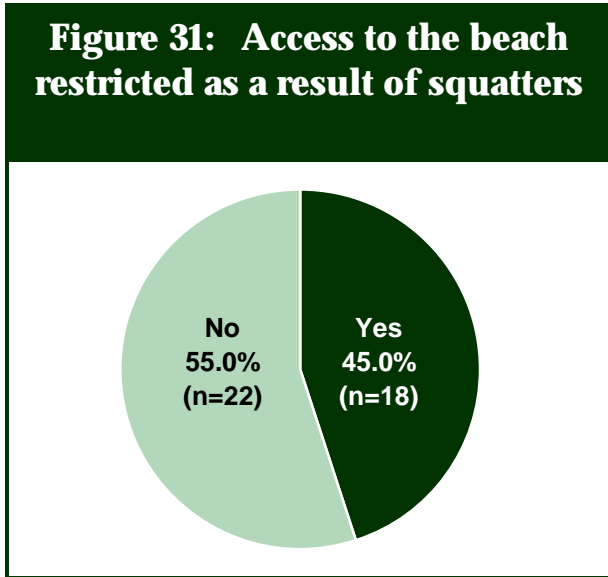
Figure 30: Boat ownership among those who fish and type of boat



Note: One person had two boats.

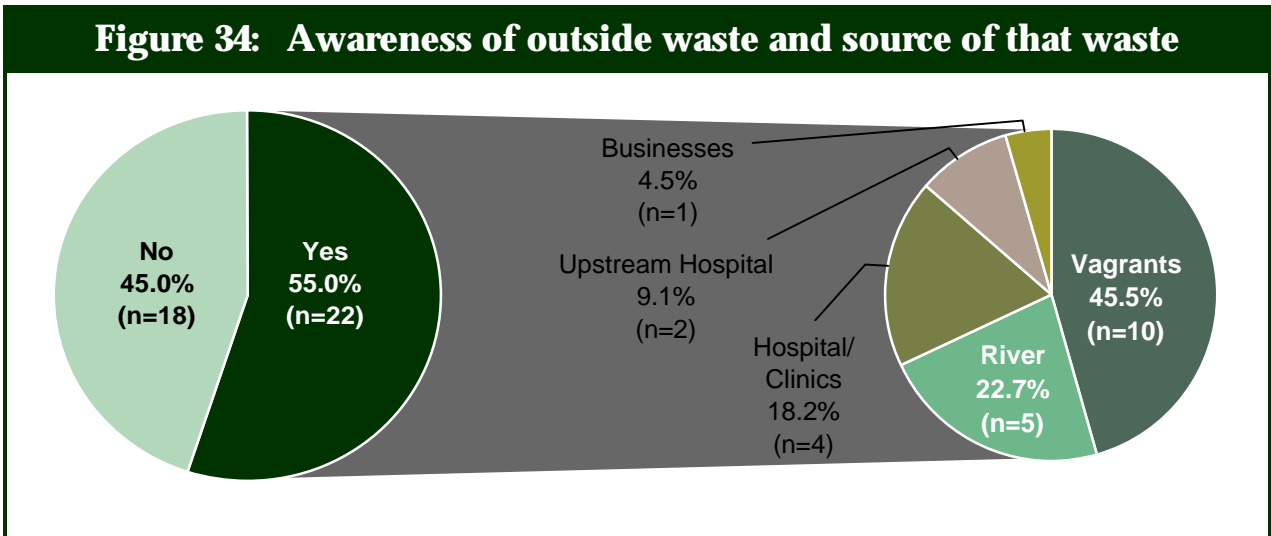
3.4.3 SQUATTING AND SQUATTERS

Squatting was identified as a major user conflict in the area. The results of the survey are below:



3.4.4 ENVIRONMENTAL JUSTICE

The chart below depicts the awareness of residents of disposal of waste in the area from outside sources.



3.5 PUBLIC AWARENESS, COASTAL RESOURCES AND ENVIRONMENTAL MANAGEMENT IN ROSE PLACE

Perceptions of the coastal environment, suggestions for the improvement of the coastal environment and knowledge of environmental regulations were the variables that were chosen to fulfill the fourth objective. The results of the survey are presented below.

3.5.1 PERCEPTIONS OF COASTAL ENVIRONMENT

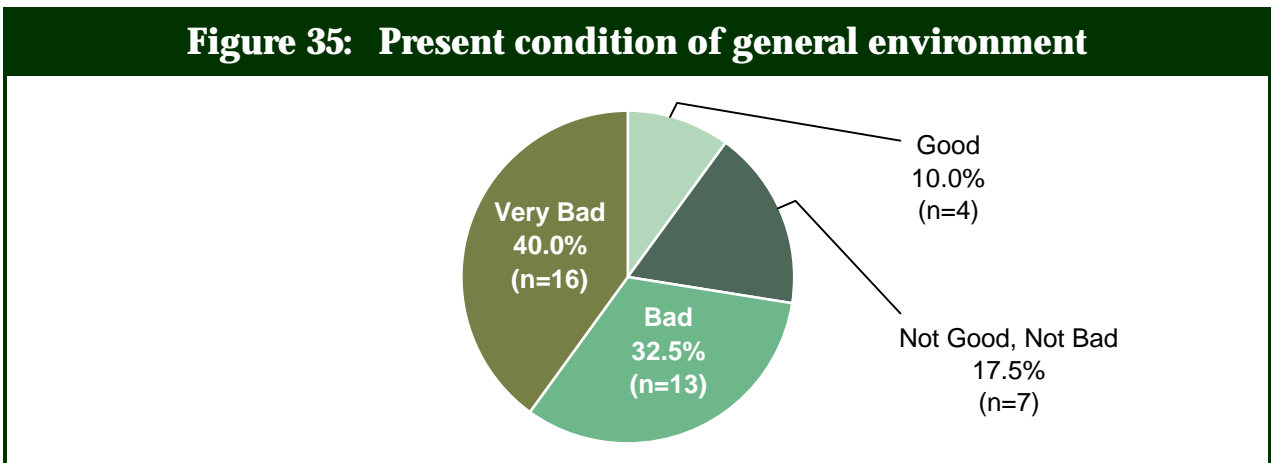


Figure 36: Present condition of the beach

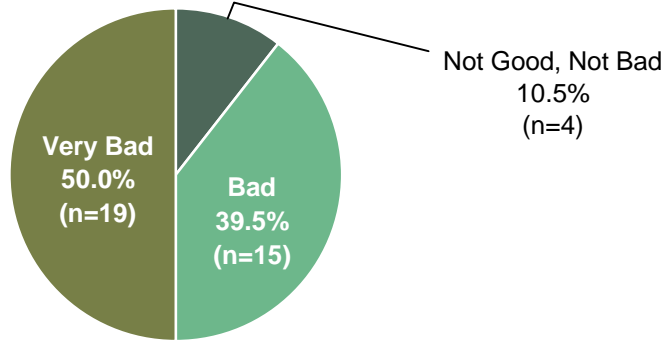


Figure 37: How general conditions have changed from 5 years ago and cause of that change

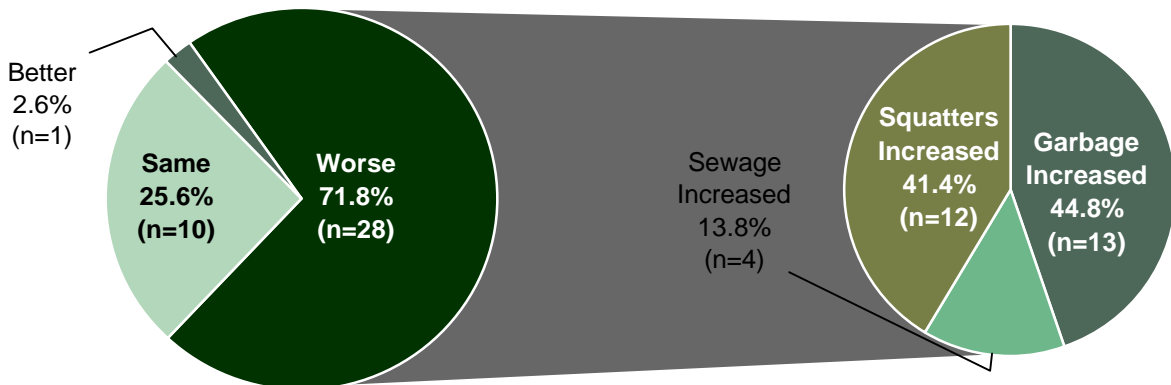


Figure 38: Present condition of the sea water

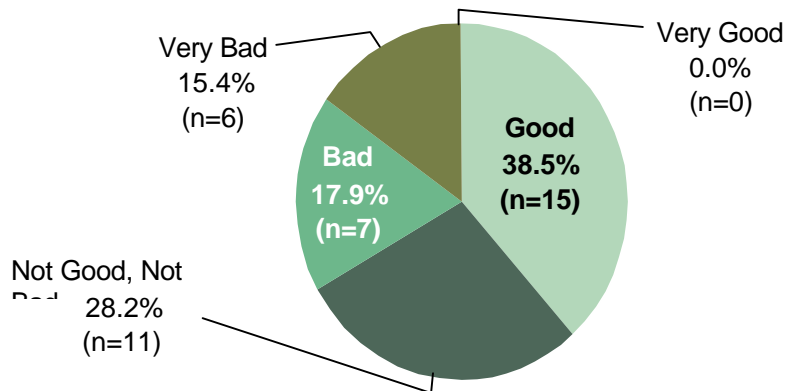


Figure 39: Current condition of the sea water compared with five years ago and reasons for worsening condition

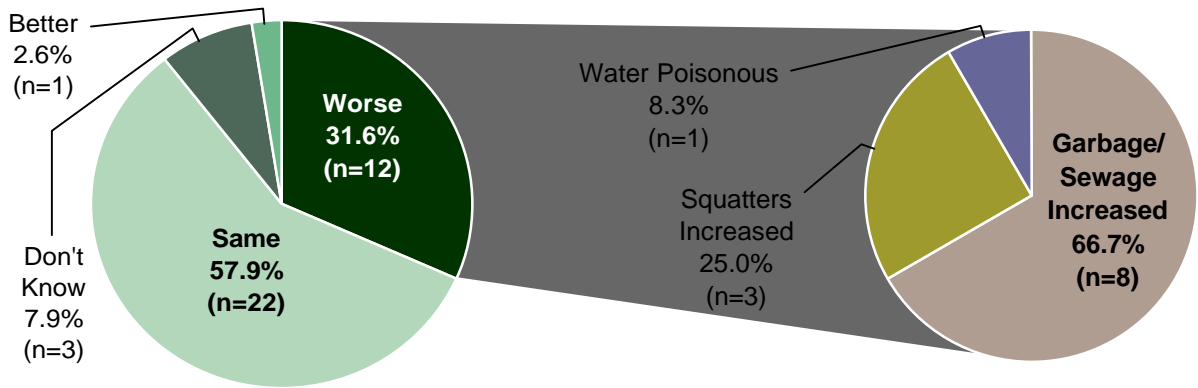
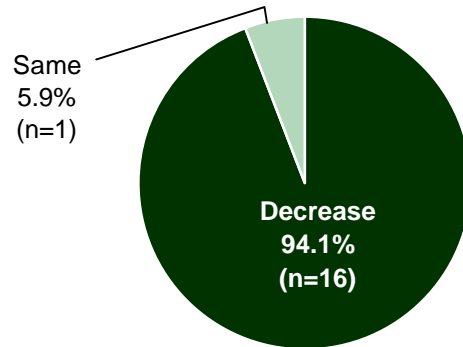


Figure 40: Difference in fish catches from 5 years ago



3.5.2 SUGGESTIONS FOR THE IMPROVEMENT OF THE COASTAL ENVIRONMENT

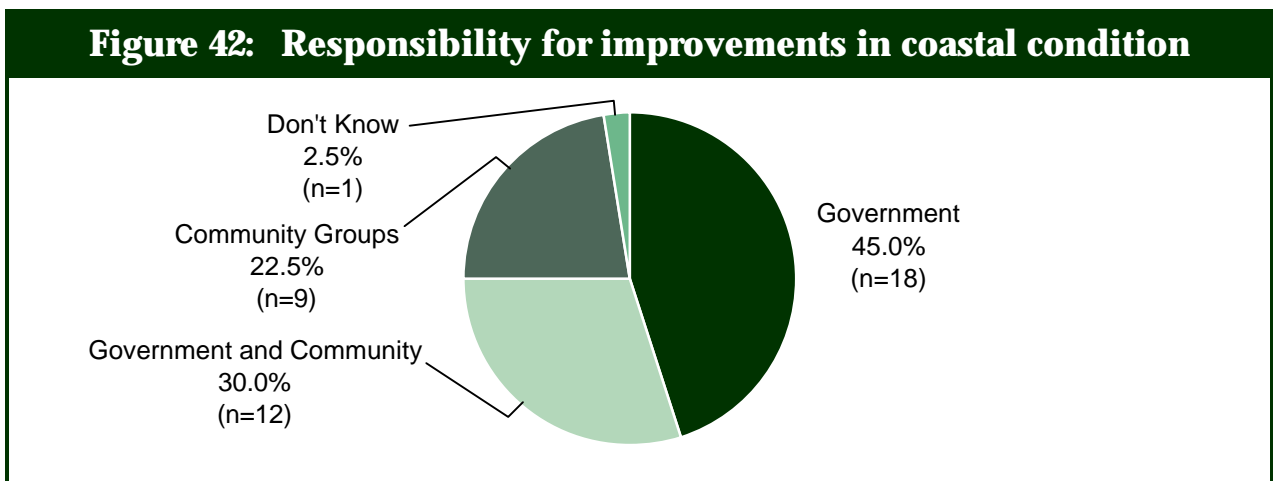
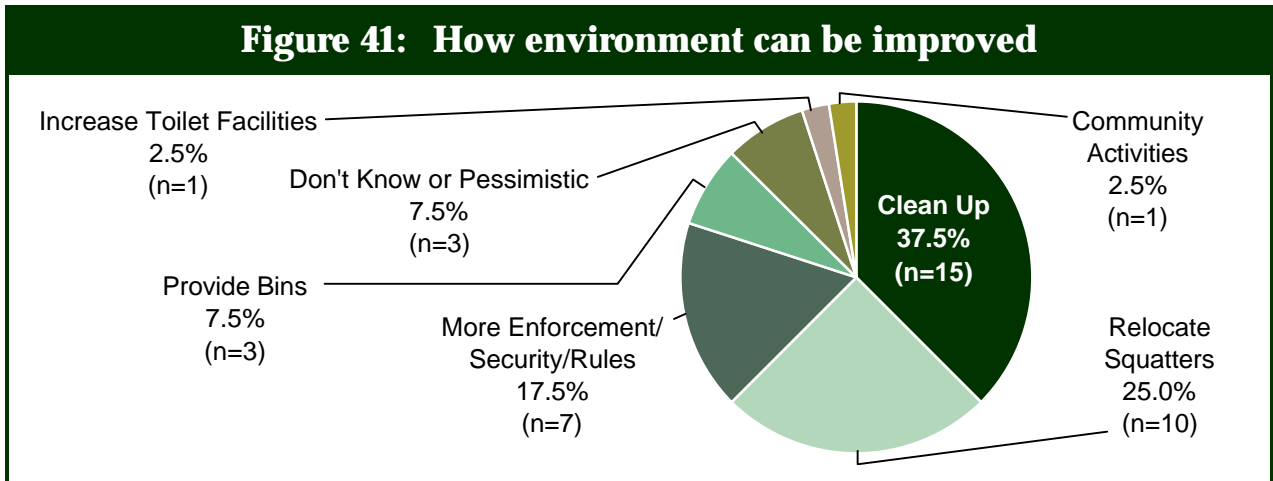
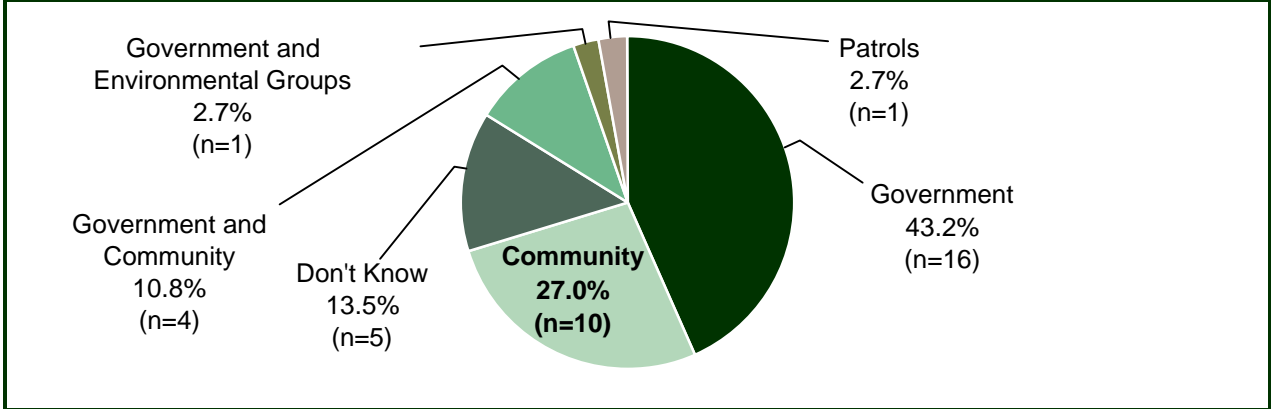


Figure 43: Who should do the work to make the improvements to sea water?



3.5.3 KNOWLEDGE OF ENVIRONMENTAL REGULATIONS

Figure 44: Awareness of environmental regulations and the regulation(s) of which they are aware

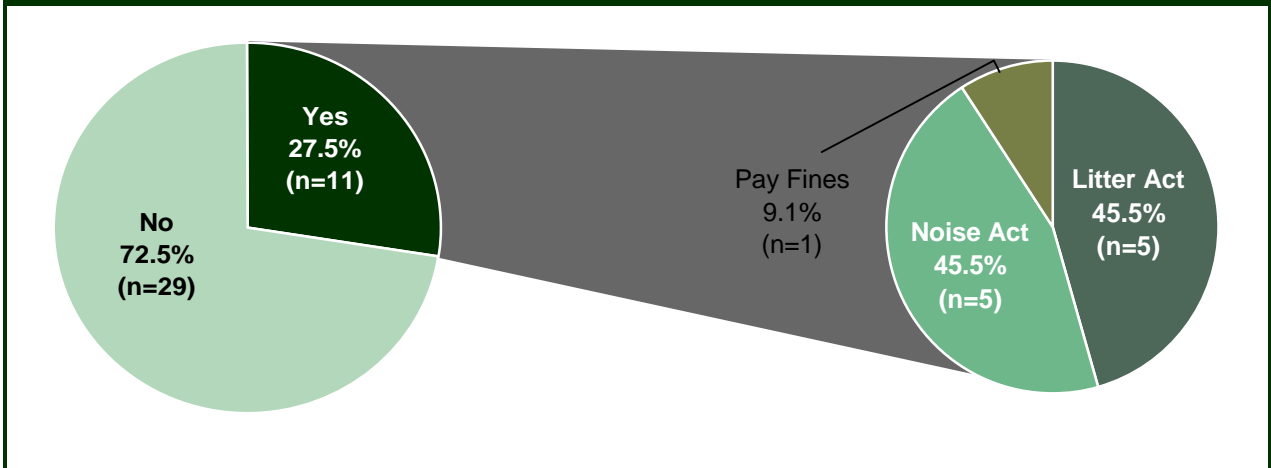
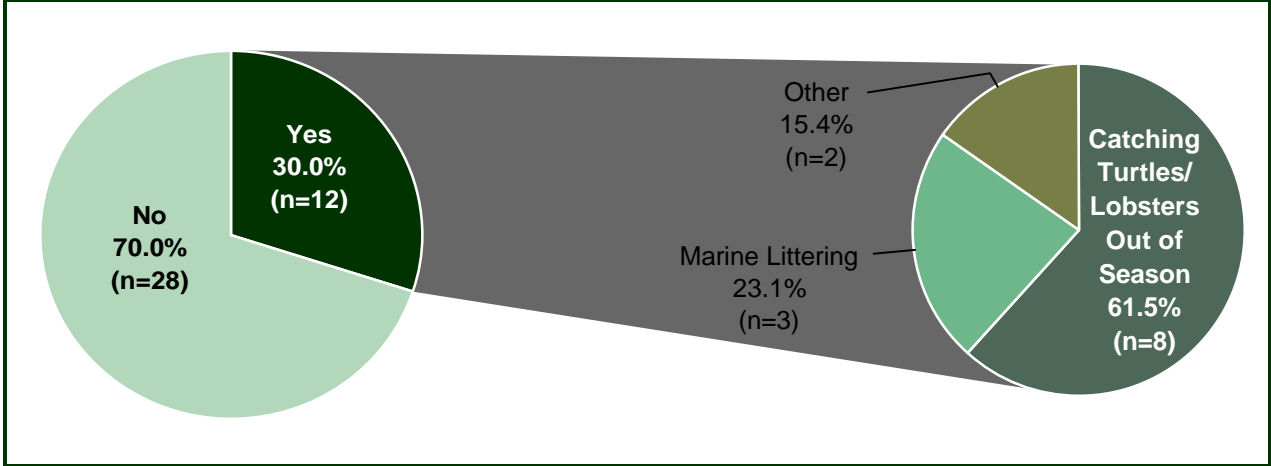


Figure 45: Awareness of regulations regarding the use of the sea and the regulation(s) of which they are aware



4. VALIDATION MEETING

The SocMon Team held its validation with the community of Rose Place on 28 August, 2009 at the Rose Place in Kingstown. The meeting was attended by the following:

- The Area Representative and Minister for Urban Development, Hon. Renee Baptiste;
- Opposition Representative, Hon. Daniel Cummings and former manager of the Central Water and Sewerage Authority;
- Mr. Raymond Ryan, Chief Fisheries Officer
- Members of the Goodwill Fishermen's Co-operative Ltd. Board of Directors
- A representative of the Ministry of Housing, Physical Planning
- The Searchlight Newspaper reporter and other members of the public.

Mr. Junior Cottle provided a historical overview of the SocMon Project in St. Vincent, the philosophical perspectives, goals and objectives of the project, an outline of the processes, resources utilized, and outcomes of the socio-economic report.

The timing of the SocMon project was opportune with proposed plans for development of Rose Place by the Fisheries Division. Therefore, Fisheries Officer, Mr. Raymond Ryan presented the objectives of the Fisheries Division with regard to the proposed fishing development for Rose Place. The social, physical and economic impact of the project was assessed as well funding sources. Significant discussion on the environmental impact was assessed with the need for river realignment, setting of upstream silt traps, and the growth of the business centre, water quality, pollution and waste water management. The Physical Planner was of the view that planning for the overall development of the Kingstown Waterfront should be taken into consideration and not as a separate and individual project. He also outlined that development of Kingstown may require some zoning for housing and commercial activities as the town is small.

The Minister of Urban Development assessed the financing requirements, sources of financing and timelines involved in the project development. She also highlighted the complexities involved in project financing. Issues related to urban planning, the impact of developing the Rose Place Fisheries Complex as well as the Rose Place foreshore was addressed.

Stakeholders of the fishing community were of the view that there was a need for the inclusion of additional facilities to satisfy the broader needs of the fishing sector: an ice making plant servicing the needs of larger fishing vessels was of necessity as the Fish Market could not satisfy current demand. The requirements for additional facilities were to include and to take into account current and existing services being offered in the area however in an informal format. Factored into this demand were services offered in boat building and repairs, as well as services for engine repairs.

There was the view that the current proposal and layout of the developmental plan did not go far enough to take into account the large number of pirogues, the developmental thrust towards larger trawlers in the Fisheries Expansion Programme. The current layout of the project needed to be expanded. Current trends of financing from donor countries for fisheries projects, the

impact of the current global financial crisis, redesigning, modifications of environmental impact studies, and a host of critical issues relating to changes in a project were debated.

Importantly, the need for assessing the watershed, waste water management, drainage, siltation and water quality, which were outside of the scope of the current monitoring needed to be further assessed.

It was noted that further socio-economic monitoring projects should vest the control and management of project funds in a single person so that there would be no misunderstanding of leadership functions requirements and responsibilities.

5. DISCUSSION AND CONCLUSIONS

5.1 GUIDING DEVELOPMENT IN ROSE PLACE

Household demographics

As seen in Figure 3 (page 15), the majority of respondents to this survey were women (61.5%). Of the total respondents surveyed, 69.2% were the heads of their households (Figure 4). With these two statistics in mind, it therefore stands to reason that most of the households in Rose Place are headed by women. At the same time, despite the prevalence of female-headed households, a slim majority of the people in those households (52.3%) was male (Figure 1).

With respect to the age range of the households, 61.6% of households had between 1 and 5 persons under the age of 18 whereas just over a third (38.5%) of households had no children under age 18 (Figure 2; page 15). Of households with 1-5 occupants under the age of 18, those with one occupant under 18 were the most popular (33.3%). When households with no persons under 18 are combined with those with only one person under 18, we already account for 71.8% of respondents.

A possible explanation for the fairly high proportion of households with no persons less than 18 years may be that most people in the community are not in their childbearing years. As seen in Figure 7 (page 17), of the 36 people who responded to the survey (and gave an age), 22 of them, or 61.1%, were 40 years or older. Moreover, if one assumes that older people are less likely to give their ages, there is reason to believe the four people who did not supply an age to the survey were older as well.

Indeed, according to Figure 6 (page 16) respondents have lived in the Rose Place for an average of 27 years. This is a significant finding for several reasons. First, it confirms the relative maturity of the population. However, more importantly, it seems to contradict the previous transitory assumption about the community. If respondents have lived in the community for an average of 27 years, it means that there is a stable resident base. This bodes well for planning activities of both the environmental and developmental kind.

At any rate, indications of an ageing population need to be monitored further. This finding can signify several things, including that migration to area is on the decline. An ageing population also has implications for the fishing industry and the environmental management of the area. In terms of environmental management, an ageing population may be less willing to learn new practices. For the fisheries industry, an ageing population is a threat to the industry's long-term existence, especially if younger members are not recruited to the fishing profession.

Also, since this is supposedly a community of migrants, many persons may have left their children with relatives in their areas of origin. Many persons may not consider Rose Place an ideal area for the rearing of children.

As seen in Figure 5 (page 16), the average household size of households surveyed in Rose Place was 4. The St. Vincent and the Grenadines Population and Housing Census Report 2001 shows that the mean household size was 3.5 compared with 3.0 in 1991 and 4.8 in 1980. Presently some census divisions such as Sandy Bay and the Southern Grenadines reflect some variables with mean household sizes of 4.4 and 2.6, respectively. The majority of households (64%) were of three and four or five persons in nearly equal, and equal proportions, respectively, among 25 out 39 households surveyed (23% comprising three individuals, 20% comprising four

individuals and 20% comprising five individuals). Households made up of 1, 2, and 6 – 9 individuals were significantly less and represented 36% of households surveyed⁴. Another surprising finding is that many households only had one male or one female (this should not be confused with single-person households, of which there were 4, but rather multiple-person households where there was only one male or one female). Fourteen multiple-person households only had one male—just as 14 houses only had one female. Similarly, Figure 5 also shows that, on average, there were an equal number of males and females (about 2) per household. If previous reports of this being a transitory community are to be believed, then these numbers may not adequately reflect the number of persons who inhabit the house. In many migrant and transitory populations, many persons may only lodge in the house at nights, or may live there but not necessarily be considered a part of the household.

Household Livelihood Activities

As seen in Figure 8 (page 17), 77.5% of people professed to be employed in one endeavor or another. Of those, 67.7% of them said they worked outside of the home. The variety of income and livelihood activities was extensive (Figure 9, page 18). Most respondents (22%) gave fishing as their primary activity (7 of them); 16% said they had a Government job; with equal proportions stating livelihood activities in shop keeping and the private sector. However, 15 different occupations were given as primary livelihood activities and 9 were given as a secondary activity, demonstrating the flexibility and resourcefulness of the population when it comes to earning a living.

Most of the respondents (56.4%) had at least one person assisting them with household income. However, that also meant that a high percentage of households (43.6%) only had one wage earner (if any) (Figure 10 page 18). Of the 22 households with secondary income earners, most (9) of those secondary income earners were in the 20 to 29 year-old range. However, 5 of those secondary incomes earners were 50 to 69 years old, which may be a reflection of income insecurity, since elderly persons were required to work (Figure 10 page 18).

Only 33.3% of households received international remittances (Figure 11, page 19); and of those, only 15.4% received such payments on a regular basis (monthly). Indeed, as ‘Special Occasions’ accounted for a daunting 84.6% of remittances, it appears that international remittances are not a reliable source of income for most respondents.

Educational Levels

As seen in Figure 12 (page 19), 55% of respondents only had a primary school education. When combined with those claiming no education whatsoever, the number of uneducated persons rose to 60% of the population. Only one person had some tertiary education, and less than one-third of respondents (27.5%) had completed secondary school. Baseline data collected by Rodney Grant (2004) indicate that when compared to the national average of 22%, approximately 18% of Rose Place residents had completed secondary school.

The educational level of the community has implications for community development and coastal management. It is obvious, given the educational level of the community that information on environmental regulations, coastal resources, development, and even this SocMon report, will have to be greatly simplified if there is to be any hope of such resources being utilized.

⁴ One survey did not complete this section, so there were only 39 households reporting for this section.

Housing and Living Conditions

The vast majority of respondents' roofs were made of metal (90%)—namely, the galvanized steel of most Caribbean homes (Figure 14, page 20). Only 10% had concrete roofs. Similarly, as seen in Figure 15 (page 20), most people (63.2%) had wooden outer walls. The 2001 Population and Housing Census of St. Vincent and the Grenadines does not indicate roof type, however results from the survey indicate that 19.28% of the population own dwellings constructed of wood, with the Kingstown census division mirroring the national average with 19.28%. From observations of the surveyors, many of the homes were old and dilapidated, indicating the poverty of the area.

Figure 14 (page 20) shows a breakdown of which material items respondents own or rent. Of the 35 people who answered this question, 16 claimed to own their home whereas 19 claimed to rent. Similarly, land ownership was minimal—as only 8 people claimed to own land, while 2 said they rented land. Ten people claimed to own a boat, and 4 people owned a car. Thus, as one might expect, the level of resource ownership was minimal in the community. Rodney Grant (2004) in his report indicates that in 2001, 3% of the Rose Place community owned at least one vehicle, the national average being 15%.

Most respondents (53.8%) had electricity as their primary source of power (Figure 16, page 21). However, the high incidence of people who used kerosene (28.2%) or candles (15.4%) as their primary power source again points to the high prevalence of poverty in the community. Equally alarming, the high usage of kerosene and candles represents a possible fire hazard since the majority of houses in the area are constructed of wood.

When it came to their primary source of water (Figure 17, page 21), the communal standpipe was the source for a plurality of respondents (61.5%). Less than a quarter of respondents (23.1%) had water piped into their houses. In line with previous findings, this is an indicator of the poverty (or at least the dearth of infrastructure) in the community. According to the St. Vincent and the Grenadines Population and Housing Census 2001, 52.2% of households had water piped into their households therefore these results indicate that Rose Place is below the national average. The report also observed that 14.6% of national households were receiving water from the public standpipe and considered this 'reasonably high'. The Rose Place community's average of 61.5% can be considered quite high when compared with households in Chateaubelair who topped the census findings at 39.1%.

Similarly, the lack of toilet facilities in the community was also telling (Figure 18, page 21). Only 22.5% of respondents had a toilet in their homes. The vast majority used some kind of public or government toilet (52.5%). Alarming, 7.5% claimed to use a bucket, and 5.0% stated they had no facilities at all. Also, when one considers that 10% gave no response, it's possible that their self-consciousness about lacking facilities may mean the number of people without facilities may be somewhat higher than the 5.0% given.

Membership in Groups and Organizations

Most people, 56.8% belonged to some kind of community group (Figure 19, page 22). Of those, the majority of them (41.2%) belonged to a church organization. However, when combined with the second most popular response ('Sports Club') it's clear that the vast majority of people who belong to community groups (70.6%) do not belong to groups whose primary purpose is community improvement. It therefore means that environmental education and other developmental activities will have to utilize the church and sport groups to disseminate its

information. There are several sports and environmental programs that can be duplicated in the area.

Major Issues Affecting Community

When asked to name the problems affecting their community, most respondents pointed to the prevalence of garbage, drugs and noise (Figure 20, page 22). They also noted a lack of toilet facilities, and an increase in the number of squatters. These findings were corroborated by the secondary information sources as well as the key informant interviews that identified lack of toilet facilities and improper disposal of garbage as the two main environmental issues facing the community. Thus, rectifying these problems will have to be the focus of any developmental assistance to the community.

5.2 REDUCING RISK AND IMPROVING SAFETY

Storing gasoline in the household can represent both a fire threat and a source of pollution. However, this study indicated that the overwhelming majority of people (89.7%) did not store gasoline in their homes (Figure 22, page 23). Three of the four persons who answered this question in the affirmative also stated that they used the gasoline for their fishing boat. Two of the four said their stored gasoline “sometimes” and two said they stored it “all the time.” Also, of the four respondents who said yes, three of them (75%) said they kept more than five gallons; one (25%) said he only kept more than one gallon. This individual also stated that he only kept gasoline “sometimes.” This was identified as a major hazard in the training workshop and by informant interviews. However, the data suggest that this is not a problem. It is possible that respondents were giving the politically correct response or household gasoline storage really is not a problem in the area. The questionnaire instrument prevented a logical follow-up question that would have clarified the data. In an interview setting, it could have been asked where and how the households that do engage in fishing activities obtain gasoline. Nevertheless, if the data is a correct reflection of the community, household gasoline storage does not seem to be prevalent in Rose Place.

In terms of waste disposal, it is promising that most people (79.5%) claim to put out their garbage for the sanitation department to pick up (Figure 23, page 24). Unfortunately, 20.5% is an unacceptably high percentage of non-standard waste disposals. It is not clear whether these responses were honest or residents were saying the politically correct thing. If they were giving a politically correct response, then it is still encouraging that they are aware of the proper way of disposing. Nevertheless, the garbage situation in the area was cited by residents as the main issue affecting the community (Figure 20, page 22), and is in urgent need of address. It should also be noted that much of this solid waste finally ends up in the marine environment, where it affects the quality of water and marine life. Further study is needed to determine the exact origin of the waste.

5.3 RESOURCE USE CONFLICT IN ROSE PLACE

Most of the people in the community (67.5%) utilized the sea (Figure 24, page 24). Of the people who utilized it, 41.9% used it for bathing, 25.6% used it for fishing and 18.6% used it for swimming. In accordance with these findings, Figure 25 (page 25) shows that of the 27 people who utilized the sea, 11 of them (40.7%) used it every day (seven times a week). Even the average usage was relatively high at approximately 5 times per week, which of course underscores the importance of the sea to this community.

Coastal Livelihood Activities

When people were asked their primary and secondary livelihood activities (Figure 9, page 18), most of them (21.9% or 7 out of the 32 people who answered this question) gave fishing as their primary activity. When all people were asked if they fished (regardless of if they did it for a living) 47.5% said they fished (Figure 26, page 25). Thus, while only 21.9% of people fished as a primary livelihood activity, more than twice as many people fished for household or general purposes. We will come back to this later; but before we pursue that discussion, it's important to note that there was evidence that the people who did fish had been fishermen (or women) for a relatively long time. Indeed, 57.9% of the people who fished had been doing it for more than ten years. This is in accordance with previous evidence of an ageing population, since the average resident of the community has been there for over 26 years (Figure 6, page 16). Indeed, the fact that so many people have been fishermen for more than 10 years may be little more than a statement of the community's maturity.

As for the specifics of why people fish, 48.3% of people who fish seem to do so for commercial purposes with the catch either sold to vendors or restaurants (Figure 27, page 25). However, it may be misleading to separate commercial fishing from household use. Of the 15 people who said they fished for household use, 10 of them also sold to vendors and restaurants. Only 13.8% of respondents said they fished solely to sell to vendors, and only 17.2% of respondents fished solely for household use. Thus, the majority (69.0%), fished for both domestic and commercial purposes or they fished primarily for domestic use, but were willing to sell any surplus to vendors and restaurants to supplement their income. This is where the discrepancy between Figure 9 and Figure 26 may be explained.

Not surprisingly, 92.1% of people in the community said they ate fish (Figure 28, page 26). On average, people ate fish almost five times a week. Of the three people who said they do not eat fish, two said fish were too expensive, and one gave no reason. This augurs well for the health of the community. There is anecdotal evidence that a large number of fishermen in Saint Vincent and the Grenadines sell their catch and use the money to buy imported chicken backs and necks, which are very unhealthy. If the residents of Rose Place actually are eating fish at such a high rate, then they could be seeing health benefits. In short, fishing may be more important to the community as a food source than a livelihood activity—especially, keeping in mind that only 21.9% of people fished as a primary livelihood activity.

With regard to fishing boats, 44.4% of the households who fished had boats (Figure 30, page 26), and 77.8% of those boats were of the more modern fiberglass variety. Of the people with boats in their households, 75% of them had a crew comprising three-persons (81.8%) (Figure 29, page 26). This seems to imply that their fishing activities were relatively unsophisticated. Also, in the area of fish quality and quantity, the overwhelming majority of fishermen (94.1%) said that compared to five years ago, their catches had decreased (Figure 40, page 30). Given respondents' complaints about the level of pollution, garbage and a lack of toilet facilities (Figure 20, page 22), this is not surprising.

Squatting and Squatters

The beach at Rose Place may be a trigger for resource conflict, because people use it as a residence, a commercial zone (fishing and mooring boats) and it has a high incidence of squatters. According to Figure 32 (page 27) 80.0% of people believe the number of squatters has

increased over the last five years. Only 20.0% said the number of squatters was the same. With regard to resource conflict, most people who fished (a significant minority of 46.2%) claimed that squatters did not hinder their access to their boats (Figure 33, page 27). This is a similar finding to when all respondents were asked if squatters hindered their access to the beach (Figure 31, page 27). For the general population of Rose Place, 45% said that squatters hindered their access to the beach. However, if the number of squatters continues to increase, then those numbers will only rise in the future, leading to greater conflicts over resources.

Environmental Justice

Another sign of resource conflict is the fact that of the 55% of people who said they were aware of outside sources of waste; most of them (45%) blamed vagrants (Figure 34, page 28). Many were of the opinion that the vagrants were paid to dump waste in the area by businesses. If this is indeed the case, it represents an environmental justice issue that is in need of redress. Environmental justice becomes an issue when a community receives an inequitable distribution of environmental burdens (pollution, garbage, crime, etc.) and environmental goods (clean water and beach) as a result of its racial or economic status. Even though ‘environmental justice’ is not a term that is often used in the Caribbean, it seems apropos here. Because Rose Place’s residents have limited economic and political power, the community has been used as a dumping ground by area businesses. As also shown in Figure 34, of the 55% of people who were aware of outside sources of waste, 31.8% of them blamed hospitals, clinics or businesses. These entities seem to be taking advantage of the limited organizing capacity of Rose Place’s residents in order to discard waste in their community. Similarly, the proximity of the river to the beach means that effluent from upstream polluters (such as the hospital) often washes onto the beach and becomes marine pollution.

5.4 PUBLIC AWARENESS, COASTAL RESOURCE PERCEPTIONS AND ENVIRONMENTAL MANAGEMENT

As shown in Figure 35 (page 28), most people (72.5%) had a negative impression of their immediate environment—including 40.0% who viewed it as very bad, and 32.5% who merely thought it was bad. Only 10.0% of respondents thought the general environment was good, while 17.5% of respondents gave a noncommittal ‘Not Good, Not Bad’ response. Likewise, when respondents were asked to rate the condition of the beach, the vast majority (89.5%) had a negative impression (Figure 36, page 29). Indeed, while 10.0% of the respondents in Figure 35 had a ‘Good’ impression of the general environment, no one had a favorable opinion of the beach’s condition in Figure 36. Even the middle view (‘Not Good, Not Bad’) was greatly reduced from what it was in Figure 35. 17.5% of people rated the general environment as ‘Not Good, Not Bad’, compared to only 10.5% for the beach. In turn, the ‘Bad’ and ‘Very Bad’ categories each went up by about 10 percentage points. ‘Bad’ went from 32.5% in Figure 35, to 39.5% in Figure 36; ‘Very Bad’ went from 40% in Figure 35, to 50% in Figure 36. It is therefore obvious that any coastal management efforts would have to concentrate heavily on beach-clean up and restoration.

In line with these findings, Figure 37 (page 29) shows that the overwhelming majority of people (71.8%) believe the condition of the environment has deteriorated over the last five years. Of those saying things were worse, responses were almost equally divided (41.4% to 44.8%, respectively) between those who thought the culprit was an increase in squatters and those who thought the change was due to an increase in garbage. The lone person who said things were

better than they were five years ago, noted that outside groups were now helping the community to clean up.

When people were asked to indicate and place in order the agent who they thought was most responsible for solving the community's problems, 'Government' was the most prevalent choice by a wide margin (Figure 21, page 23). Indeed, when giving their first choice, 55.2% of people (21 respondents) named the government, followed by 34.2% (13 people) who put 'People in Communities'. When giving their second choice for determining who should fix their problems, 75.0% of respondents (15 people) who put 'People in Communities', while 15.0% put 'Government' and 10.0% put 'Community Groups'. These findings are in accordance with Figure 42 (page 31) and Figure 43 (page 32), which both showed that most people see the government, their community, or a combination of both, as the solution to their environmental problems. In Figure 42, people were asked who is responsible for improving the general environment. Here, 45.0% said the Government, followed by 30.0% who said a combination of the Government and the community, followed by 22.5% who named community groups. Similarly, in Figure 43, when people were asked who was responsible for improving the condition of the sea, 43.2 % said the Government, followed by 27.0% who named the community, and 10.8% who pointed to both the Government and the community. With these findings in mind, it seems fairly clear that community capacity and confidence will have to be enhanced before they will see themselves as the solution to their problems. However, again, considering the minimal educational levels of the community (Figure 12, page 19), this lack of confidence cannot be surprising.

When asked specifically how environmental problems could be improved (Figure 41, page 31) a plurality of respondents believed environmental conditions could be improved through a combination of community and governmental action. Most (37.5%) simply pointed to a general 'Clean Up'. However, when the 'Relocate Squatters' and 'More Enforcement / Security / Rules' categories are combined, the result is also 37.5%. Thus, there seems to be a genuine desire for some kind of punitive action to correct some of the issues plaguing their environment. This may also be a sign of further conflicts over resources. It can also be the case that residents view the environmental problems as separate and distinct from the other community problems, such as unemployment or the pervasive drug use in the area.

A clear majority of residents (72.5%) were unaware of any environmental regulations (Figure 44, page 32). However, of the 27.5% of them who were aware of such regulations, equal proportions (45.5%) of respondents were aware of the Noise and Litter Acts and 9.1% were aware that fines had to be paid for infractions. When asked specifically about regulations regarding the use of the sea, most people (70.0%) were again unaware of any regulations. However, of the 30.0% who were aware of regulations, the majority (61.5%) was aware of the regulations pertaining to the capture of turtles and lobsters out of season (Figure 45, page 33). Again, major efforts in environmental education will be necessary here, in order make the community aware of the wide panoply of environmental regulations.

6. RECOMMENDATIONS FOR MONITORING AND MANAGEMENT

The following are recommended for monitoring and management of the area:

1. That further studies if possible be done to further investigate some of the areas that this study did not capture such as the origin of waste in the area and the reason for the small family size.
2. This study indicated that storage of fuel is not a hazard as identified by other sources. This needs to be investigated further and information relayed to policy makers and community leaders.
3. There is a need for the inclusion of a wider range of stakeholders in the management of the area. The religious organizations seem to be the most prominent local institutions at present.
4. Environmental education in the area will have to utilize non-traditional messages and media to get the information out. For example since the church is the most prominent social organization, they along with other organizations should be utilized, and if possible lead the process.
5. There is the need for a bottom-up-approach to waste management and general environmental management in the area. Again, the messages and medium will have to utilize innovative ways to inspire the community to take ownership of the process.

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8. APPENDICES

Appendix 1: Map of Rose Place





APPENDIX 2: LIST OF PARTICIPANTS IN SOCMON TRAINING WORKSHOP

Trava Castello Community Development	Edmond Jackson Environmental Coordinator	Don O'Garro Boat owner Tel: (784) 492-5314
Benedict Charles	Jeanette Lynn Jacobs	Erasto M. Robertson National Parks
Junior Cottle Senior Community Liaison Officer Integrated Forest Management and Development Program	Cheryl Jardine-Jackson Senior Fisheries Assistant - Data Fisheries Division Ministry of Agriculture, Forestry and Fisheries Kingstown, St. Vincent	Maria Pena Project Officer CERMES The University of the West Indies Cave Hill Campus Tel: (246) 417-4727 Fax: (246) 424-4204
Jennifer Cruickshank Senior Fisheries Officer Fisheries Division Ministry of Agriculture, Forestry and Fisheries Kingstown, St. Vincent	Elke James Physical Planning	Raymond Ryan Chief Fisheries Officer Fisheries Division Ministry of Agriculture, Forestry and Fisheries Kingstown, St. Vincent
Lucine Edwards Fisheries Officer - Conservation Fisheries Division Ministry of Agriculture, Forestry and Fisheries Kingstown, St. Vincent	Calvin Lampkin President Goodwill Fishermen's Co-operative	Dale Samuel UWI student intern with Fisheries Division
Lynette Glasgow Manager - Magi Kleen	June Masters CRFM	Andrew Telesford
Nyasha Hamilton Environmental Services Unit Tel: (784) 432-8596	Patrick McConney Senior Lecturer CERMES The University of the West Indies Cave Hill Campus	Branson Thomas Tourism Leopold Thomas Inspector I - Cooperative Department
Cecil Jackson Registrar of Co-operatives Tel: (784) 485-6595	Lyndon Moss Manager Goodwill Fishermen's Co-operative Tel: (784) 457-2928	Leopold Thomas Inspector 1 - Co-operative Division

APPENDIX 3: LIST OF PRIMARY ISSUES IDENTIFIED IN TRAINING WORKSHOP

- Sewage disposal: the area is below sea- level. People use buckets instead of toilets
- Squatters on the beach
- No facilities for hauling boats to higher ground during storms and hurricanes
- Boat protection – a number of boats in the area cannot be beached due to illegal structures on the beach (squatters)
- Seine fishing was common but is declining probably attributed to degraded condition of inshore area. Very few traps used
- Alternative livelihood – strong drug culture (cocaine)
- Area impacted by hospital waste
- Lockers built for fishermen in late 1980s. Some were built originally for gas storage
- Lots of commercial activity
- Large quantities of gasoline being stored above ground are a potential safety risk
- Fisheries Division currently working on proposal to redevelop the entire area with zoning of area use and facilities for access by main resource users. More lockers to be built and a small fisheries centre.
- Conflict exists in Rose Place between people living on the beach, shops and the area for boats
- Deforestation occurring above Rose Place impacting on the near shore environment through siltation
- Waste disposal of communities beyond Rose Place impacting on the area
- Flooding

APPENDIX 4: LIST OF KEY INFORMANT INTERVIEWS

Lyndon Moss (Manager, Goodwill Fishermen's Cooperative)

Calvin Lampkin (President, Goodwill Fishermen's Cooperative)

Jennifer Cruickshank (Fisheries Division, Ministry of Agriculture, Forestry and Fisheries)

Don O'Garro, Rose Place Development Organization

APPENDIX 5: OUTLINE OF TRAINING OF DATA COLLECTORS

St Vincent and the Grenadines SocMon Training of Data Collectors

Friday, August 29th 2008

Objectives of Training

- 1. To ensure that the data collection is consistent and accurate**
- 2. To provide clear written instructions on how the instrument is to be administered**
- 3. To conduct a walk-through of each item on the instrument, which includes a discussion of intent**
- 4. To make available an example of a completed instrument**
- 5. To practice the instrument including role-playing**
- 6. To agree on clear schedule of dates when the collection of data will occur**
- 7. To supply a clear understanding of who will complete the instruments, structures to support the data collection effort, and where to refer respondents with questions and/or concerns**

Topics

- Instructions on how to administer questionnaires**
- Walk-through of questionnaire**
- Asking questions**
- Recording responses**
- Prompt the person being interviewed without being “leading”**
- Consistency in recording responses**
- The Time Factor**
- Avoiding extraneous(outside) issues and discussions**
- What to do with completed questionnaires**
- Any other issue**

APPENDIX 6: SURVEY INSTRUMENT

Introduction

I am conducting a socioeconomic assessment of Rose Place. This survey is a collaborative effort between the University of the West Indies, the Ministry of Agriculture and Fisheries and the Goodwill Fishermen’s Cooperative. The purpose of this assessment is to provide baseline data on the social and economic conditions of the Rose Place community. The information collected will be used inform developmental decision-making and improve environmental conditions. The information collected in this questionnaire will be confidential and used only for the purpose of this project.

I will start off my asking you some questions about your environment.

1. How would you describe the present condition of your immediate surroundings?

very good []	good []	not good, not bad []
bad []		very bad []

2. What are the 3 problems affecting your immediate environment?

1	

2	

3	

3. What do you think can be done to resolve these problems?

1	

2	

3	

4. Who is most responsible for solving problems within the community? (Number in order of priority)

Government []	community groups []	people in comm. []
all together []		other []

5. Are you aware of any environmental regulations? (e.g. Litter Act, Noise Act)

Yes []	No []
---------	--------

6. If yes, which one(s)?

I would now like to ask you some questions about the natural resources of your community and your use of them.

Natural Resources use and perceptions

7. Do you use the sea?

Yes []	No []
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(If no, go to question 11)

8. What do you use it for?

1	<hr/>
	<hr/>

2	<hr/>
	<hr/>

3	

9. How many times do you use it per week? _____ times

10. How would you describe the condition of the beach?

very good []	good []	not good, not bad []
	bad []	very bad []

11. Is it better or worse than 5 years ago?

worse []	same []	better []	do not know []
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(If same or don't know, go to question 13)

12. How is it better or worse?

13. How can it be improved?

14. Who should do the work to make improvements?

15. Is your access to the beach restricted as a result of squatters on the beach?

Yes []	No []
-----------	----------

16. How would you describe the number of squatters on the beach in the last five years?

less []	same []	more []	do not know []
------------	------------	------------	----------------------

17. Are you aware of waste in your area that comes from outside of your area?

Yes []	No []
------------	-----------

(If no, go to question 19)

18. If so do you know where this waste comes from?

19. Are you aware of any activity outside of Rose Place that affects the nearshore/beach environment?

Yes []	No []
------------	-----------

(If no, go to question 22)

20. If yes, do you know what some of these activities are?

21. How would you describe the condition of the sea water?

very good []	good []	not good, not bad []
	bad []	very bad []

22. Is it better or worse than 5 years ago?

worse []	same []	better []	do not know []
--------------	-------------	---------------	--------------------

(If same or don't know, go to question 24)

23. How is it better or worse?

24. How can it be improved?

25. Who should do the work to make the improvements?

26. Are you aware of any regulations regarding the use of the sea?

Yes []	No []
------------	-----------

(If no, go to question 28)

27. If so, what regulation/s?

28. Do you or anyone in your household fish?

Yes []	No []
------------	-----------

(If no, go to question 40)

29. For how many years have you or member of your household been fishing?

less than 5 []	5-10 []	more than 10 []
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30. What do you/ member of your household do with the fish you catch?

household use []	sell to vendors []	sell to restaurants []
	sell to supermarkets []	other []

31. Do you/ member of your household own a boat?

Yes []	No []
------------	-----------

(If no, go to question 34)

32. What type of boat do you/member of your household own?

wood []	fibreglass []	other _____
----------	----------------	-------------

33. Is access to your boat restricted as a result of squatters on the beach?

Yes []	No []
---------	--------

34. Do you/ member of your household have a crew?

Yes []	No []
---------	--------

(If no, go to question 36)

35. How many persons are in the crew? _____

36. What type of gear and equipment do you/ member of your household use?

37. How would you describe your/member of your household most recent catches (in terms of quantity and quality)?

38. What is the difference from 5 years ago?

increase []	same []	decrease []	do not know []
-----------------	-------------	-----------------	--------------------

If same or don't know move to question 40

39. What do you think is responsible for the change/s?

40. Do you eat fish?

Yes []	No []
------------	-----------

(If no, go to question 42)

41. If yes, how many times per week? _____ times

42. If no, why?

43. What are the 3 problems affecting the marine resources in your community?

garbage disposal in the sea []	hospital waste []	industrial waste []
used oil []	runoff from upstream []	other (describe below)

44. How do you think these problems can be resolved?

I would like to now ask some questions about your household and the activities of the persons in your household.

Household

45. What is your position in the household?

46. How many persons are in your household?

males _____	females _____
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47. How many persons under 18 yrs? _____

48. How long have you lived in the community? _____

49. Do you or any member of your household belong to any group/organisation?

Yes []	No []
--------------	-------------

(If no, go to question 51)

50. If yes, what group?

Church []	Goodwill Fishermen Co-op []	Lodge []
Sports club []	community group []	other _____

51. Do you store gasoline in your home?

Yes []	No []
--------------	-------------

(If no, go to question 55)

52. If yes, why?

53. How often?

all the time []	rarely []	sometimes []
--------------------	--------------	-----------------

54. How much?

less than 1 gallon []	more than 1 gallon []	five gallons []	more than 5 gallons []
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I would like to ask you some questions about your material style of life.

Material Style of Life

55. Do you own or rent any of the following?

	Own	Rent
Land	[]	[]
House	[]	[]
Boat	[]	[]
Car	[]	[]

56. What is your main source of power?

electricity []	kerosene []	other _____
-----------------	--------------	-------------

57. What is your main source of water?

piped into house []	piped into yard []	Standpipe []
sea []		other _____

58. What kind of toilet facilities do you have in your home?

59. What do you do with your household garbage?

I would now like to ask some questions about income generating activities.

Livelihood/Economic Activities

60. Are you presently doing anything at home or outside of your home that you get money/material things from?

Yes []	No []
---------	--------

61. Do you work from home or outside of your home?

home []	outside home []
------------	--------------------

62. Are there other persons in the household who contribute towards the household income?

Yes []	No []
-----------	----------

(If no, go to question 65)

63. What are the ages of the persons contributing to the household income?

under 20 yrs []	20-29 yrs []	30-39 yrs []
	40-49 yrs []	50-59 yrs []
	60-69 yrs []	70+ yrs []

64. What is your main activity in providing for your household, secondary activity and other activities?

1	
----------	--

2	_____

3	_____

65. Do you receive money or household items and gifts from relatives abroad?

Yes []	No []
-----------	----------

(If no, go to question 67)

66. If yes, how often do you receive money from your relatives?

once a week []	once a month []	once every two months []	special occasions []
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Finally, I would like to ask you some questions about yourself.

General

67. How old are you?

under 20 yrs []	20-29 yrs []	30-39 yrs []
	40-49 yrs []	50-59 yrs []
60-69 yrs []	70+ yrs []	not stated []

68. What is your highest level of Education?

primary []	secondary []	tertiary []
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Observational Information**69. What is the respondent's gender?**

male []	female []
----------	------------

70. Type of roof:

metal []	concrete []	shingles []
-----------	--------------	--------------

71. Type of structure of outside wall:

wood []	concrete []	metal []
----------	--------------	-----------

THE END