

# Government of Saint Vincent and the Grenadines

# Disaster Vulnerability Reduction Project (DVRP) Social Assessment Report

# Phase 1

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# **Acronyms and Abbreviations**

Central Planning Division - CPD

Disaster Vulnerability Reduction Project - DVRP

Emergency Recovery Loan - ERL

Ministry of Education - ME

Ministry of Health and the Environment - MHE

Ministry of Housing and Physical Planning - MHP

Ministry of National Mobilisation - MNM

Ministry of National Security - MONS

Ministry of Transportation and Works - MTW

National Emergency Management Organisation - NEMO

Resettlement Policy Framework - RPF

Social Assessment - SA

Persons Affected by the Project - PAP

Participatory Research Approach - PRA

# **Social Indicators**

The list of variables, indicators and measures presented here provides a general guideline in this initial stage of the social assessment for monitoring the social impact in the implementation process.

Table: 1 Social Indicators

Variable	Indicator	Measure
Identity Age, Gender	Median age dependency Sex ratio	% persons <18 and 64> years Ratio of females to males
Social institutions	Educational, health, religious	Number and capacity (School, health services)
Environmental Water	Drought Available water	Period without water or rainfall
Wealth	Poverty rate	% persons living below the poverty level Level of dependence
Organization	Service organizations and NGOs People willingness to participate	Number of service organization Number of Community members available to help
Social well-being	Attachment to place	No. of family members in area.

# **EXECUTIVE SUMMARY**

The Social Assessment (SA) was undertaken as part of the preparation requirements of the St. Vincent and the Grenadines Disaster Vulnerability Reduction Project (DVRP). The Assessment was conducted in compliance with World Bank requirements as presented in OP 4.12, World Bank Safeguards Involuntary Resettlement and OP/ BP 4.10 on Indigenous peoples, for Category B projects

The social assessment will a) analyze the potential social impacts of the project and develop associated social indicators for monitoring and evaluating the social impacts of the project, b) solicit stakeholder/beneficiary perspectives on project design and impact and c) identify and assess the nature and magnitude of land acquisition related issues. The social assessment will assist in the identification of poor and vulnerable populations and ensure that project objectives are acceptable to the intended beneficiaries.

The project would be implemented in several communities throughout St. Vincent and the Grenadines. The sites were selected by the Government of St. Vincent and the Grenadines. The main objective for selecting these sites was based on investigation of the vulnerable communities this was a joint collaboration of ministries, namely; the Ministry of Transportation and Works, Ministry of Health and the Environment, Ministry of Education, Ministry of Housing Lands and Surveys Ministry of Finance and Economic Planning.

Its primary objective was to broadly understand the way in which the proposed project might impact or change the social condition of the receiving human environment. As well as, but not limited to identifying how these processes might be changed by the proposed project additionally the social assessment would identify the information gaps that would have to be addresses during the implementation

One of the main activities that formed part of this social assessment was the collection of data. Methodologies that were employed included primary and secondary data collection methods.

# **INTRODUCTION**

St. Vincent and the Grenadines is among the most disaster-prone countries in the world, regularly suffering disasters related to natural events such as earthquakes, hurricanes, landslide, rain and drought. These hazards have caused significant and in some cases recurrent damage to national infrastructure including housing, road networks, schools, hospitals and other facilities such as phone lines, water and electricity. This significantly affects human welfare, national economic activities, property, and natural resources.

Additionally, the effects of climate change are already evident in many parts of the country with rising sea levels and storm activity continuing to impact on exposed coastlines and development. The situation is only expected to worsen as St. Vincent and the Grenadines is highly vulnerable to the effects of global warming and climate change.

Over the last decade, St. Vincent and the Grenadines began its risk reduction activities with the development of disaster preparedness and response investments. During this period, most of the activity in disaster risk reduction focused on the development of national disaster plans, setting up the disaster management agency, and promoting public education and awareness.

Despite these efforts, St. Vincent and the Grenadines continues to face high levels of risk to its economic stability and national welfare. Post-disaster rehabilitation of damaged infrastructure is a major contributor to the national economic risk profile. Studies have documented that aging public infrastructure presents very high levels of vulnerability, particularly in critical sectors such as health, education, water, and roads. The annual hurricane season, combined with the cumulative effects of climate change, will continue to threaten island economies. Without intervention, this will likely increase the future need to divert limited financial resources away from economic growth activities into repairs and reconstruction as a result of disaster and climate change-related events. While work continues in preparedness and response, the logical next step is reduction of vulnerability to natural disaster.

Function of the Social Assessment in this project

The social assessment aims to understand the social factors influencing proposed project activities or the ones affected by those activities additionally it aims to solicit the active participation of the most directly affected individuals and groups by project activities during the design and implementation of the project (in particular, vulnerable groups). At the same time the social assessment aims to demonstrate the positive function of the project and prevent or alleviate negative social impacts.

# **Objective of the Disaster Vulnerability Reduction Project**

The Project seeks to measurably decrease the vulnerability of people and the national economy of St. Vincent and the Grenadines to climate change and natural hazards. The development objectives of the project would be to:

- (i) Integrate disaster vulnerability reduction and climate resilience in national development strategies and management of public infrastructure;
- (ii) Improve SVG's access to and benefit from regional collaboration and support structures for hazard monitoring and risk assessments, and
- (iii) Reduce the risk of loss of human life due to natural hazard induced structural failure of critical public infrastructure.

# Socio-economic profile of St. Vincent and the Grenadines

# Country Description

St. Vincent and the Grenadines is an archipelagic State in the Eastern Caribbean. The country is comprised of a main island, St. Vincent, and a chain of 32 islands and cays, the Grenadines, of which only seven are inhabited -Bequia, Mustique, Canouan, Mayreau, Union Island, Palm Island and Petit St. Vincent. The total area of the country is 150 sq. miles (389 km<sup>2</sup>) of which the main island is 133 sq. miles (344 km<sup>2</sup>).

The country has a territorial sea of 12 nautical miles and an exclusive economic zone (EEZ) and continental shelf of 200 nautical miles. The marine space is 70 times the land area. The terrain of the main island and several of the Grenadines is mountainous. The highest point on the main island is La Soufriere at 4,048sq.ft (1,234m). Forests cover between 25 percent and 30 percent of the country. The active volcano on the main island, La Soufriere, last erupted in 1979 damaging the agricultural sector and disrupting life.

The country is a small open economy which is highly susceptible to external economic shocks and natural disasters, such as hurricanes.



In the past, the country relied almost exclusively on agriculture, but within recent times, tourism and related services, construction and other sectors have become increasingly important as contributors to the national economy.

# Weather and Climate

St. Vincent and the Grenadines has a tropical marine climate characterized by a marked dry season, from mid December to mid May, and a rainy season from mid May to mid December. In the drier months higher than normal atmospheric pressure ensures dryness and drought conditions in coastal areas and the Grenadines. The wet season is characterized by tropical waves, depressions and hurricanes. Hurricanes are perennial hazards related to the atmospherics of the region in the wet season. Temperatures are high (27oC) all year round due to the moderating influences of the trade winds. The diurnal range is about 3 – 5oC and widest in the dry seasons on account of cool nights.

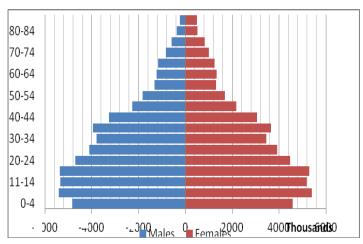
Rainfall is highest in the north central portion of St. Vincent (150 inches) and decreases on the coast (about 60"). The leeward side of the island is in a "rain shadow" and shows marked variation in rainfall compared with the windward side. In the well-watered interior, the water supply forms the basis of the supply of water and potable hydroelectricity power generation on the Colonarie River, Cumberland River and the Richmond River. In sum, the rainfall distribution is quite reliable on the mainland.

# Population Demographic Factors

Based on the 2001 Population and Housing Census Report, the population of St. Vincent and the Grenadines stood at 106,253. This represented a 0.2 percent decline from the previous census of 1991 of 106, 499 persons. In 2001, the largest single group of the population (30.7%) was in the under 15 age group. Additionally, the sex ratio was 1.02, i.e. for every 100 females, there were 102 males. Subsequent mid-year estimates indicate that the total population declined by an average annual rate of 0.9 percent, to 100,892 persons in 2009. These declines are

attributable to an average reduction in the birth rate of 1.9 percent, accompanied by adverse net migration. Within every age group, with exception of those 65 years and over, there were more males than females. The demographic data based on the last census demonstrate that the migration option has hold considerable continued to significance in the economy and society of St. Vincent and the Grenadines. Remittance income is high, estimated at over 20 percent of household income, according to the SLC, but at percent of **GDP** 

Figure 1: Population Pyramid as at June 30<sup>th</sup> 2007



Source: Statistical Unit, Central Planning Division

# Settlement Pattern

The 1980 census revealed that 92.6 percent of the total population of St. Vincent and the Grenadines resided on mainland St. Vincent. In 1991, the figure was almost the same at 92.1 percent. In

2001 however, there was a slight decrease with 91.9 percent of the total 106,253 persons residing on the mainland. 85 percent of St Vincent's population lives in the coastal zone. The major concentration of the population is in the more developed areas in the south, with 45% of the population in the census divisions of Kingstown: 12.3 percent Kingstown suburbs: 11.77 percent; and Calliaqua: 20.79 percent.

# **Environment**

St. Vincent and the Grenadines is susceptible to tropical storms, hurricanes and also has an active volcano the La Soufriere. The highest point is the La Soufriere volcanic mountain of 1,234 m. The Island is signatory to the Biodiversity, Climate Change, Climate Change-Kyoto Protocol, Desertification, Endangered Modification, Species, Environmental Hazardous Wastes, Law of the Sea, Marine Dumping, Laver Ozone Protection, Ship Pollution, and Whaling Agreements.

# Density

The average density for St. Vincent is 707 persons per sq mile.

Table : Population and Density for St. Vincent and the Grenadines

CENSUS DIVISION	Area	Population		Density			
SERVICE DIVISION	Sq. Miles	1980	1991	2001	1980	1991	2001
Kingstown	1.9	16,532	15,466	13,212	8,701	8,140	6,954
Kingstown Suburbs	6.4	8,609	10,757	12,508	1,345	1,681	1,954
Calliaqua	11.8	17,440	20,290	22,095	1,478	1,719	1,872
Mariaqua	9.4	8,408	8,864	8,145	894	943	866
Bridgetown	7.2	6,762	7,532	6,754	939	1,046	938
Colonaire	13.4	7,210	7,890	7,482	538	589	558
Georgetown	22.2	6,494	7,303	6,914	293	329	311
Sandy Bay	5.3	2,867	2,793	2,716	541	527	512
Layou	11.1	5,510	5,993	6,303	496	540	568
Barrouallie	14.2	4,667	5,199	5,422	329	366	382
Chateaubelair	30.9	6,101	6,045	6,087	197	196	197
Total Mainland	133.8	90,600	98,132	97,638	677	733	730
Northern Grenadines	9	4,740	5,514	5,389	527	613	599
Southern Grenadines	7.5	2,505	2,853	3,226	334	380	430
Total Grenadines	16.5	7,245	8,367	8,615	439	507	522
TOTAL SVG	150.3	97,845	106,499	106,253	651	709	707
Source: Population and Housing Census 1980, 1991 and 2001							

The least densely populated areas are Chateaubelair (197/sq mile); Georgetown (311/sq mi); Barrouallie (382/sq mi) and Sandy Bay (512/ sq mi). There was a net loss of 14.6 percent of persons from the Kingstown census division with gains in the suburbs of 16.3 percent.

# Livelihood

In 2001, 41.6 percent of the total population worked in Agriculture, Construction and wholesale industries.

# Health

Recent basic health indicators for St. Vincent and the Grenadines have been positive. Particularly in infant and maternal health, expansion in primary health care coverage has brought this country on target

to achieve Millennium Development Goal (MDG) number four, "Reducing Child Mortality" bv 2015. There full immunization coverage for the under 5 age group and maternal deaths (per 1000) are negligible. Fertility rate is at a stable 2.8 children per woman with an average life expectancy at birth of 74.3 vears, comparable to that of developed countries.

Through several line ministries, an array of social assistance programmes is implemented to address vulnerability in population. However, these the programmes provide less than adequate coverage and, due to insufficient coordination within and among them, duplication often occurs. Weaknesses in this area of the social sector have been observed throughout the OECS and reflect the need for organised social planning.

# **Education**

The literacy level of St. Vincent and the Grenadines is approximately 96 percent. Universal education and free education have helped to achieve this result. In addition the Government provides subsidies to further advance the provision of private and tertiary education system.

# Disaster vulnerability

St. Vincent and the Grenadines is vulnerable to a number of natural

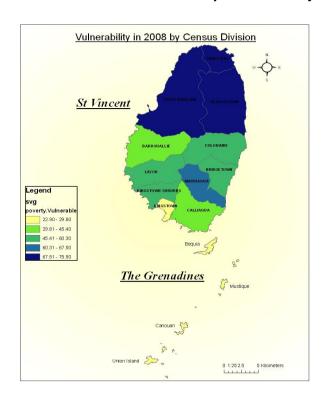
disasters and hazards. These include tropical storms, hurricanes, earthquakes, sea surges, high winds, droughts, wild fires, landsides, soil erosion, agricultural pest and volcanic eruptions. The La Soufriere Volcano, located at the most northern part of the island, last erupted in 1979. Additionally, there is an underwater volcano in the southern part of the Grenadines "Kick Em Jenny" that also poses a threat, this volcano last erupted in 1977 and most recently in 2001 this volcano is located near Union Island and Carriacou.

topography The the island of necessitates varying mitigation measures. The islands capital - Kingstown - has the highest concentration of economic activity. The Administrative complex, which is the administrative capital, was constructed on reclaimed land. The Cruise ship berth, the Port Authority, the E. T. Joshua Airport and the island is main police station are all in the vulnerable location. Many of the hotels are located on the sea front. More than sixty percent of the population lives on the coast.

The Grenadine islands have similar layout. Canouan, Mustique, Union Island and Bequia they are all susceptible to natural disasters.

The 2008 Country Poverty Assessment (CPA) report indicated that, 30.2 percent

of the population was deemed to be poor, and 2.9 percent was deemed to be indigent. An additional 18 percent, though not poor were vulnerable (defined as being at risk of falling into poverty in face of economic shock, or other **disaster**) Thus altogether 48.2 percent of the population was under the vulnerability line.



# SOCIAL ASSESSMENT CONSULTATION FRAMEWORK

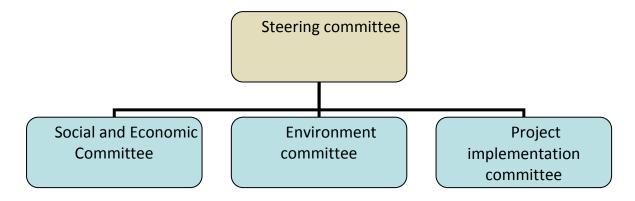
An extensive consultation framework was used for the Disaster and Vulnerability project. The development of the Social Assessment Report required the establishment of a project Steering Committee along with the active participation of all stakeholders.

The Steering Committee has representation from the Ministry of Finance and economic Planning, the Ministry of transport and works, the Ministry of Housing, Ministry of Health and the Environment, Ministry of National Security- NEMO.

The social and economic committee has representation from the Ministry of social Development, the Ministry of Finance and Economic Planning, the Ministry of Housing.

The Environment Committee has representation from the Ministry of Health and the Environment and the Ministry of National Security – NEMO

The project implementation committee is mainly members of the PSIPMU in the Ministry of Finance and Economic Planning.



# **Consultation with the community**

In addition to the direct interviews and focus groups discussion it is proposed that there would be various ongoing community meetings with key members of the community as well as the entire community to provide the community members with an opportunity to give their views on the different implementation cycles of the projects.

- 1. Explain the project initiatives
- 2. Get community buy- in
- 3. How can specific community members or individuals be involved

# **Methodology**

### Overview

Participatory Research Approach (PRA): This approach is used to engage community residents, field research facilitators, team members of the PSIPMU, as well as, other Governmental and Non-Governmental Organizations. The PRA incorporates the knowledge and experiences of individuals most affected by the proposed changes into the assessment process. The field research facilitators would be trained in the use of the participatory research methods and techniques that would be used to collect and generate data. The PRA approach is process-oriented, bottom-up and global approach to identify and assess the social impacts.

The fundamental principles of the methodology are a multi-disciplinary team, a mixture of techniques, flexibility and informality. Creating opportunities for participation of the beneficiaries is essential to accurately reflect knowledge, practices, and beliefs.

# The Research Methods:

The research method used consisted of the following:

- Focus group discussions: This is a qualitative method to obtain in-depth information on concepts and perceptions about a particular issue through small group discussion of approximately 6–12 persons.
- Representatives were invited from the communities of Marriaqua, Buccament, Rose hall, Rose Bank and Green Hill to discuss the component of the project that would be implemented in their area. The questions chosen for the discussion were taken from the Disaster Vulnerability Reduction Project Questionnaire.

Interviews were conducted with:

- **Individuals** from the community to learn about their own situation in detail, to discuss issues that would be difficult to address in group situations, and to reveal their personal perspective.
- Key informants, or people with specialist knowledge, to gain insights on a
  particular subject, or people who can represent a particular group or viewpoint;
  and
- Groups, either randomly, or systematically selected to allow a focused discussion of a particular issue

Interviews were chosen for this project because it is an efficient technique use to gather information.

Survey, a representative sample was selected by the Census office based on the population on each census division.

# **Research techniques:**

Both the quantitative and qualitative approaches are use to test objectively as it regards the measurement of the social world as well as provide a more descriptive understanding of the social conditions and livelihood of a people.

# **PROCESS**

# **Stakeholder Meetings and Consultations**

Stakeholder meetings were conducted with the agency or agencies charged with responsibility for executing the specific project activity. These meetings served to clarify the activities to be completed (e.g. geographical location and work to be done), persons identified as beneficiaries, the social benefits to individuals and communities, possible negative outcomes and other related issues of social impact. In cases where project activities geared towards directly benefitting community members (e.g. Emergency communication and shelters) stakeholders were consulted to identify how issues of access and community involvement would be stimulated.

Wider consultations were conducted with individuals (or representatives of groups) with related expertise and community/field knowledge. These took the form of technical committee discussions to ascertain the social impact of the project activity, the need and acceptability of the project initiative, beneficiaries of the project and experiences of the community with related disasters (e.g flooding).

### **Site Visits**

Visits were made to each site with representatives from the agency or Ministry charged with the responsibility for the specific project activity. These visits preceded community consultations and attempted to clarify exact geographic location and work to be done, persons currently using the site and level of risk.

# **Community Participation**

Community participation was sought through the use of interviews, group discussions, consultations and surveys. At each site involvement was solicited from residents and users of facilities who have been identified as beneficiaries. Community discussions will attempt to gauge the level of awareness of risk, assess acceptability of project initiative and gather perspectives of need (relative to risk). This component will generate the bulk of data for the Social Assessment.

# **Preparation**

A questionnaire was designed by the Team for the purpose of soliciting community members' perspectives on the proposed activities. Specifically, it aimed to address objectives (a) to (d) of the Social Assessment:

- Ensuring that project initiatives are acceptable to beneficiaries
- Assessing their perspectives on the benefits and possible adverse impact of the proposed project
- Soliciting their recommendations for alternative or additional project activities
- Providing baseline data on each sub-project

This instrument also served as a guide for the group discussions.

# Methodology for the development of the questionnaire

- 1.Comments and brief project description were review from a selected committee: Chief Statistician, Econometrician, Economist, Social Research Specialist, Project Director as well as the social Team.
- 2.The World Bank's Senior Social Assessment Specialist was consulted, basic questions were developed, and they were used to draft the base questionnaire which took the objectives of the social assessment as its rationale for including or excluding questions.
- 3. The World Bank Senior Social Assessment Specialist commented on the questions, suggested changes which were considered.
- 4. The changes were incorporated. The base questionnaire was circulated amongst a multi-disciplinary committee for review and comments.
- 5. A modified questionnaire was designed to incorporate the committee's comments. The modified questionnaire was re-circulated amongst the committee members, where further changes were made.
- 6. The final questionnaire was accepted by the committee as it was deemed to cover relevant areas.

# Questionnaire design

The questionnaire was divided into seven sections as follows:

- 1. Demographic attributes of the respondents;
- 2. Community members' experience of natural disaster; opinions towards social and environmental issues;

- 3. Community's views on rivers in their community, risks, uses and possible measures to mitigate risk
- 4. Community's views on slope stability and land stability in a changing climate in their community, threat, uses and possible measures to mitigate risk
- 5. Community's views on coast in their community, danger, causes and possible measures to mitigate risk
- 6. Community's views on the Disaster Vulnerability Reduction Project, possible impact, necessity and scope expansion.
- 7. Community members' views on climate change awareness, disaster preparedness, community participation, available skills of members, most effective Early warning method.

# **Questionnaire Administration**

Sixteen (16) Field Officers were trained in data collection and community risk assessment for the purpose of the survey. This included Field Officers from the Community Division in the Ministry of National Mobilisation etc. Field work was carried out by the sixteen (16) field officers, along with members of the Social Assessment Team.

# Data Collection:

**Site Visits** were made to all project sites together with representatives from the relevant agencies, e.g. NEMO and Ministry of Transportation & Works. This was done in order to clarify specifics of the location, nature of the work to be done, and the potential impact.

**Technical Committee Meetings:** Several Technical Committee Meetings were held on separate project components to clarify issues related to project implementation and impact. (See appendix for list persons consulted.)

**Stakeholder Meeting:** One (1) all-inclusive stakeholder meeting was conducted. This meeting sought to engage representatives from all agencies charged with responsibilities in executing and coordinating activities under the project (See appendix for list persons consulted). The meeting was aimed at identifying:

- 1. Benefits of the project activities
- 2. Persons or category of persons who would benefit
- 3. Potential negative impacts including land acquisition, displacement and relocation

Two Hundred and Seventy (270) Questionnaire Interviews were conducted with residents of 16 communities: Sandy Bay, Fancy, Georgetown, Chester Cottage, Colonarie, Spring,

Marriaqua, Arnos Vale, Kingstown, Buccament, Barrouallie, Cumberland, Rose hall, Rose bank, Dark view, and Troumaca.

Community selection was based on number of criteria including, number and scope of activities to be conducted, population around the project site, proposed impact e.g. land acquisition and relocation, and level of social vulnerability including poverty.

Apart from the questionnaire interviews, focus groups discussions were held with residents of two (2) Communities: Marriaqua and Buccament. Group discussions were also held with 1 environmental group (Kingstown) and 2 student-led groups engaged in environmental activities (Kingstown). In addition Interviews and informal discussions were held with key informants in Sandy Bay and Fancy.

Secondary sources were used in the collection of data for the Social Assessment. Sources include:

- 2001 Population and Housing Census
- 2007/2008 Country Poverty Assessment
- Various Damage Assessment Reports
- Community Development data

# Sampling and Justification

A representative sample was selected from the country's thirteen (13) census divisions.

Census division	Number	Actual	Response
Kingstown	46	20	17
Suburbs	35	0	No project activity
Calliaqua	77	25	24
Marriaqua	25	30	24
Bridgetown	21	20	15
Colonaire	25	20	20
Georgetown	21	40	35
Sandy Bay	7	40	37
Layou	9	25	16
Barrouallie	21	35	30
Chateaubelair	18	65	51
Northern Grenadines	21	25	Not applied
Southern Grenadines	14	25	Not applied
Total	340	365	270

The sampling method was purposive. Questionnaires were administered to persons who, due to factors of physical or geographic location, and vulnerability to natural

disaster, are most likely to benefit from the project. In practice, this included persons in close proximity to project sites, persons living near to rivers, persons living near to the coast, residents of communities near the coast and persons who own lands or operate businesses in the communities of interest. Similarly, discussions and informal interviews were held with key personnel, who, through participation in community/ environmental organisations or previous experience with disaster, made them of interest to the assessment.

Given the Social Assessment was aimed at assessing the potential impact of the project, particular attention was paid to more vulnerable groups and communities for whom impact was most critical. Special mechanisms were employed to ensure that views of women, the poor, the elderly and other marginalized groups were adequately represented in the sample. The methodology therefore employed the use of:

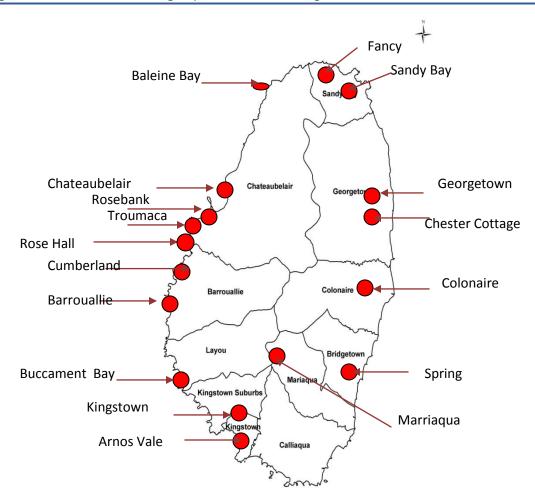
- 1. Oversampling as well as key informant interviews in the communities of Sandy Bay and Fancy. These areas are of particular interest due to high levels of poverty and the possible presence of Indigenous People. The Social Assessment Team notes that these communities have also been subject to increased scrutiny and participatory research, and instead employed the use of key informants to ensure that quality data was collected.
- 2. Oversampling and focus group discussions in the communities of Buccament and Marriaqua: Due to the size of these communities, their proximity to the rivers and the risk and incidence of flooding, it was anticipated that river defence activities would have significant impact. Residents were therefore invited to a discussion on the project.
- 3. Expert group discussions where possible: Community organisations and environmental groups were invited to discussions where possible due to their working knowledge of issues relevant to the project. This process also served to establish contact with the groups, foster collaboration with ongoing activities and identify opportunities for increasing project impact.
- 4. Purposive sampling in all communities to ensure the most relevant data was collected.

# Survey Sample

The survey sample comprised two-hundred and seventy (270) respondents from sixteen (16) communities, 49.2 percent male, and 50.8 percent female. All respondents (except 1) were over the age of 18. Thirty- two percent were over the age of 50 years and twenty -four percent were over 55. On average persons had been a resident in their communities for thirty and one half years.

The sixteen communities selected for the survey from which data were collected covered eight (8) of the thirteen (13) census divisions in St. Vincent and the Grenadines. A total of 137 (50.7 percent) of the respondents reside in the Census Divisions of Georgetown, Sandy Bay, Chateaubelair and Colonaire. These Census Divisions were found to have the highest and most severe levels of poverty in the 2008 Country Poverty Assessment. While the survey did not collect data on the economic status of individuals or households, it can be taken as representing the views of the most poor and vulnerable.

Map: Communities where project would be implemented



The methodology for the social assessment process has been limited in the following instances:

• 2010 – 2011 is a pre census period in St. Vincent and the Grenadines, it was difficult to measure the population affected by the project implementation because of the

- incompatibility of the census division and the project profiles. Household questionnaires could not have been implemented.
- the total potential benefits of project activities on the population have not been incorporated or investigated in some instances and would be determined in a post social impact assessment.
- There was a problem in defining the geographical extent of the project hence the range of the population affected may not have been adequately investigated. This is particularly relevant for the involuntary relocation of people who may reside in the project area.

# **Key Social Finding**

The Social Assessment revealed the need for the project activities to help to reduce the vulnerability of the communities in the event of natural disaster.

- Employment opportunities for unemployed youth, men and women on some the project sites, for example the construction of the satellite warehouse, river and coastal defence. In Sandy Bay some residents indicated the possible of having the opportunity to make basketry to display next to the coastal defence.
- In Colonaire, some families and farmers are currently experiencing difficulty to get to their farms and lands are being washed away therefore they welcomed the idea. They also suggested the construction.
- Generally gender disparity is not fundamental given that the project interventions are beneficial to all members of the community.

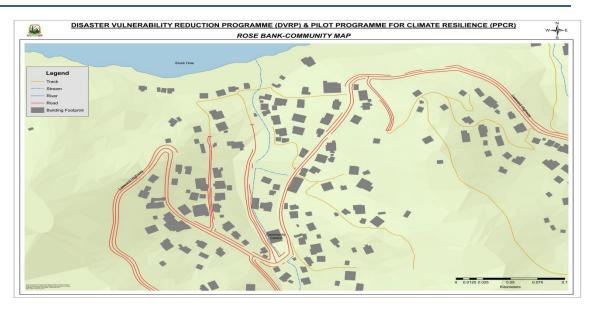
These finding were extracted from the questionnaire.

Table 2: Key social findings

Beneficiaries	Characteristics	Potential benefits		
Women, Children,	Are poor, some may	Direct: Temporary employment from		
Vulnerable groups	lack skills,	participation in the project activity.		
education/literacy ,				
	information, health	Indirect: Children enjoy better standard		
		of living due to parents employment.		
Community	Members have a strong	Direct: Organization of Self- help		
	common interest	groups		
	(satellite warehouses	Improvement the livelihood of		

	and community	community members in the event of the	
	centres). Members	natural Disaster.	
	share the responsibility	Possible skill training opportunities.	
	and benefits equitably.	Community mobilization	
	leadership identified.		
Farmers, fisher folks	Small producers who	Direct: farmers can have tools readily	
	contribute to the	available to clear drain and the	
	country's economy	Infrastructural support and training	
		space in the use of equipment	
Health department	Staff and equipment	Direct: Better facilities for the entire	
	shortage, limited space	community to health and nutrition care	

# COMMUNITY PROFILES DARK VIEW

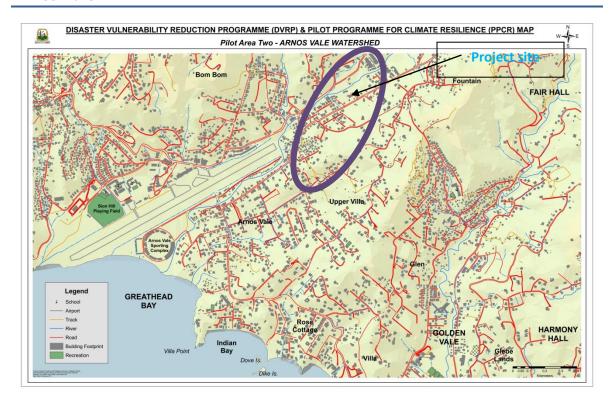


Dark View is situated in the North western section of St. Vincent. The surrounding topography consists of steep hills that rise to heights of approximately 400ft. The vegetation comprises a mixture of tall trees, grasses and shrubs. The general geology of the area comprises predominantly of the Yellow Tephra Formation underlain by volcaniclastics (Robertson 2003) This Formation is a well bedded pyroclastic fall deposit produced by the Soufriere volcano during the late Pleistocene (Rowley 1978b). (The pyroclastic fall deposit in this location contains mainly fine-grained ash and beds of pumice). Volcaniclastics are believed to have been derived from the Grand Bonhomme Volcanic Centre. Alluvial deposits are located in the area. Soil movement is a common occurrence at Dark View mainly due to the nature of the geology where the ash beds are fairly easily eroded and pumice beds can be washed out or individual pumice easily removed by hand. The beach and coastal front in Dark View has suffered considerable erosion, the sea is encroaching the land.

The Dark View main road borders the coastline. It is located approximately 50 ft away from the mean sea level position. The elevation of the road appears to be about 12 ft above MSL. From observation, it is evident that land seaward of the road has suffered severe coastal erosion and that undermining of the road is imminent.

The livelihood of most community members is seine fishing it is a traditional and current activity of residents.

# **Arnos Vale**



# **Activity:**

This component of the project includes the lining of the river via the installation 1500 x 18ft gabion baskets and reinforced concrete walls. This will be done in an effort to increase the capacity of the river and minimise the incident and impact of flooding

# **Background:**

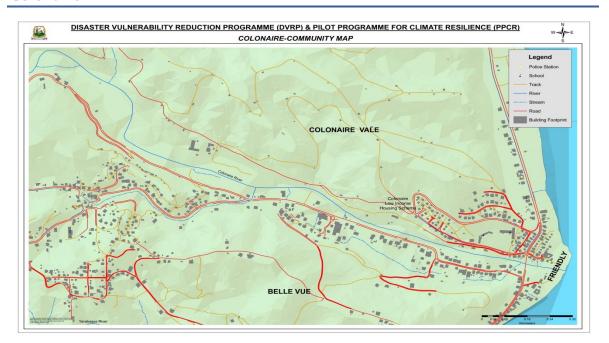
In 2006 the Government of St. Vincent and the Grenadines commissioned a Drainage Improvement Study to assess the existing drainage conditions. Among the key sites examined was the Arnos Vale drainage system which discharges directly into the Warrawarrow River. This area has become increasingly urbanised and the study highlighted problems of increased runoff into the river, increased incidence of flooding and erosion of river banks which threatens individuals' properties. The study further identified critical works required for flood protection and provided conceptual designs and preliminary cost estimates for the work.

**Areas in close proximity** include dwellings (approximately 15), 2 business outlets, 1 utility storage house and 1 health centre.

**Major beneficiaries** include the residents of these dwellings and users and customers of neighbouring facilities.

**Synopsis and justification**: The river presents a major safety risk particularly for dwellings along the river bank due to substantial soil erosion. In addition the river encroaches on the sewage systems of approximately two dwellings presenting various health hazards. Due to this, assessment at this site sought to engage residents in interviews in order understand current impact of the unprotected river and needs with regard to safety. These interviews created direct contact between researcher and beneficiary with a view to gaining in-depth information, soliciting cooperation during the project and enhancing the benefits to the intended beneficiary.

# Colonarie



### Location:

Colonaire is a small rural community located on the north eastern side of St. Vincent and the Grenadines. It is approximately 16 miles away from the capital Kingstown. It is mainly a farming community where persons cultivate bananas, citrus, ground provisions and vegetables. The vegetation along the riverbed consists mainly of shrubs, coconut palms. There is no human settlement along the river. The area is currently being affected by Climate change patterns from torrential rains which is endangering the stabilization of the public road.

# **Population**

According to the 2001 census the population of this area was seven thousand three hundred and five (7,305). Five thousand and ninety nine are in the economically active population (5,099), seven hundred and twenty nine (729), 527 males and 202 females are unemployed.

# Family structure

The extended family unit is quite evident in this community. Some households are nuclear. Few are of single parentage, in which a woman heads the household in most instances.

### Culture

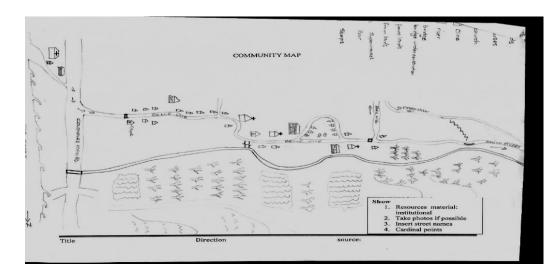
Cultural activities such as ring games and storytelling were done especially on full moon. With the passing of the older generation and the accessibility of technology these customs have died. The main issues affecting the community are unemployment, teen-aged pregnancy, drug abuse, and lack of recreational activities.

# Public infrastructure

The houses are constructed of concrete. Residents have easy access to utilities such as electricity, water, telephone, cable television and internet. Residents continue to use the river to conduct domestic chores such as washing and bathing. There is one health clinic, a police station, a secondary school and a primary school.

# General

The Colonarie river is one of the longest watercourses in St. Vincent and the Grenadines flowing from Grande Bonhomie in the north east to the Atlantic ocean on the central east coast. Land along the river is current used for nature conservation and research. Some agricultural activity is also supported. This area is considered a forest reserve in St. Vincent and there is no human settlement on the proposed site. The current 'status' of the river exposes surrounding the lands to erosion and threatens stability of the public road. Due to the steep valley topography and relatively high moisture content of the soil, there is usually rapid runoff. The vegetation along the riverbank consists mainly of shrubs.



In an effort to mitigate the effects of disaster the project proposes to include this river in the river defence component.

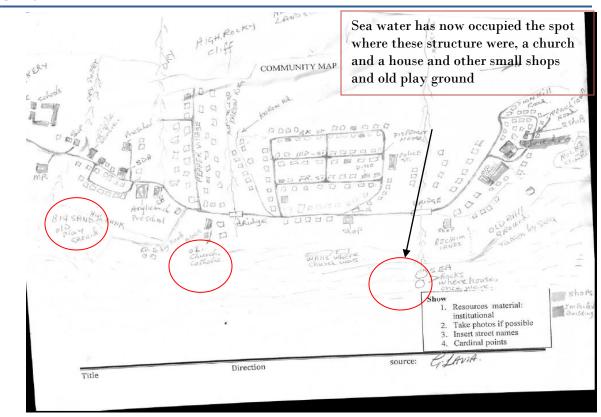
**Activity:** The activity includes the installation of 1000 x 18ft of Gabion baskets along the river bank.

**Areas in close proximity:** includes farm lands; there are no social activities or settlements,

**Major beneficiaries:** owners of farm lands, road users, and members of the surrounding community.

**Synopsis and justification**: The river presents medium risk to the community. Currently there is minimum access to farm lands which results in underutilization. This work will facilitate easy access to and increase the value of nearby lands. The Members of the community will therefore be engaged in group discussion to obtain their feedback on this activity. Additionally attempts would be made to engage land owner.

# **SANDY BAY**



# Location

Sandy Bay is a rural coastal village on the North Windward coast of St. Vincent and the Grenadines in the parish of Charlotte. It lies approximately four (4) miles north of Georgetown (a main town in St. Vincent and the Grenadines) and south of the La Soufriere Volcano. The community is also in close proximity to one of the island deadliest rivers, the Rabacca Dry River. This river, which flows directly from the volcano for regularity is DRY in nature but very powerful when flowing. It is accessible by land and sea.

# **Background:**

The village comprises of two (2) major sections old Sandy Bay and New Sandy Bay. The old Sandy Bay section is believed to have existent in 1797 after the Carib wars with the British. The area comprises mainly of decedents of the Yellow Caribs, a small number of African slaves referred to as Black Caribs the ancestors of the Black Caribs became the first permanent non-carib settlers in the island in 1675 mainly survivors from the sinking

Dutch ship. During the 1900s the community had numerous upsurges from heavy flooding, hurricanes and volcanic eruption.

# Population

The population according to the 2001 census, was two thousand seven hundred and sixteen (2,716). (This is the entire Sandy Bay census division that comprises surrounding communities. The economically active population is one thousand eight hundred and eighty (1,880) of which 718 are economically inactive. The unemployed women in the community are normally engaged in household chores, while the men seek odd and ends tasks.

### Livelihood

The community livelihood is embedded in subsistence and commercial farming, of crops including cassava, peas, sorrel and sweet potatoes.

# Culture

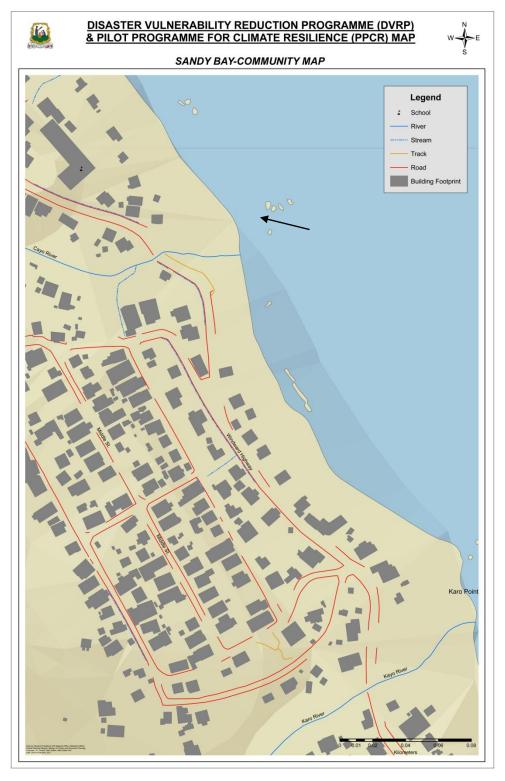
The traditional Carib culture is not practiced however, members of the community practice the Quadrille dance. November 1 (the day of the Dead) is also celebrated by the cleaning and lighting of candles on their deceased relatives graves. In December, like all other communities in St. Vincent and the Grenadines the members visits each other homes to bring a message of glad tidings and joy.

# **Family Structure:**

The family composition is single parents and extended families living in small to medium size concrete and partly wooden houses. Approximately 96 percent have electricity, and domestic water supply. Telephone in the homes is very common however a number of people have cellular phones. Approximately 15 percent of the population use pit latrines. Teen pregnancy seems to be the dominant social problem in this area.

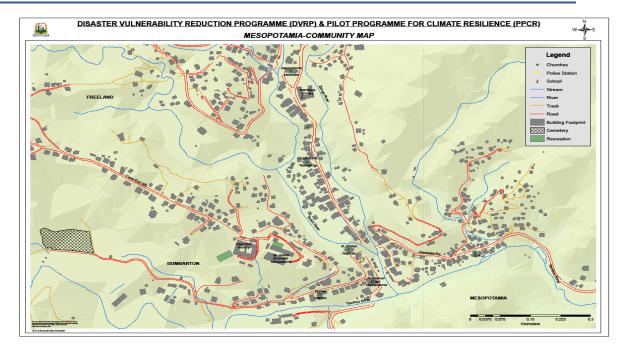
### Infrastructural

The institutions present in this community are one (1) health clinic, two (2) preprimary schools, one (1) primary and one secondary school, Churches from all religions (Anglican, Catholic, Spiritual Baptist, Adventist, etc.) one resource centre that serves as an office for teachers in the Secondary school, Adult Continued Education Programmes and community meetings. Additionally the community has its own radio station, the Garifuna radio, post office, police station, playing field and cemetery. Other businesses that can be found in Sandy Bay include hairdressing, bakery, and retail shops.



Sandy Bay

# Marriaqua



# Location

The Marriaqua area is located in the southern central district in St. Vincent and the Grenadines. The community is surrounded by rivers. The three main rivers are the Zinger; the Tiviate and Fold river, and all meet together towards (the marriage of waters) Yambou past river.

# Composition

The community has a mixture of races mainly East Indians and Africans. It is known as the bread basket of St. Vincent and the Grenadines for its 'agricultural base. The lands are very fertile as it is known to be an old volcano.

# **Family Structure**

The family structure is single parent, nuclear and to a great extent, extended. The main social problems according to residents in this area are unemployment, alcohol abuse, idleness among the youth, illiteracy, immortality and HIV/AIDS.

# **Population**

According to the 2001 Census the population was eight thousand one hundred and forty five (8,145) which accounts for 7.2 percent of the population. There are five thousand five hundred and forty seven (5,547) persons in the economically active age group five hundred and fifty four (554) of whom were unemployed, 348 males and 206 females.

# Livelihood

While many of the persons are farmers, a great number is employed in the service sector. Other employment activities in this area include: domestic workers; self-employed; Blockand Baluster making and tradesmen.

### **Infrastructure:**

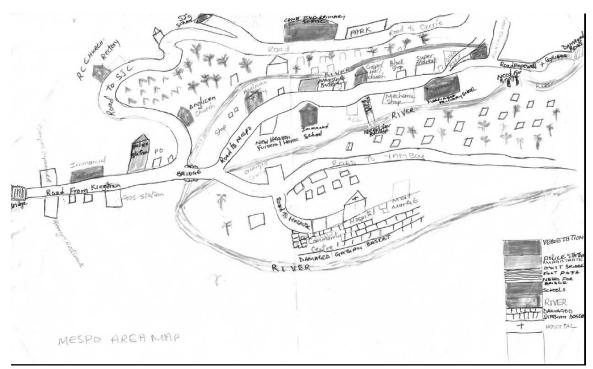
There are two (2) pre-schools, one (1) primary and one (1) secondary school. There is a health centre, post office, police station and magistrate court. There is a community centre that was erected by the elderly in the form of self help. It houses the village council clerk's office, and the community development field officer's office. There are various food shops, retail shop, rum shops and one supermarket. Other businesses include beauty parlour, barber shop, computer café. The community has electricity and water in about 96 percent of the population. Access to domestic telephone.

# General

The Marriaqua community is prone to heavy flooding which is often caused by prolong or intense rainfall that result in channel overflow and human factors such as the dumping of debris in waterways, resulting in blockage of culverts and prevention of free passage of water, lack of river maintenance and squatting on the river banks also contributes to the onset of rapid flooding, allowing less than two (2) hours for safe evacuation from vulnerable areas. Many of the services in Marriaqua are located in this flood zone, the educational facilities, the medical facility, the food distribution (food shops) and supermarket facilities and the Police station.

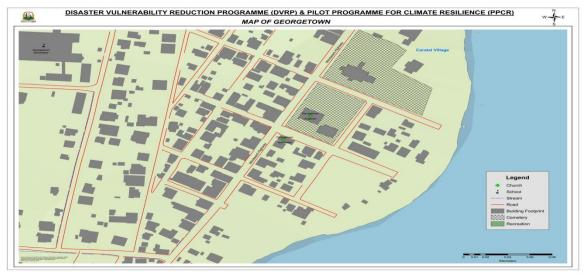
Some efforts have been made to establish a warning system by the installation of simple flood-warning devices installed at Montreal and Majorca. These devices are calibrated to trigger an alarm at critical flood water levels and transmit this warning to designated telephone numbers. Once this warning is received it will be conveyed to residents. The chairperson of the Marriaqua Disaster Committee, the Co-ordinator of NEMO, the Officer-In-Charge of the Police Station, and the medical office will all receive warning signals. The information will then be sent to the bell person who rings the church bell to alert residents.

# Social Assessment Disaster Vulnerability Reduction Project



Map provided by the field officer in the area, 2011

# Georgetown:



# Location

Georgetown is the largest town in the north eastern side of St. Vincent and the Grenadines. It was once a prosperous community where most persons were employed in the sugar cane and arrowroot estates. Settlement begun in Georgetown in the late 1880s. About 10 percent of the village is below sea level, which makes it vulnerable to flooding. The area is vulnerable to high winds, flooding, sea surges and hurricanes. It is also one of the closest communities to the volcano.

# Livelihood

Residents make their livelihood by farming, construction sites, government and private businesses. Most of the houses in the area are concrete brick, a few are incomplete or are a mixture of wood and concrete. There are wooden houses that date back to 1950s

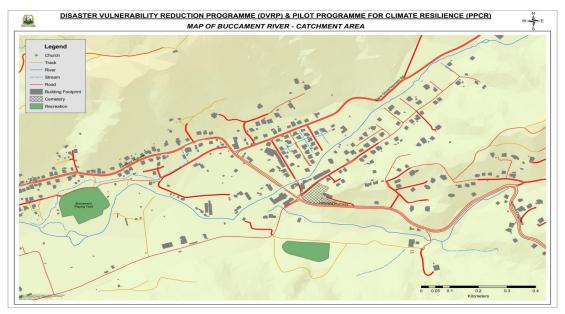
# **Population**

The population of Georgetown according to the 2001 census was six thousand seven hundred and sixty seven (6,767). There are four thousand six hundred and forty three (4,643) residents, seven hundred and twenty nine (729) of whom were unemployed 459 males and 137 females.

# **Family structure**

The family structure comprises of a majority of extended families, single parent and nuclear families are on the increase. The main social problems identified by residents are the unemployment and the unavailability of skilled labour

### **BUCCAMENT**



#### Location

Buccament is located on the south leeward side of the island and sustains the largest and most reliable source of potable water on the island, the Dalaway catchment, which provides over 40% of the island's total water supply. Apart from this, the river supports community activities such as sport fishing, bathing, and water for farms and stones for building construction. From documentation, it was revealed that the riverbanks are relatively shallow at 8ft to 15ft. (2001). Additionally, the river has a profound impact on the structure and life of the communities. It empties into a flood plain of relatively poor drained soils near Buccament Bay that runs along the main road

### **Activity:**

The installation of gabion walls comprising staggered stocks of gabions baskets varying in height between 12ft and 15ft. The walls will be 50ft in length on both banks downstream of the main bridge and 1000 ft along the right bank upstream of the bridge and 500 ft along the left bank.

Areas in close proximity: includes farm lands, properties and enterprises.

**Major beneficiaries:** owners of farm lands, enterprise owners, and members of the community.

### Composition

Buccament is comprised of a number of small communities starting at Buccament Bay at the coast to Table Rock at 690 ft elevation. The Buccament economy is supported by both tourism and agricultural activities such as the newly opened Buccament Bay Beach Resort, a five star resort which employs...Vincentians. The Vermont Valley in the centre of Buccament is home to one of the country's prime eco-tourism sites, the Vermont Nature Trail and has a thriving agricultural community of over 200 registered farmers and over 400 agricultural plots, which produce a wide variety of vegetables and root crops.

### Population:

Buccament is comprised of a number of small communities largely at Buccament at coast to table rock. The Vermont valley, at the centre of Buccament is home to the country's prime eco-tourism sites, the Vermont nature trail.

#### STAKEHOLDER ISSUES

This section of the report discusses the main stakeholders consulted, the method of consultation and the general issues raised.

#### **Stakeholder Consultation**

The purpose of the consultation was to provide an opportunity for the stakeholders to participate in and provide input into the project as it relates to their feelings on the activities, ideas on implementation and their reservations. Generally, the parties which were consulted included the public/community members, government representatives, and special interest groups. Each stakeholder group is discussed briefly below:

### **Key Stakeholders**

### Public/Community members

The communities were engaged in discussion (individually and Groups) about the possible impacts the projects may contribute to their livelihood.

### Government representatives (Ministries)

This group was comprised of representatives from several government agencies with direct administrative and technical responsibility for specific project activities. This included engineers from the Ministry of Transport and Works, Technical officers from the Ministry of Housing, land and surveys, Physical Planning and Informal Human Settlements, Ministry of Telecommunications, Ministry of Health and the Environment, Ministry of Education, Ministry of National Security, and Ministry of National Mobilisation. Staff from these agencies provided technical and process related inputs to the assessment team. The consultations generally took the form of group discussions and individual interviews.

### Special Interest Groups

This group included representatives from specialist interest groups such the Red Cross, Rainbow League and Community Disaster Management committees. This group provided information and input relative to special community issues.

### Principles of the consultation and specific consultation approach

In an effort to inform and engage the stakeholders and obtain constructive feedback, the social assessment team used a multi-tiered approach. This approach was designed to achieve the following specific objectives:

- Provide varied opportunities for stakeholders to participate in and provide input to the project;
- Ensure that key messages and concepts are conveyed in a clear, concise and understandable manner;
- Explain complex project details;
- Demonstrate a transparent decision-making process.

The following techniques were used:

- Presentations to groups and individuals
- Focus group discussion
- Individual interviews
- Group discussions and meetings
- Surveys

Stakeholder List Local Level - government authorities

User groups - residential, commercial, institutional, medical, farmers

Vulnerable Groups- residents living near project sites, Women, Children and elderly

The table below summaries the types of approaches used, the particular parties consulted and their respective responses to the critical issues presented.

### STAKEHOLDER ANALYSIS AND CONSULTATION

Method	Activity	Stakeholder	Characteristics /interest	Issues raised	Response from questionnaires
200 questionnaires 3 group discussion	Satellite warehouse	Community members of Rose Hall and of Sandy Bay. Government Ministry of Telecommunication, NEMO,	Storage of material and other supplies to be readily available in the time of natural disaster.	Possible employment to monitor, secure and distribute material and supplies.	99.2% approval
200 questionnaires 3 group discussion	VHF/HF radios	Community members of Marriaqua , NEMO, NTRC, Rainbow League, Ministry of Telecommunication	The training of members to operate radios to communicate in the event of an emergency	Where are they going to be stored? Who will be trained?	100 % approval
140 questionnaires 3 group discussion	River defense	Community members of Buccament, Marriaqua , Ministry of Transport and Works	Work is necessary to protect properties and farm lands	Whether the gabions are the best source to protect the river	95.2 % work is necessary
1 group discussion: 2 informal interviews	Rehabilitation of bridges and roads	Community Members of Green Hill, Dauphine: Farmers, Ministries of Housing and Land development: Agriculture and Rural Development: Transport and works	Eco-tourism development possibility safe alternate route access	Management of the area especially Fenton consideration must be given to Green preservation	
Interview NEMO	Search and rescue (land and sea)	Ministry of National Security	Rapid response and a trained cadre of response officers	Storage of equipment	
Interview with Nurses at 2 Clinic, 3 police station, Nemo, Housing, Physical planning	Retrofitting\reconstruction of government buildings	Ministries of Health and the Environment: Housing: Transport and Works: Physical Planning: National Security: Ministry of Education	Health Services are interrupted: the Clinic in Fancy, Colonaire, Overland do not have a generator and vaccination and other medical supplies are at risk.	There is need for a resident doctor or nurse for 24 hours at health clinics.  The building codes must be taken into consideration	

Method	Activity	Stakeholder	Characteristics/interest	Issues raised	Response
Interview	Upgrade of disaster management agencies	NEMO	Better coordination improved response		
Interview	Training	NEMO	Capacity building	Facilitators	
Interview	Institutional strengthening	Red Cross, Community based organization	Capacity building	Dispersion of knowledge	
Interview Site visit	Villa beach restoration	Public, Ministry of Culture and Tourism, Ministry of Transport and works			
Interview Site visit	Drainage Improvement	MTW, community members of Arnos Vale			
Interview Discussion	Relocation of the Milton Cato Memorial Hospital	Ministry of Health and Environment: Ministry of Finance and Planning Lands and surveys; MTW:	The present building is structurally unsound Feasibility study and possible new location	Conduct a feasibility study, do design and other preconstruction	
Interview Discussion	Strengthening of institutions for the enforcement of the Building codes etc	Ministry of Housing, Physical Planning, MTW	Reconstruction training monitoring; higher building standards: public awareness		
Interview	Public Education and Awareness	Ministry of Education ; NEMO	Public awareness	Nationwide campaigns	
Interviews	Retrofitting of Emergency Shelters	Ministries of Education; Transport; National Security; Social Development; NEMO	Shelter management /organization. Suitable structures- repair to the roof, replacement of doors and windows.	Need for women and children to feel protected: address Water and sanitation issues separate areas for male and female	
Interviews, questionnaires (270)	Slope Stabilization	Communities: Ministries of Transport, Health and the Environment, Housing, NEMO	Landslides resulted in the loss of lives	Almost all communities are at risk	

Activity	Description	Land Acquisition	Land acquisition involving relocation	Estimated affected population	Categories of affected persons *
Emergency Communication s	Installation of nine (9)) VHF/HF radios with solar power at all the satellite warehouse facilities,	No	NA	Entire populatio n	NA
Drainage Improvement	Drainage improvements work in Kingstown and Arnos Vale. Some of the activities include design and civil works.	No	No	~ 50 families ~ 15 business ~ 2 Farmers	Business Owners  Homeowne r Others - TBD
Relocation of the Milton Cato Memorial Hospital	Feasibility studies Design and site selection for the relocating the hospital.	TBD	TBD	TBD	TBD
Strengthenin g of institutions for the enforcement of the Building codes etc.	This activity involves reviewing the current building code and providing technical training to improve its enforcement	NA	NA	NA	NA
Coastal and River Defence	Protection of coastal areas and river defences including lining drainage channels and potential relocation of individual residing along vulnerable coastal location	Yes	TBD	TBD	Farmers Fisherfolks Vulnerable groups Others TBD
Public Education and Awareness	Public education on hazards and reducing risks to the school population.	NA	NA	NA	NA
Roads and bridges	This activity will undertake design and construction of a bypass road.	Yes	Yes	TBD	Farmers Homeown ers Others NTBD

## Disaster Vulnerability Reduction Project

Activity	Description	Land Acquisition	Land acquisition involving relocation	Estimated affected population	Categories of affected persons *
Retrofitting of Emergency Shelters	Emergency shelters requiring total or partial retrofit	No	No	No	No
Slope Stabilization	Landslide prone communities in which intervention measures can be implemented to reduce the landslides and reduce the impact on infrastructure.	Yes	No	TBD	TBD
Search and rescue (land and sea)	Capacitate to perform land and sea rescue operation.	NA	NA	NA	NA
Retrofitting\rec onstruction of government buildings	The upgrading of buildings such as clinics and police stations.	NO	No	TBD	TBD
Upgrade of disaster management agencies	Activity included the provision of equipment and internal training	NA	NA	NA	NA
Training	National Disaster Training Programme	N/A	NA	NA	NA
Institutional strengthening	Involves the establishment of mechanisms for the monitoring disasters	N/A	NA	NA	NA
Satellite Warehouse for communities	Construct and equip nine satellite warehouses for communities	No / TBD	TBD	TBD	TBD
Villa beach restoration	Study to determine the pollution levels and reefs.	TBD	TBD	TBD	TBD

#### Overview

Research has shown that disaster greatly impacts the poor, most of whom are women. It also well-recognised that all vulnerable groups including the poor, women, children, and the elderly form a part, are less able to withstand the negative impact of changes to their environment. The survey for the Social Assessment therefore, takes into account social variables of gender, age, and poverty. A large proportion of the sample (50.7 percent) is drawn from the poorest regions in St. Vincent and the Grenadines, ensuring that views of the poor are thoroughly investigated. Women and the elderly¹ are also sufficiently featured in the sample, and represent 50.8 percent and 23.8 percent of the sample respectively Having sufficiently sampled these groups, the Social Assessment finds that the project objectives are acceptable and do not adversely impact any vulnerable groups. The impact of the project on the poor:

Based on the analysis the project offers numerous benefits to poor communities as well as to the poor, directly.

First, in the implementation phase the civil works should provide some opportunities and new livelihood supports temporarily. Consistent with this, residents in the communities surveyed identified possible short-term employment creation as one major benefit of the project.

Second, training in the sub-components of the projects for example in the operation of the VHF/HF radios and the use of the equipment in the satellite warehouse are other components of the project will increase the skills –set available to persons in various communities . In particular, this will increase the capacity of poorer persons to gain employment, and improve their competitiveness. It will also provide the necessary skills to prepare for, mitigate and respond to disaster more effectively. Given that the poor are vulnerable to disaster, project components which reduce risk and improve disaster response and preparedness, also serve to reduce the vulnerability of the poor.

Third, the stabilization of land would reduce risk to farmers and residents. Processes of soil erosion which currently results in the devaluation of land and property will be halted. In this way farmers can maintain their level of produce given that the topsoil will be protected. Additionally, small businesses such as grocery shops, restaurants, and bars etc, found in the vulnerable locations near the coast will be made more secure.

One of the fundamental benefits to the poor is the mental security of knowing that they are protected and that risks of endangerment are reduced. The poor can now concentrate on other efforts such as increasing income for their families.

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<sup>&</sup>lt;sup>1</sup> Elderly is commonly defined as person 55 years and over.

### The impact of the project on gender

The projects activities are being conducted throughout St. Vincent and the Grenadines. The nature of the project does not connote any significant difference in the number of females and males benefiting under the project. However, included as part of the scope of work to retrofit of emergency shelter, is the inclusion of a provision to make shelter more gender sensitive. The team further recommends that in retrofitting of emergency shelters consideration should be given for:

- (a) Space (Physical separation ) allocations for pregnant women
- (b) Women and men should be trained in shelter management and the operation of the VHF/HF radios, and they should be separated at night.

This includes providing separate facilities bathing and sleeping inter alia Apart from this it is impossible to identify and mitigate all social impacts at this stage of the development of the project. However, adequate information and community participation may reduce any uncertainty associated with the project. Several respondents indicated that the project may increase employment in the area; therefore consideration should be given to integrate members (workers) from the communities. A general rule of thumb is to maximize the use of local labour where the skill can be found.

### **Analysis of Impact Specific Intervention**

River Defence

The assessment conducted in the villages of Marriaqua, Colonarie, Arnos vale, Buccament, and Cumberland (Spring) indicated that the river defence is necessary for the protection of the village. In Marriaqua 76 percent of the respondent stated that the river plays an important role in their community as it is used mainly for farming, fishing, bathing and washing. 72 percent highlighted that the river poses a threat on their community and 68 percent felt that the river bank was not secure. 96 percent agreed that this activity should be undertaken in order to further secure the bank of the river.

This support was echoed in all of the villages. Residents living along the river in the Buccament and Colonaire areas are in agreement for the project, given their agricultural based livelihood. They support the structures because they are of the opinion that the Gabion basket or wall would help to protect their lands as well as reduce the serious soil erosion that results in the devaluing of their properties. One land owner in Buccament indicated that almost 8 feet of his hand was washed away during the last five years due to torrential rains and flooding.

In Arnos Vale, there may be biophysical changes downstream as a result of the Gabion baskets. With the project intervention properties on the southern end of project would now be safer as the gabions would reduce flooding in these vicinities.

Overall, respondents felt that this intervention would help accelerate economic and social development in the community by providing a greater sense of security. Furthermore most persons interviewed considered it very necessary as a mitigation effort, especially in the Buccament area.

The measures that the project implement at the sites will help to strengthen the communities flood prevention and disaster vulnerability capacities as it relates to river. The additional positive impacts includes:

- Reduction of erosion
- Reduction in landslides
- Protection of lives
- Protection of properties
- Protection of roads and other infrastructure (Buccament and Marriaqua)

There are no potential negative impacts identified by the respondents however some concerns were raised:

First in Colonarie, the project construction along the bank of the river may prevent farmers from rapid access to their lands. They indicated that to access the lands they would simply cross the river when the flow is low. The implementation of the river bank support structure implies that the height would prevent such access. They indicated that the project should take into consideration their every day crossing to access their lands and time they can spend cultivating their farms.

Secondly, some respondent stressed that it can create more problems for the residents if not supervised or done properly while others felt that gabion basket are not suitable as river defence and that there was a need for solid wall along the problematic areas. Suggestions were also made in Buccament and Marriaqua for the gabion baskets to be reinforced with cement, trees or mud. This suggestion was voiced by approximately 20 percent of the interviewees. A suggestion was made for the use of fascines or wattle.

Thirdly, the introduction of the gabion basket may reduce the space allotted for the flow of the water and the banks may continue to overflow. This therefore poses an ecological health impact, especially for vectored environmental diseases. One resident explained "if garbage is caught in between the baskets this could create new breeding grounds for mosquitoes and possible increase waterborne and water related infections if the river is not cleaned regularly". This is not a direct negative impact of the gabion basket, but the unsanitary garbage disposal methods of the communities. Residents from all districts indicated that there is a problem of garbage disposal in the area from the general population and from farmers.

### **Coastal Defence**

The Coastal defence assessment was conducted in the communities of Sandy Bay, Georgetown and Darkview (Rosebank). The coastal front in some areas in St. Vincent and the Grenadines is developmental land for tourism. Prime beneficiaries of these activities consist of grocery shops operators, restaurants and bar owners and other small-business owner. In addition to questionnaires, informal interviews were conducted with entrepreneur living along the coast. In these communities, 95.2 percent of the respondents indicated that this activity was necessary for the community. 92 percent felt that the people living along the coast were unsecure and 90 percent of the respondents felt that it

was necessary to secure the coastal front. They anticipate that the sea defence would help in flood and disaster mitigation and highlighted the following positive impacts:

- In Sandy Bay respondents anticipated that coastal defence would prevent beach erosion. This would enable the residents to reintroduce beach sports such as cricket, football and volleyball. Additionally, this would promote a sense of security among parents who indicated that their children would be safer while playing on the beaches.
- It would protect properties along the coastal front and provide environmental beautification.
- It would reduce the risk of loss of human life resulting from natural hazards. Particularly, in the communities of Georgetown and Sandy Bay, which are located near the Atlantic belt, where residents are endangered as high waves are frequently observed.
- The coastal defence work would protect the infrastructure particularly roads in some of the communities for example, Sandy Bay and Dark view. The roads in these two communities are an essential part of the road network and connect communities (in the north) to the rest of the island.

Generally the residents approve the objectives of this activity and indicated that if not implemented, there can be negative consequences to individuals, communities, the economy and the environment. Some of their responses are presented in the table below.

The respondents say: If the project was not implemented then:

Individual	Community	Physical Infrastructure	Environment
"people will lose	"If nothing is	"if nothing is done the sea	"there will be no beach
their lives and too	done after a while	will take all the lands, and the	and it will need some
often persons have to	the sea will claim all	roads and therefore the	protection"
evacuate the coastal	the lands at the sea	government will have to spend	
areas when a	front"	more money to cut roads and get	
hurricane strike"		lands to relocate people"	
"people living in	"many roads	"in the next five years about	"damages to the beach
the area will have to	and homes along the	fifty homes will have to be	and people's homes"
find other places to	coast lines will get	relocated (SANDY BAY)"	
live"	damaged"		
"very little or no	"the sea will	"the sea will continue taking	"the sea water may
beaches recreational	take more lands"	land until it takes the public	continue to reclaim and
areas"		road"	erode the lands"
	"there will be a	"the water will destroy	"there would be no
	total cut off in some	infrastructure like roads and	land for living and in some
	areas, main road	other buildings along the	areas of the community the
	will be destroyed.	coastline"	roads will be completely
	residents of low		destroyed"
	lying areas will have		
	to move to higher		
	ground"		

The project has been deemed necessary for the community as it would provide a measure of security to the poor, the elderly, women, children and the general population in all three communities. They do not envisage any negative impact of the projects.. However some respondents in Sandy Bay expressed scepticism on the ability of coastal-defence structures to protect the community.

Respondents stated:

"if it is not maintained [the sea defence] it would not make sense"

"it will be impossible to build a sea defence because the coastal area is a broad area"

"it will limited beach area"

"well is if [what if] the sea come up higher"

"when water ready nobody can control it"

"How will we get access to it [the sea]"

Residents are concerned that a simple sea defence may not be sufficient to reduce their exposure the sea entirely because of the environmental changes that have been observed over the last 10 years.

### Slope Stabilization:

Many of the lands in St. Vincent and the Grenadines are endangered and prone to landslide. The slope stabilization activities are scheduled to be conducted in Bequia, Fancy, Spring, Chester Cottage, Mount Grennan, Mt. Pleasant/Peruvian vale, Maroon Hill and Dark View. The Social Assessment finds that slope stabilisation activities are welcomed in the areas as they help to maintain the water table and fertility of the soil. In Chester cottage, Fancy, and Dark view 89.6 percent of the respondents felt that it was necessary to secure the slopes. 99.3 percent were of the opinion that the work was necessary to protect properties and control erosion.

Residents of Dark View emphasised that it was necessary to stabilize the area to prevent hazards and prevent the communities in the north from being cut off. The implementation of the project implies that persons in Dark View must be relocated. The serious undermining of the road and mountain terrain endangers the lives and livelihood of the residents in this area. Thus, efforts should be made to prevent persons from further investing in the area.

Moreover, he slope stabilization activities may bring changes in the soil structure, that is protection for the top soil and may impact on the availability of land for farming, soil productivity and housing.

In Bequia, information from secondary sources revealed that major landslides have been reported in Paget Farm in 1992 and 1994. During that period six (6) homes were destroyed and one public building (church) was rendered uninhabitable. In November 2005, flood waters and landslides significantly impacted the major road network restricting traffic and destroying two (2) homes. Several houses were also inundated by flood waters. During that same period a major landslide occurred along the coast and killed 2 fishermen sheltering in a cave. The *After Action Report* prepared by NEMO (date) (state objectives) recommends that persons who reside in the main affected area of Paget Farm should be relocated due to the vulnerability of the area. The social assessment team, after observation of the area, concluded that in addition to slope stabilization activities, a more holistic intervention is needed.

In Spring and Chester Cottage in addition to housing, the resident use lands for farming however, the frequent soil erosion, landslides and land slippage is decreasing the fertility of arable lands. The farmers in these rural areas depend entirely on the soil productivity for their livelihood. The respondents stated that the stabilization of the slope would help to protect and preserve lands for the next generation. Further, the slope stabilization would increase safety in the community as it becomes extremely dangerous during the rainy season for lives, property, vehicles etc, as the roads become impassable.

The Maroon Hill, Mount Pleasant and Mount Grennan areas identified for slope stabilization were assessed by the Project Committee; consideration would be given to reforestation or the installation of strong apron, deep toe wall and sufficient foundations to prevent further erosion.

According to residents in all proposed sites, the potential negative impact may be environmental and if the stabilization is not properly implemented it may add to the existing problem of erosion and drainage.

Some of the views shared by residents from all sites:

Project	Potential impact of not implementing the project
Slope stabilization	<ul> <li>damage the livelihood and property</li> <li>farmers would lose their crops and also their animals</li> </ul>
	deaths and change of land features
	destroy individual home property
	destroy land the soil content
	• if nothing is done the problem will get worse no houses will be able to be
	constructed in these areas neither farming activities can take place
	there would be constant erosion, and landslides on these slopes
	<ul> <li>more of the land will continue to slip thus creating road blockage for persons</li> </ul>
	who use the road
	<ul> <li>more soil erosion from the water running on the road; vehicles can drive over,</li> </ul>

loss of lives
over time the houses will collapse
over years the entire area would erode

### **Roads and Bridges:**

This activity will include design and construction of a bypass road to Kingstown and replace two bridges at Fenton Road. This area was assessed using secondary data sources and a group discussion. The Fenton trail is a 6 mile stretch of mountain road which acts as a bypass between Gomea in the West St. George constituency and Green Hill in the Central Kingstown constituency. The road was constructed in the 1970's and passes through private and government-owned farm lands, forested areas and numerous streams. The trail is an area for hiking, sight-seeing, swimming, picnicking, hunting and increased farming. The farming created a major economic earning for the residents of Green Hill and surrounding areas. In recent years, the road was partially destroyed and the bridges were deemed unsuitable for use. The area also took a major setback with the passing of hurricane Tomas and the bridges have now been declared hazardous. Farmers in the area are at risk and access to the area that once served as an ecotourism attraction is now closed. In an interview with, members of a community group in the area it was disclosed that it was necessary to improve these bridges and the roads as it would yield economical benefits for the community. Additionally the public perception of ecotourism will increase and hereby provide some employment opportunities including the employment of Rangers to work in the Fenton Mountain other opportunities include:

Opportunities project may provide:

Opportunity	How
Tourism	Eco- tourism - wild life and bird watching
attraction	Water falls
	Hiking areas
Recreational	Recreational spots
	Green protected area in Kingstown where persons can
	relax, hunt, farm, fish and take part in other cultural activities.
Farming	Farmer can produce more as they would be able to
	transport their produce.
	Reintroduction of the green hill market
Go- green home	This would a house that uses solar energy.
installation	Water pumped from the river or collected in tank from
	rainfall.
	Garbage Composting
	Home gardening
Employment	Forest rangers, tour guide operators,

The group indicated that because the area is somewhat abandoned it is increasing becoming a dumping ground causing environmental pollution. Therefore the potential impact for not implementing the project would include:

- Contributing to the loss of forest land, resulting in habitat degradation.
- Changes in the landscape and topography, which may further alter drainage line, downstream thereby, impacting the people Greenhill.
- Changing emphasis in community activity to ecotourism
- Creation of a National park

There are no land acquisition issues as it pertains to the repair of the roads and bridges in the Fenton area. The Land directly involved is owned by the Government of St. Vincent and the Grenadines.

Other issues raised:

In Green hill – lack of value added facilities

Money is needed to develop area

### Common impact for Slope stabilization, Road and Bridges, coastal defence and River defence

Potential negative impact

- An increase in ambient noise levels that could annoy some residents
- A change in the traffic conditions (traffic may have to be redirected)
- Water levels in the rivers

### **Emergency Communication: Installation of VHF/HF Radios**

The project activity involves the installation of emergency communication equipment (VHF/HF radios) in 10 communities across the island. These are Bequia, Canouan, Georgetown, Mayreau, Marriaqua, Rose Hall, Sandy Bay, and Union Island. It will include the training of personnel in radio usage and disaster management, physical placement of radios in community centres, satellite warehouses or other central location, and the erection of repeaters in remote areas to boost signal transmission. This project activity aims to improve the communication network across St. Vincent and the Grenadines, and to enable communication during and after a disaster.

The Social Assessment identifies residents or members of the ten (10) communities as beneficiaries of this activity. In particular beneficiaries include the poor, elderly, women and children who, together, are more vulnerable to the adverse effects of disaster. Shelter managers and emergency responders in each district (health clinics, police stations etc.) will also benefit from a more comprehensive communication network.

Anecdotal evidence obtained by the Social Assessment Team indicated that several communities (e.g. Bequia) were cut off from the main telecommunication network in previous disasters including the most recent Hurricane Tomas due to damage infrastructure. This evidence points to the need to provide all communities with the facilities to communicate in a national disaster. Further a large proportion of respondents of the survey point to 'early' and 'reliable transmission of information' as one area of concern related to disasters. The Social Assessment therefore concludes that not only is this activity acceptable to residents of the community (as indicated by a 99.3percent approval rating), it is also consistent with the needs and concerns raised.

In order for stakeholders to benefit as intended, issues of training and accessibility will need to be carefully implemented and monitored. The Social Assessment therefore recommends that these aspects of capacity building/training and monitoring be treated with a high level of priority.

The Social Assessment finds that this project activity will have no known adverse impact on the quality of life, health, culture or environment of the residents of the respective communities, either directly or indirectly. The structures to be erected (repeaters) are of negligible size and will be placed in remote locations, integrated with already-existing telecommunication infrastructure. No land acquisition or issues of displacement have been identified.

The project will equip communities with the resources (and training) to communicate with the relevant authorities as well as other communities, in the event of disaster. Project deliverables will not impose on, or disadvantage persons in anyway – it serves and protects the interests of most vulnerable groups. Overall this project activity is likely to build capacity in the relevant communities, and increase disaster preparedness.

### Satellite Warehouse

This component of the project involves the construction and outfitting of nine (9) satellite warehouses in communities across St. Vincent and the Grenadines in an effort to decentralise disaster management. Warehouses will be equipped with, and used to store emergency supplies such as food and clean-up equipment to be used in the aftermath of a disaster. Communities earmarked for Satellite Warehouses are Barrouallie (Peter's Hope), Bequia, Canouan, Georgetown/Colonaire, Mayreau, Mesopotamia, Rose Hall, Sandy Bay, and Union Island.

Persons who reside in the target communities (named above) are the direct beneficiaries of this activity. In particular, this includes residents of the poorest census division in St. Vincent and the Grenadines (Georgetown, Sandy Bay, Colonaire, Chateaubelair and Marriaqua). Separately, these regions have the highest numbers of poor households and the most severe incidences of poverty, as indicated by the 2007/2008 Survey of Living Conditions. Benefits are therefore necessarily transferred to the most vulnerable groups; this includes persons living in sub-standard housing who are often displaced by a disaster. Communities in which disaster management personnel or groups exist (e.g. Marriaqua) would benefit from the additional resources and training. Communities with no formal structure for dealing with disaster will also benefit from this initiative.

Research conducted by the Social Assessment Team indicates that the project activity is consistent with the needs and interests of community members. Focus group discussions in Marriaqua for example pointed towards the need for a place to 'house' emergency supplies and equipment and disaster management activities. Members of the local Disaster Management Committee (DMC) present at the discussion recommended such a facility to ensure sustainability and effectiveness of the DMCs. Separately, respondents in the Social Assessment survey indicated that timely distribution of aid after a disaster was an important area of concern, underscoring the need for community-based supplies.

The possibility of land acquisition has been identified in one case only (Bequia). The scope of impact has not yet been determined as designs are still in their preliminary phase. It is expected that, as in every other case for which it is applicable, the Resettlement Policy Framework and subsequent Action Plan will guide this process of land acquisition. This framework will ensure adequate compensation and humane treatment of the persons displaced.

Save for the case of land acquisition highlighted above, no other adverse impacts have been identified. In all instances a new facility will be designed and constructed. Feedback from the survey indicated that community members are pleased to have additional infrastructure in their communities. One Rose Hall resident remarked "anything to benefit we community". Another in Sandy Bay remarked that the proposed Satellite Warehouse 'will help save people's lives' by increasing 'access to tools and equipment'.

In sum this project activity will have limited adverse impact on residents of the target communities and is found to be consistent with the needs.

### Risk assessment

- C	D. (	TA71. • •	TT.	T. ' '	D
Commu nity	Potential hazards	Who is at risk	How	Existing control measures	Preventative measures
Sandy Bay	Environme ntal –socio – economic	Children, elderly, woman, disabled etc.	There is not enough work, hardly any recreational spot	Nil	Skill training classes art and craft, etc.
	Crossing the river without a bridge - only way to the house	Children, elderly, pregnant women	Unpredicted flooding, water level may be higher, pregnant women may fall	When it's rainy take extreme caution	
	Approxima tely 15 informal dwelling on the sea coast	Elderly, children, women , men, farmers	Sea waves can come to the land and wash away houses and crops	None ¿what do you do in the event of an eventuality? Just watch the sea	Relocate houses
Colonarie	Approxima tely 20 dwelling houses, 1 business place, more than 100 acres of farm lands (not in project area)	Children, elderly	During periods of heavy rain, water level rise and can flood area	none	Bank, river enforcement, sinking the river, removal of stones from the river
	Over 100 acres of farmlands (Park hill, north of the project site)	Farmers and families	Prolong period of dry spells, or heavy rains, agricultural pests	None	Restore irrigation system, grass barriers and contours drains.
	Unstable houses	Families in houses, road users	Area is prone to soil erosion and landslides during heavy	None	Proper drainage and or possible relocation

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		rain		
River contamination	The entire community	During heavy rainfall, pesticides used by farmers can leach in to river	None	Prevent overuse of pesticides. Contour drainage, garbage disposal cans
Crossing the river to get to farmlands without a bridge. Farmers have to walk through river to get to lands. Some days the river is impassable		Unpredictabl e flooding, rising water levels during rainfalls, turbulent waters can wash away, family members, crops , farmland top soil	None	Construction of a vehicular bridge.

### Social Safeguard issues and other social risks

Issue	Significant/Limited/No	Strategy to address issue	Plan or other measure
	Impact		included in design
Involuntary resettlement	Limited. Although there is	A project level	Resettlement Policy
	potential involuntary	Resettlement Policy	Framework 🔀
	resettlement issues in some	Framework (RPF) has bee	
	activities, the project is	drafted and activity level RPFs	
	designed to minimise land	will be prepared as necessary.	
	acquisition and resettlement		
	impacts. The extent of these		
	will be further defined as the		
	project develops.		
Indigenous Peoples	No impact. The indigenous	Due diligence 🛚	No action required 🛛
	peoples are fully integrated	_	_
	into mainstream society.		
	However, the impacts were		
	investigated as part of the due		
	diligence and it was found that		
	the project is unlikely to affect		
	this group.		
Labour	Construction operation is		No action required 🛛
Employment opportunities	likely to generate considerable		_
	employment at both the local		
	and national level		
Other risk and	No impact. No significant		No action required 🛛
vulnerability	risks or vulnerability have been		
	identified		

### St. Vincent and the Grenadines

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### **World Bank Safeguard Policies**

	World Bank Safeguard Policies and their implications						
Policy	Relevance to the project	Implicatio	Remarks				
		ns					
Environme	The following activities retrofitting of emergency shelter; VHF/HF	Triggered	Activities proposed would help				
ntal	radios with solar power; slope stabilization; coastal and river defence;		improve environmental conditions.				
Assessment	rehabilitation of roads and bridges and the satellite warehouses will be		However, an environmental				
(BP/OP 4.01)	undertaken. These have been affected by natural hazards and may have		assessment has been carried out				
	caused soil erosion. The activities would cause minor damage to nature and		where a mitigation plan would				
	would contribute to the improvement of the vulnerability levels of the		guide the way to contain any				
	communities additionally would help to improve farm productivity.		adverse impact of project activities.				
Indigenous	There are people of indigenous descent living in some project sites	Not	Social assessment highlights				
Peoples	however these people do not have a separate culture or livelihood to the	triggered	that no project activities are going				
(BP/O.D. 4.20)	other habitat of St. Vincent and the Grenadines		to adversely change the quality of				
			life of any indigenous people or any				
			individual in area where project				
			activities are being developed				
			No actions required.				
Involuntary	There may be some land acquisition issues in Specific Subproject	Triggered	The social assessments				
resettlement(B	coastal defence and slope stabilizations		necessitates a clear geographical				
P/O.P 4.12)			path of all constructions be outlined				
			so as to determined with certainty				
			the exact locations and persons who				
			may be affected. However, the				
			Ministry of Housing under the Land				
			Acquisition would handle all				
			implications and make				
			recommendations for suitable				
			relocation where necessary.				

### Social Assessment Disaster Vulnerability Reduction Project

### Beneficiaries table\*

Community	Issues to be address			Social Safeguard					
		WHO	Total	GENDER ( 2001)		H	Vuln erable group	consultati on	
				M ALE	FE MALE				
Grenadines									
Union Island	VHF/HF radios with solar power Satellite		3354	1 765	158 9			yes	Environme tal Assessmen
	warehouse								(OP/BP 4.01)
		poor	254	1 37	117			yes	
Mayreau	Satellite warehouse	marginalize d							Environme tal Assessmen
		community							(OP/BP 4.01)
	VHF/HF radios with solarpower		1165	6 65	500			yes	Environme
Canouan	Satellite warehouse								tal Assessmen (OP/BP 4.01)
Bequia	VHF/HF radios with solarpower		4861	2 511	235 0			yes	Involuntar Resettlement
	Satellite warehouse	Teenage mothers							(OP/BP 4.12) Environmenta

	Retrofitting of Emergency Centre Slope Stabilization Paget farm	poor							Assessment (Op/BP 4.01
	rehabilitation of road Paget farm								
Community	Issues to be address		BEI	NEFICIAR	IES				Social Safeguard
		WHO	Total	GE 200		H	Vulne rable group	consultation	
				MA LE	FE MALE				
	Retrofitting /reconstruction health clinic	marginalized							
Sandy Bay	VHF/HF radios	indigent	1425	769	656			yes	
J	Satellite warehouse	Elderly						, , , , , , , , , , , , , , , , , , ,	
	coastal / river defence	Teenage mothers							
Overland	Retrofitting /reconstruction health clinic Public awareness Education	poor	549	284	265			yes	Environment al Assessment (OP/BP 4.01) Indigenous peoples (O.D.
Georgetown	VHF/HF radios	poor	5676	2888	2788			yes	4.20)
	Satellite warehouse Coastal/River								Environment al Assessment

	defence opp.Ferdies								(OP/BP 4.01)
	Retrofitting of								
	Emergency Centre								_
Chester									Environme
Cottage	Slope stabilization	poor	507	262	245			yes	al Assessmen
									(OP/BP 4.01)
	Issues to be								Social
Community	address		BEN	NEFICIAF	RIES				Safeguard
				-	NIDED.		Vulne		
		WHO	Total		ENDER 01)	Н	rable	consultation	
		WHO	10141	MA	FE	ow	group	Consultation	
				LE	MALE				
	Coastal/River								Environme
	defence next to three								al Assessmer
Colonarie	rivers undermine, towards south rivers	***	1010	514	496				(OP/BP 4.01 Natural hazar
Colonarie	Retrofitting	poor	1010	514	496				Vulnerability
	/reconstruction health								floods, soil
	clinic								stability /eros
Mt. Grennan	Slope stabilization	poor	777	403	374				Environm
									al Assessmen (OP/BP 4.01
									Natural hazai
									Vulnerabilit
									floods, soil
									stability / eros
South Rivers		Community	1213	622	591				Environme
Jouni Rivers		Community	1213	022	371	1			Littigititi

	Retrofitting /reconstruction health clinic	elderly poor							al Assessment (OP/BP 4.01)
Spring	Slope stabilization	elderly, unemployed	701	353	348				Environment al Assessment (OP/BP 4.01) Natural hazards Vulnerability, floods, soil
			DE	NIEELOLAD	IEC				stability / erosion
Community	Issues to be address		BE.	NEFICIAR		тт.	T 4 44		Social
		WHO	Total	GE (20	ENDER (01)	Ho w	Vulnerabl e group	consultation	Safeguard
				MA LE	FE MALE				
Windward									
Mt. Pleasant /Peruvian vale	Slope stabilization	farmers	1261	624	637				Environmen tal Assessment
		elderly							(OP/BP 4.01)
									Natural hazards Vulnerability, floods, soil stability /erosion
				309	319				
Stubbs			6288	6	2				
	Retrofitting /reconstruction Police station	Police							Environmen tal Assessment (OP/BP 4.01)

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### Disaster Vulnerability Reduction Project

Maroon Hill	Slope stabilization	Farmers							Environme tal Assessmen (OP/BP 4.01) Natural hazard Vulnerability, floods, soil stability /erosion
Community	Issues to be address		ВЕ	NEFICIAR	IES				Social Safeguard
		WHO	Total	GEI 200		H ow	Vulne rable group	consultati on	
				MALE	FE MALE				
Marriaqua	VHF/HF radios with solarpower Public awareness Education Satellite warehouse Retrofitting /reconstruction Police station Retrofitting /reconstruction health clinic River defence (Tiviot river)	poor, teenage mothers, children, farmers, elderly, disabled, nurses, police, community, unemployed	3103	1569	1534				Environme al Assessmen (OP/BP 4.01) Natural hazard Vulnerability floods, soil stability / erosid

Central									
Calliaqua	Retrofitting /reconstruction Police station	high poverty index , teenage mothers, children,	6946	3396	3550				Environment al Assessment (OP/BP 4.01)
	Station	elderly, disabled, police, community, unemployed							(O1 / D1 4.01)
Villa									
	Villa beach restoration								Environment aL Assessment (OP/BP 4.01)
Community	Issues to be address		BE	NEFICIAR	IES				Social Safeguard
		WHO	Total	GENDER	( 2001)	Ho w	Vulnerabl e group	consultation	
				MA LE	FE MALE				
Arnos vale			4668	229 5	237 3				Environmental Assessment
	Drainage improvement	poor,							(OP/BP 4.01) Natural hazard
	river defence	children, elderly, community,							Vulnerability, floods,soil stability
		unemployed							/erosion
South River	Coastal defence								Environmer

road									taL Assessment (OP/BP 4.01)
Kingstown	Relocation of the Milton Cato Memorial Hospital	urban poor, teenage mothers,							Environmen tal Assessment (OP/BP 4.01)
	Retrofitting of Kingstown	children, elderly,							Natural hazards Vulnerability,
	Government	disabled, police, community,							floods, soil stability
		unemployed							/erosion
Fenton	Rehabilitation of roads and bridges	surrounding community Green Hill,							Environmental Assessment (OP/BP 4.01)
Dorsetshire Hill	Retrofitting of Emergency Shelter	community members	1064	538	526				Environmen tal Assessment (OP/BP 4.01)
Community	Issues to be address		BE	NEFICIAR	IES				Social Safeguard
		WHO	Total		NDER ( 01)	Ho w	Vulnerabl e group	consultation	
				MALE	FEMAL E				
Leeward									
Campden Park	Retrofitting of emergency centre- Community centre	poor, children, elderly,	2914	149 6	141 8				Environmen tal Assessment
		community,							(OP/BP 4.01)

		unemployed							
Buccament	River defence	high poverty	1460	723	737				Environmen
		index, teenage							tal Assessment
		mothers,							(OP/BP 4.01)
		children,							Natural hazards
		elderly,							Vulnerability,
		disabled,							floods, soil
		community,							stability
		unemployed							/erosion:
									Water quality
									and water
									resource
									availability and
									use
Peter's hope			785	401	384				
•	Satellite								Environmen
	warehouse								taL Assessment
									(OP/BP 4.01)
									,
			P	OPULATIO	ON				Social
Community	Issues to be address			<u> </u>			Vulne		Safeguard
				GE.	NDER (	H		consultatio	
		WHO	Total	200	`	ow	group	n	
					FEMAL		0 1		
				MALE	Е				
	7.7.10 / T.D. 19	1 . 1		100	100				
D 11:	VHF/HF radios	high poverty	0550	132	123				Environmen
Barrouallie	with solarpower	index, teenage	2558	2	6				taL Assessment

		mothers,						(OP/BP 4.01)
		children, elderly, disabled,						
	Satellite warehouse	community, unemployed						
Cumberlan								Environmen
d	River defence		222	126	96			taL Assessment (OP/BP 4.01)
Rose hall	Retrofitting of emergency shelter		978	518	460			Environmen taL Assessment
	VHF/HF radios with solarpower	poor, children, elderly, community,						(OP/BP 4.01) Indigenous peoples (O.D. 4.20)
	Satellite warehouse	unemployed women						
Troumaca	Retrofitting\recon struction of Government building	poor, children,	517	272	245			
Houmaca	Government bunding	elderly, community, unemployed	317	272	240			Environmen taL Assessment (OP/BP 4.01)
Community	Issues to be address		BEN	NEFICIARI	ES			Social Safeguard
		WHO	Total	GEN 200	NDER ( 1)	Vul H erable ow group	n consultatio	

### Social Assessment Disaster Vulnerability Reduction Project

				MA LE	FE MALE		
Rose Bank	Retrofitting of emergency shelter	poor, children,	794	421	373		
		elderly,					Environmen
		community, unemployed					taL Assessment (OP/BP 4.01)
Chateaubela	VHF/HF radios	poor,					
ir	with solarpower	children,	764	270	494		
		elderly,					Environmen
		community,					taL Assessment
		unemployed					(OP/BP 4.01)
Baleine	Slope Stabilization		18	15	3		Environmen
	•						tal Assessment (OP/BP 4.01)
							Natural hazards
							Vulnerability,
							floods,soil
							stability
							/erosion

This Table would be completed during the first year of the implementation process when the exact geographical scope of the project is known.

To respond to the situation that may arise during the implementation of this project the focus would be on the community development aspects.

Community development is the process to strengthen the participation and organization of the population in search of answers to improve their own locality, under the principles of cooperate, mutual aid and community.

### Recommendation to address social issues:

### Access to facilities:

- The implementation of new structures requires the dissemination of information as it regards accessibility and operation to potential beneficiaries. Awareness campaigns and other educational activities should be conducted at all projects implementation sites.
- The formation of Community Self help groups is recommended for the sustainability of the project management.

#### Traffic

Safeguard be built into the implementation in order to minimize impact which include scheduling works at best time to minimize disruptions. Where disruptions cannot be avoided develop a traffic plan outlining alternative routes and appropriate signage.

### **Financing:**

Social protection activities and their funding levels should be taken into consideration.

Additional funding would be require for social protection programmes

#### **NOISE Pollution**

Noise Control: In the execution of works, particularly in residential communities, the contractor shall control noise emissions generated as a result of contracting activities to the extent possible. In the case of site locations where noise disturbance will be a concern, the contractor shall ensure that the equipment is in good working order with manufacturer supplied noise suppression (mufflers etc.) systems functioning and in good repair. Where noise management is a concern, the contractor shall make reasonable efforts to schedule activities during normal working hours (between 8 am and 5 pm). Where noise is likely to pose a risk to the surrounding community, the contractor shall inform the site manager and shall develop a public notification and noise management plan for approval by the Central Planning Division.

- Inform communities when heavy equipment usage would be taking place and during what hours.
- Organize scenic tours to take members if noise prolongs beyond 2 hours

#### For the areas with Emergency shelter, Satellite warehouse,

- Forming Self Help Groups (SHGs) in all project areas of Saint Vincent and the Grenadines.
- Co-ordinate actions with the populace of the area and the authorities so that there is institutional support.
- Use of the community members with leadership skills (observed and identified by community members) in the areas of health, education, etc.
- Facilitate training to the SHGs through a workshop.
- Establish a system of communication and information in the communities.
- Support programmes which build the capacity of the local authorities and other institutions which can support community members in Shelter management.
- Train various members in the use of VHF radios

#### For the schools that would be emergency centres: Disruption to school

The project includes rehabilitative works to schools. In some cases, construction may occur while classes are being held. If this is the case, the school will used undamaged areas for classroom activities. The contractor shall seek to minimize as much as possible, the impacts to ongoing classes. Contractors shall also work with the Ministry of Education's designate to manage the storage and flow of materials so as to minimize disruption to

school activities. In cases where this is not an option, the project implementation unit will coordinate with the Ministry of Education to propose a system which will ensure that the smallest level of disruption to school activities e.g. shift system in collaboration with neighbouring schools.

- Work should commence during holiday period at best.
- An unoccupied building can be used during the period of retrofitting.
- A shift system can be implemented if needs be; morning period for younger children and older grades in the afternoon- a special bus can be contracted during this period.

#### Recommendations related to specific vulnerable groups

- Determine whether special groups such as the elderly, the disabled, women and children would suffer discriminatory practices and provide a basis for proposing mitigation measures.
- Raise parents' awareness on the importance of preparation for natural disaster and give preparation tips.
- Encourage and facilitate young women involvement in the dissemination of information and organization of the community in the period of natural Disaster.

#### Additional Specific research:

- Small-scale studies to monitor the responses of vulnerable groups.
- Conduct risk assessment studies
- Develop community evacuation plans

#### **Actions of the Social Specialist**

- Actions to enhance the development of human capabilities in the community with the aim of achieving social wellbeing.
- Identify the skills that the population has and their training needs
- Identify some leaders in the population for the program to be self sufficient.
  - (i) To provide information and form networks with self-help groups

- (ii) Provide consultation, advice and logistical support
- (iii) To promote community education
- (iv) Investigate the social problems of the community
- (v) Review and agree upon the working procedures to be followed. i.e. in cases of resettlement ensure that the World Bank Operational procedures are followed.
- (vi) Undertake a systematic intervention.
- (vii) Organize the effort to identify all active elements of the intervention, with special attention to the unique contribution of social support to the desired end result.
- (viii) Take precautions to observe side effects (immediate or delayed) insofar as it affects the source of support and beneficiaries.
- Promote the organization of the institution. Translating public education campaigns (e.g., promotion of informal sources of support and mutual aid groups).
- Guide and assist the poor in setting up plans to rebuild their social life if affected by project implementation.
- Strengthen the efforts which enhance gender participation for all age groups, and raise awareness and contribution of all community members in disaster management preparation.
- Conduct risk assessment studies
- Develop community evacuation plans.

#### General recommendations:

#### **Policy:**

 A comprehensive policy on social protection is required. When required the Bank policy would govern

- Creation of a documentation of the entire project implementation to serve as a guide to follow in cases of relocation.
- Utilization of the Sustainable livelihood approach provides a useful guide or checklist for identifying and assessing social impacts.

#### **Targeting:**

- Develop community specific responses.
- Allow community to define the response.
- Each community where the project would be implemented signifies different personalities therefore it is important to recognise that addressing cultural and attitudinal factors requires more effort and continuous intervention additionally, the vulnerability of children may require a broad approach.

#### Implementation:

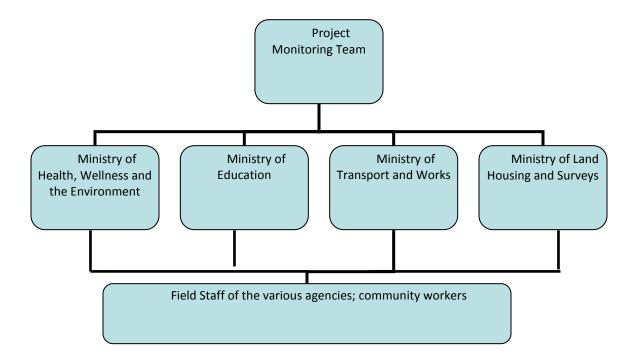
- The Social specialist must guard against creating unrealistic expectations, and be sure that the community understand the aim of the project and are familiar with its components;
- The Social Specialist will need to explore all the relevant dimensions of the social environment, not only those that are obvious and easily accessible;
- During implementation it will be important to consciously seek out the views of marginalized and vulnerable individuals and social groups. To access their perspectives requires conscious effort and strategizing and may mean that intervention has to be done on an individual level.

A schedule of the exact project components will be needed in advance for the determination of relocation and resettlement so that the procedures can be followed to allow a smooth transition of the affect persons.

Project Sector Investment Programme Management Unit (PSIPMU) in the Central Planning Division will manage the monitoring of the social impact of the project. This team will consist of a social specialist enlisted for the life of the project for the purposes of monitoring project impact, and staff of the PSIPMU. The PSIPMU is staffed with professionals trained in the area of monitoring and evaluation, (including in data collection and evaluation methods) who are experienced with World Bank projects. The World Bank team will assist the PSIPMU in monitoring by the performance indicators outlined below.

#### **Institutional arrangements**

Project impact will be monitored using a three-tiered monitoring and evaluation system. This will comprise the Project Monitoring Team at one level, key personnel within the Implementing agencies/line ministries, and field staff. The team will also engage the World Bank for input between reporting and during Bank missions.

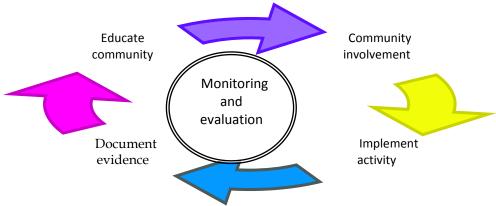


#### **Monitoring procedure**

The monitoring team will report to the World Bank quarterly as part of the agreed project reporting on performance indicators outlined below. Updates will also be provided to the Bank semi annually in the context of the Bank's supervision missions. These will include generally beneficiary analyses and treatment of persons affected by the project.

The monitoring team will ensure that the management of the project takes social safeguards into account, at all levels, and that facilities are enacted to mitigate social impacts highlighted by this assessment. It will monitor the schedule of physical works and progress, use of social safeguards and World Bank Operational Policy, and adherence to stated Resettlement Policy Framework where required. To do this the team will gather information from Project Steering Committee, implementing agencies, and field workers, on a regular basis as demanded by the progress of the project. It will consult with members from the relevant government ministries such as the Legal Affairs department in monitoring the legal framework of resettlement and the Ministry of Housing, land and Surveys for issues relating to land acquisition and relocation.

The monitoring team will also collect data from field workers of the various line ministries in all communities relevant to the project, including staff of the Community Development Department and the Ministry of National Mobilisation. This will be done in order to more directly monitor impact at the community level and mitigate against unforeseen negative impact during the course of the project.



NO.	Objective	Indicator				
	Participation	• One adult member from every household in the village attend				
		community public meeting.				
		• Formal requests from the community for information				
		Willingness to contribute labour and time				
		• Record of previous participatory activities (with other agencies				
		/sectors or independent community activities				
		Community characteristics				
		Number and type local organizations				
		Suitable leadership				
		Social homogeneity / strength of factions				
		Settlement characteristics				
	Inclusiveness	• At least 1 representation from every street (Block) is a member of				
		the Community Self Help Group				
		Gender representation				
		Youth representation				
		Elderly representation				
		Squatter representation				
		Church Based Organizations representation				
	Ownership	Development of rules and regulation for the management of the use				
		of project activities.				
	Capacity	<ul> <li>Users of project activities are trained.</li> </ul>				
	building	Information sharing				
		Disaster management groups developed				
		• In Fenton( Rehabilitation of Bridges) – at least 5 members of				
		the communities are trained in ecotourism, nature guide etc.				
Socia	al safeguards					
1	Conflict	Legal awareness of rights and responsibilities				
	management	Community meetings on project implementations activities				
	Relocation	(Slope Stabilization ) – Establishment of user groups for				
	and	conservation and sustainable outcomes.				
	resettlement	Areas acquired are used for aforestation and nature parks				
	vention					
outco	omes					
		Number of people adopting and using interventions				

Number of problems arising from misuse of facilities
<ul> <li>Number of persons attending training meeting</li> </ul>
User satisfaction measured
Number with satisfactory knowledge to use new equipment

## **Results and Monitoring Framework**

Indicators	Baseline	Target	Data Source	Freque ncy of Collection	Responsibility for Data Collection	Notes
Project Activity: Retrofitting of	f emergency Shelters					
Indicator One: Number of persons benefitting from access to safe emergency shelters	Number of Emergency Shelters (118), Population with access (11,800)	Two (2) shelters to be retrofitted, estimated target (12,000)	Project Progress Report, Certificate of Completion	Bi- annual	Project Steering Committee, Ministry of Transport and Works	
Project Activity: Construction of	of Satellite Warehouses					
Indicator Two: Number of communities with a fully equipped Satellite Warehouse	Zero (0)	Eight (8)	Certificate of Completion, NEMO	Bi- annual	Project Steering Committee, Ministry Transport and Works	
Project Activity: Installation of	VHF Radios					
Indicator Four: Number of community members with training in the use of VHF Radios	0	Nine (9)	NEMO	Bi- annual	Project Steering Committee, NEMO	
Indicator Five: Number of communities with access to VHF Radios	1	Nine (9)	NEMO	Bi- annual	Project Steering Committee	
Project Activity: Slope Stabilisa	ation, Bridges, Coastal a	nd River defen	se			
Indicator Six: Reduced risk to failure of roads and bridges to natural hazards	10,500	0	NEMO,MoT W Supervision Report	Bi- annual	Project Steering Committee	Fenton Daily User (500) South Rvr Rd

# St. Vincent and the Grenadines Social Assessment Disaster Vulnerability Reduction Project

						(10,000)
Indicator Seven: Reduced risk of community population to flooding in areas with flood mitigation works financed by the	60	0	NEMO	Annual	Project Assessment and Report, MoTW Supervision Report	15 HH, approx 4 persons each
project					Supervision Report	
Indicator Eight: Number of persons relocated from unsafe locations (exposure to flooding, erosion etc.)	0	30	Ministry of Housing, Land and Surveys	Annual	Social Team,	
Project Activity Education and	Awareness					
Indicator Nine: Number of Community Disaster Management Groups functioning	Eight (8)	30	NEMO	Bi- annual	NEMO and Project Steering Committee	*Group meetings
Indicator Ten: Number of persons participating in disaster management workshops	0	108	NEMO, Ministry of Education	Bi- annual	NEMO and Project Steering Committee	

#### **Community Participation Plan**

A steering committee whose members are created from the PSIPMU responsible for guiding the preparation and broad policy direction on the future development as they serve as an informational resource tot project development.

In an effort to deliver maximum benefit to stakeholders and ensure that project outcomes do not adversely affect the intended beneficiaries, the Social Assessment Team recommends the communities, both geographical and that as defined by interests, be included in the following activities during the life of the project:

- Educational and Awareness Programmes on disaster risk management and climate change issues and project activities. This will be done at the school level and will be incorporated into National Emergency Management Organization (NEMO's) existing plans. NEMO, Ministry of Education and Project Monitoring Committee will take responsibility for this activity.
- Training in the use of facilities. Key personnel identified during the social assessment will be trained in the use of VHF and HF radio. This activity will include persons and organizations with expertise in Radio Communication such as Radio Rainbow League and the National Coast Guard, and will target interested community members and members of Community Disaster Management Groups. NEMO will take responsibility for this activity.
- Shelter Management Committees: In line with existing procedures, shelter management committees will be set up, where none exists, to govern the operation of the shelters retrofitted under this project and operation of the Satellite Warehouse facilities. Procedures will be formalized for the operation of the facilities, including the role of shelter managers and committee members, and guidelines for the operation and use of facilities within emergencies and in 'down time'. This activity will target Community Disaster Management Groups, interesting community members, and will include existing shelter managers. Attempts will also be made to encourage formation of additional Community Disaster Management Groups.

Establish linkages between organization: Project implementation activities should strengthen linkages between the various emergency organization, including the Ministry of Transport and Works, Health Facilities, NEMO, Community Disaster Management Groups etc. by increasing visibility, and providing opportunities for networking.

Community Participation	on Plan for year 1 of implementatio	n			
	ootential representation in partners		у,		
Strategy	Task	Performance indicator	Timeline	Responsibility	Outcome
Develop and maintain links with community groups in project areas	Maintain relationships with community groups	Attendance to meetings Links established	Ongoing	Steering committee Social specialist Community field	Network of community groups; Sensitization Awareness on the
Conduct Community meeting	Public meeting Solicit involvement	Attendance to meetings	January	Steering committee Social specialist Community Field officer	geographical scope of the project Inform and educate about the project Assess preliminary issues Solicit representations
Form community group where they do not exist	Use representation suggested from public meeting for the formation of Community Self Help groups	No: of Groups formed	January to April	Social specialist Community Field officers	Awareness information on capacity of community members formation of community self help groups
Objective 2: Ensure that so community	ocial specialist and community self h	nelp group have knowle	dge, skills and c	apacity of project im	plementation and
Conduct a needs assessment (resources, demographics, persons affected by project)	Conduct a survey to determine knowledge, skills and needs	Report on information gathered	May to August	Steering committee Social specialist SHGs Community field officers	Solicit who are the best community leaders on different aspects Are there vulnerable groups affected
Improve communication about community participation	Utilise media, community meetings and institutional meetings to inform on project activities and need for	Flyers , API coverage at least 3 institutional meetings	March Initial Ongoing	Social specialist SHGs Community field officers	Information sharing

## Social Assessment Disaster Vulnerability Reduction Project

	community participation				
Community meeting of	Use assessment of project	Report from	July –	Social specialist	Review issues arising
the Project affected	area by SHGs	assessment	September	SHGs	out of project
persons					implementation
					Inform communities
					about possible time
					delays likely to occur
Community	Annual event	Annual event	Annually	Social specialist	Identify members of
participation Month	Formal evaluation of all	conducted		SHGs	the community who
	members contribution (crime	Report on		Community	made development
	reduction, youth success in	evaluation		Field Officers	contributions
	school, family disaster plan)				
Training of	Training in Disaster	Report on training	Ongoing	Steering	Equip members with the
Community Self Help	Management, Groups dynamics,			committee	necessary skills
Groups	Community participation,			Social specialist	
	communication			SHGs	
Objective 3: Incorpora	te community members participation	· · · · · · · · · · · · · · · · · · ·		1	
Strategy	Task	Performance	Timeline	Responsibility	Outcome
		indicator			
Develop framework	Establish a database of	Database	August –	Social specialist	Resource persons
to enhance opportunity	resource members of the	established	October	SHGs	from the community
for community members	community			Community field	identified
to participate	Review demographic data			officer	
	Integrate with other				
	development sectors				
Public meeting	Organize a community	Attendance	November –	Social specialist	Comments from general
	meeting – public forum		December	SHGs	public on issues of
	Community development of a			Community field	implementation
	risk map			officer	Draft community risk
	2112	2.1	<u> </u>		map
Development of the	SHGs develop	Risk map developed	December -	Social specialist	Risk map developed

## Social Assessment Disaster Vulnerability Reduction Project

community risk map			January	SHGs	
				Community field	
				officer	
Strategy	Task	Performance	Timeline	Responsibilit	Outcome
		indicator		у	
Objective 4 : Developm	ent of community disaster manage	ment groups			
Develop management	Establishment of shelter	Committee	September	SHGs	Community
committees	management committee	developed	to		education programmes
	Establishment of satellite		November		Identify suitable
	warehouse management				leadership
Know of social capital in	Documentary and field research	Report on	January	Social	Social capital and
the community in its	Discussion with community	documentation	2013 to	Specialist	development
development aspect	members display of community		March	SHGs	Identification of internal
	resources				and external
					opportunities
Investigate the social and	Conduct survey to verify what	Survey	Ongoing	Social	
ecological impact	are the damage or benefit to the	conducted		specialist SHGs	
	population				

#### **List of contact:**

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Karen J. Nero	Arnos Vale
Roger Young	
Everal INCE	Chateaubelair Baliene
Donnette Pierre	Colonaire
Shamanth Labban	Colonaire
Philcol Jeffers	Barrouallie
Glaston Lavia	Sandy Bay/ Fancy
Gwenneth Anthony	Marriaqua

## Sandy Bay

NAME	GEN DER	COMMUNITY
Hoyte Alford	M	Biabou
Jordon Ronette	F	CPD
Ralph De-Anna	F	CPD
Stewart Chiaka	F	CPD
Peters Hulda	F	NEMO
OSMENT Kendol	М	Sandy Bay
Hoyte Nesta	F	Sandy Bay
May Andrea	F	Sandy Bay
Walter St.	M	Sandy Bay
Elbert		
Ballantyne	M	Sandy Bay
Peters		
Hepburn	M	Sandy Bay
Sheldon		
Lavia Alex	M	Sandy Bay
Ballantyne	М	Sandy Bay
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Fraser Patsy	F	Sandy Bay
Locke Justin	М	WB
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#### **ANNEX 1**

## St. Vincent and the Grenadines Disaster Vulnerability Reduction Project

#### Terms of Reference for a SOCIAL ASSESSMENT

#### August 15, 2010

#### 1. Introduction

The purpose of these Terms of Reference (TOR's) is to identify the nature, scope and extent of the social assessment to be undertaken during the preparation of the St. Vincent and the Grenadines Disaster Vulnerability Reduction Project (DVRP). The Social Assessment will be undertaken by the social policy specialist. Ms. DeAnna Ralph of the Public Sector Investment Programme Management Unit, with guidance from the World Bank's social Development Specialist.

#### 2. Background Information

St. Vincent and the Grenadines is among the most disaster-prone countries in the world, regularly suffering disasters related to natural events such as earthquake, hurricane, landslide, rain and drought. These hazards have caused significant and recurrent damages to national infrastructure including housing, road networks, schools, hospitals and other facilities such as phone lines, water and electricity. The resulting impacts significantly affect human welfare, national economic activities, property, and natural resources. The effects of climate change are already evident in many parts of the country with rising sea levels and storm activity continuing to impact on exposed coastlines and development. The situation is only expected to worsen as SVG is highly vulnerable to the impacts of global warming and climate associated impacts.

Over the last decade, SVG began its risk reduction activities with the development of disaster preparedness and response investments. During this period, most of the activity in disaster risk reduction focused on the development of national disaster plans, setting up the disaster management agency, and promoting public education and awareness. Despite these efforts, SVG continues to face high levels of risk to its economic stability and national welfare. Post-disaster rehabilitation of damaged infrastructure is a major contributor to the national economic risk profile.

Studies have documented that aging public infrastructure presents very high levels of vulnerability, particularly in critical sectors such as health, education, water, and roads. The annual tropical storm/hurricane season, combined with the cumulative effects of climate change, will continue to threaten island economies. Without intervention, this will likely increase the future need to divert limited financial resources

away from economic growth activities into repairs and reconstruction as a result of disaster and climate change events. While work continues in preparedness and response, the logical next step is reduction of vulnerability to infrastructure.

#### **Project Objectives**

The project for which this social assessment is being developed would seek to measurably decrease the vulnerability of people and the national economy of SVG to climate change and natural hazards. The development objectives of the project would be to: (i) integrate disaster vulnerability reduction and climate resilience in national development strategies and management of public infrastructure; (ii) improve SVG's access to and benefit from regional collaboration and support structures for hazard monitoring and risk assessments, and (iii) reduce the risk of loss of human life due to natural hazard induced structural failure of critical public infrastructure.

#### 3. Purpose of Social Assessment

The social assessment will a) analyze the potential social impacts of the project and develop associated social indicators for monitoring and evaluating the social impacts of the project, b) solicit stakeholder/beneficiary perspectives on project design and impact and c) identify and assess the nature and magnitude of land acquisition related issues. The social assessment will assist in the identification of poor and vulnerable populations and ensure that project objectives are acceptable to the intended beneficiaries.

Specifically, the SA will serve as a:

- I. **Baseline data collection** tool in *each* of the project sites and a means to identify
  - a. **Stakeholder analysis** (including those who can influence the project outcome, e.g. NGOs? etc) and their roles, responsibilities and priorities in the various project locations.
  - b. **Social diversity and gender profile** of project beneficiaries including the identification of key socio-economic characteristics of the communities including their livelihood strategies and characteristics (gender, age, poverty, disability status etc.). What are the cultural and social features that differentiate social groups in the various project areas and who are the poor and vulnerable?
  - c. Potential social impacts of the project including opportunities and risks among the differentiated stakeholder groups outlined above in each project site.
  - d. **Key institutions** (formal and informal organizations) likely to affect the project and relationships between project beneficiaries/ stakeholders and institutions.
  - e. **Key social indicators** for monitoring and evaluating potential project impacts on the identified groups.

#### II. Consultation and participation tool to:

- a. Consult with project beneficiaries (paying particular attention to otherwise excluded groups) and to identify and document what communities want in terms of information/ community level engagement.
- b. **Identify stakeholder opportunities to influence project design** as well as social risks.
- c. Better understand the nature, scope and magnitude land acquisition issues in each project site as well as land ownership and strategies to mitigate potentially adverse impacts as well as to inform project affected peoples of project plans.
- d. Prepare a participation plan for the project.
- e. The findings from this analysis and consultation will be incorporated into the project design and resettlement processes;

#### 4. Expected Outputs

The outputs should include:

- (a) Consultation Strategy. Documented consultations (and their outcomes) with project affected peoples/project beneficiaries and the development of a consultation strategy for the project going forward;
- (b) **Monitoring and evaluation plan:** The assessment should provide a framework, including indicators and institutional arrangements, for monitoring the social impacts of the project.
- (c) Recommendations for project design and implementation arrangements: Provide input to the RPF and Resettlement Action Plans and link SA findings to resettlement policy framework when appropriate including an *estimate* of the numbers and categories of affected peoples at the sites identified as triggering OP/BP 4.12.
- (d) Identification of poor and vulnerable populations and assessment of how the project might best respond to/address reduction of vulnerability of the poor.
- 5. Data collection and research methods: Build on existing data and review all relevant literature (e.g past NEMO consultations) as well as any ongoing and relevant activities. The consultant is expected to use relevant and appropriate research methods such as rapid user surveys, consultations and stakeholder workshops and key informant interviews as necessary with project affected people/beneficiaries/institutions in *each* of the project sites paying particular attention to the poorest and most vulnerable communities.

The SA should be carried out in parallel to the development of the Resettlement Policy Framework and the key findings should be included in the RPF.

**6. Team:** Ms. DeAnna Ralph has been identified as the **s**ocial scientist who will design, conduct and write up the results of the social assessment with input – where necessary - from the affiliated ministries, particularly Housing.

#### 7. Schedule and Reporting

- Level of effort = approximately 30 days
- Develop a research plan with research methodology (data collection methods, units of analysis, interview questions/guidelines) timeline and outputs and submit to the Bank for review prior to the commencement of field research. This initial report should include a comprehensive update of the summary table below.
- Prepare a draft report and submit to the Bank.
- Incorporate Bank input and prepare final report.
- Submit final report to the Bank prior to project appraisal.

#### **ANNEX 2**

RISK ASSESSMENT Disaster Vulnerability / Climate Resilience

Potential Hazard (State the hazard)	Who is at risk?	How	Existing Control Measures	Possible Preventative Measures
Environmental: social: economic:	Children, elderly, women, disabled etc.			
Environmental Crossing the river to get home without a bridge, only way to house	Children , elderly, pregnant woman	Unpredicted flooding, water level may be higher, pregnant woman can fall.	When it's rainy take extreme caution	Parents cross the children in the morning
Environmental Socio- economic Approximately 15 informal dwelling on the sea coast	Elderly, children		None, ( what do you or would you do in an eventuality ) just watch the sea	
Social (houses are unstable)	The elderly	The walls of the house are shaking due to soil erosion	None	
		488		

#### **Documents**

The Town and Country Planning Act No.45 of 1992

The Central Water and Sewerage Act of 1992

The Waste Management Act, No. 31 of 2000

The Environmental Services Act No. 14 of 1991

The Environmental Health Services Act No. 15 of 1991

The National Emergency and Disaster Management Act of 2006



## **Social Assessment** isaster Vulnerability Reduction Project

#### ANNEX 3

<b>Enumeration District</b>	
For official use only	

Location	Central	Windward	Leeward	Grenadines	

Interviewer	
Surname	
(use block letters)	

**PLANNING** 

#### CENTRAL PLANNING DIVISION

MINISTRY OF FINANCE AND ECONOMIC P.O. BOX 608, KINGSTOWN ST VINCENT AND THE GRENADINES

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DISASTER VULNERABILITY REDUCTION PROJECT

PILOT PROGRAMME CLIMATE RESILIENCE

Objective: To assess the level of awareness and preparedness for climate change related events.

To solicit community perspectives on proposed mitigation measures.

### Instructions for completion of the questionnaire

Please complete sections 1, 3, 5 and 6. Complete sections 2 and 4 where applicable. Tick boxes where appropriate, write out responses to open - ended questions.

Name o	f Commun					
How area?	long	have	you	lived	in	this

Sex of	Male	Female
interviewee		
	•	

Age	
15-19	
20-24	
25-29	
30-34	
35-39	
40-44	
45-49	
50-54	
55 +	

## **SECTION 1- GENERAL**

This section deals with community members' experience of natural disaster. It is to be answered by all interviewees.

1. Which of the following natural disasters are you likely to be affected by in your community? ( multiple responses can be selected)

EVENTS	NOT	NO	SELD	LIKEL	VERY
	AT ALL	Т	OM	Υ	LIKELY
		LIKELY			
Floods					
Landslides					
Soil erosion					
Tropical storms					
/hurricanes					
Drought					
Storm Surges					
Earthquakes					
Volcanic eruptions					
Agricultural pest					
High winds					
Other please specify				•	

2.	Have any of these impacted on your life, health, property, livelihood,
	environment in the past 5 years?
	If <b>Yes</b> , please continue by stating which ones and what aspect.
	If <b>no</b> , Please skip go to question 4

Events	Life	He	Prop	Livelih	Environm	Othe
	(wa	alth	erty	ood	ent	r Please
	y of life)	(injury)	(dam	(earni	(Surroun	state:
			age)	ngs)	ding)	
Floods						
Landslides						
Soil erosion						
Tropical storms						
/hurricanes						
Drought						
Storm Surges						

Earthquakes						
Volcanic						
eruptions						
Agricultural						
plagues						
High winds						
Other please specify						

3. How would you rate the level of impact of these events?

Events	Not		Low	High		Not
	at all	Very			Very	exposed to
		Low			high	this event
Floods						
Landslides						
Soil erosion						
Tropical storms						
/hurricanes						
Drought						
Storm Surges						
Earthquakes						
Volcanic						
eruptions						
Agricultural						
plagues						
High winds						
Other please spe	cify		_			

4. What social problems are most common in this community? Rate the level of occurrence from very low to very high.

	FREQUENCY LEVEL						
	Ver	Low	Н	V	Ν	NOT	
	y low		igh	ery	ot	а	
				high	sure	problem	
Youth unemployment							
Adult unemployment							
Teenage pregnancy							
Drug use/abuse							
Drug dealing							
Domestic violence							

## **Social Assessment** Disaster Vulnerability Reduction Project

Violence against			
women			
Violence			
Theft / Burglary			
Predial Larceny			
Gang violence			
Poverty			
School drop outs			
HIV/AIDS			
Other, Please specify			

5. Please rate what level of impact would a natural disaster have on the services in your community.

						Communi
					Very	ty does not
	None		Not	high	high	have this
	at all	low	Sure	impact	impact	service
The school						
The health						
Clinic						
Community or						
resource centre						
Police station						
Roads						
Telephones						
Electricity						
Water						
Other, Please Sp	ecify					

6.	How prepared	d are you for another eventua	ality? (related to natural disaster)
	A. B.	Don't believe in preparation  Not prepared at all	
	C.	Somewhat prepared	

## Social Assessment Disaster Vulnerability Reduction Project

What is your main source of water supply a) Pipe borne CWSA b) River c) Collecting rain water d) Public pipes e) Other, Please Specify  In the event of a disruption in the water supply from CWSA. How would this a Not at all Very much 1 2 3 4 5  Do you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types (a) Plastic tanks (b) Concrete tanks (c) Drums (d) Water jugs	What do you epairs, inform	think is needed for you to be nation etc,)	more prepa	ared? List opt
a) Pipe borne CWSA  b) River  c) Collecting rain water  d) Public pipes  e) Other, Please Specify  n the event of a disruption in the water supply from CWSA. How would this a Not at all  Very much  1 2 3 4 5  Oo you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums				
b) River  c) Collecting rain water  d) Public pipes  e) Other, Please Specify  the event of a disruption in the water supply from CWSA. How would this a Not at all  Very much  1 2 3 4 5  O you have alternative water storage facilities?  Yes No If no go to question 13  f Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	Vhat is your n	nain source of water supply		
c) Collecting rain water  d) Public pipes  e) Other, Please Specify  n the event of a disruption in the water supply from CWSA. How would this a Not at all  1 2 3 4 5  Oo you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	a) Pipe bo	rne CWSA		
d) Public pipes  e) Other, Please Specify  n the event of a disruption in the water supply from CWSA. How would this a Not at all  Very much  1 2 3 4 5  Oo you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	b) River			
e) Other, Please Specify	c) Collecti	ng rain water		
n the event of a disruption in the water supply from CWSA. How would this a Not at all  1 2 3 4 5  Do you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	d) Public p	pipes		
n the event of a disruption in the water supply from CWSA. How would this a Not at all  1 2 3 4 5  2 0 you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums				
Not at all  1 2 3 4 5  Do you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	e) Other,	Please Specify		
1 2 3 4 5  Do you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	e) Other,	Please Specify		
Oo you have alternative water storage facilities?  Yes No If no go to question 13  If Yes, state types (a) Plastic tanks (b) Concrete tanks (c) Drums	n the event of		-	
No If no go to question 13  If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	n the event of Not at all	fa disruption in the water suppl	V	ery much
No If no go to question 13  If Yes, state types (a) Plastic tanks (b) Concrete tanks (c) Drums	n the event of Not at all	fa disruption in the water suppl	V	ery much
If Yes, state types  (a) Plastic tanks  (b) Concrete tanks  (c) Drums	n the event of Not at all 1	a disruption in the water supply 2 3	4	ery much
(a) Plastic tanks  (b) Concrete tanks  (c) Drums	n the event of Not at all  1  Do you have a	2 3  Iternative water storage facilitie	4 4 s?	ery much 5
(b) Concrete tanks  (c) Drums	n the event of Not at all  1  Do you have a	2 3  Iternative water storage facilitie	4 4 s?	ery much 5
(c) Drums	n the event of  Not at all  1  Do you have a	2 3  Iternative water storage facilitie  No If no go to e	4 4 s?	ery much 5
	n the event of Not at all  1  Do you have a  Yes	2 3  Iternative water storage facilitie  No If no go to expess	4 4 s?	ery much 5
	n the event of  Not at all  1  Do you have a  Yes  If Yes, state ty  (a)	2 3  Iternative water storage facilitie  No If no go to expess	4 4 s?	ery much 5
(d) Water jugs	n the event of Not at all  1  Do you have a  Yes  If Yes, state ty  (a)  (b)	2 3  Iternative water storage facilities  No If no go to expes  Plastic tanks  Concrete tanks	4 4 s?	ery much 5

## Social Assessment Disaster Vulnerability Reduction Project

	(e)		Buckets	
	(f)		Cisterns (underground stora	age)
	(g)		Other, please specify	
12.	How long v			nain water source was shut down due to
		a.	less than a day	
		b.	a little less than a week	
		c.	1-2 weeks	
		d.	2 weeks to a month	
		e.	More than a month	
GC	TO NEXT SI	ECTI	ON	
13.	Why not			
	,	a.	Too expensive	
		b.	Not enough space	
		c.	not necessary	
	d. Oth	er. F	Please specify	

## **SECTION 2 RIVERS**

#### COMPLETE THIS SECTION ONLY IF THERE IS A RIVER IN THIS COMMUNITY

This section seeks to gain community's views on rivers in their community, risks, uses and possible measures to mitigate risk.

14. Is this river important to you/your community? (Tick in the box, 1-5)

Not at all				Very Important
important				
1	2	3	4	5

15.	What do	you use	this river	for curr	ently?(	Tick boxes)
-----	---------	---------	------------	----------	---------	-------------

(a) Cooking	
(b) Farming/fishing/ animal use	
(c) Bathing	
(d) Washing clothes/utensils	
(e) Construction	
(f) Cleaning	
(g) I do not use the river water	
(h) Other ( Please Specify)	

#### PLEASE COMPLETE

		No	somewhat	Yes	Not sure
16.	Do you think the river pose a threat to				
	you or your community?				
17.	Do you think the river bank is secure at				
	present?				

18.	Do you think it is necessary to further secure the bank of the river?  Yes No:
	If yes, What do you think can be done to protect the river bank?
19.	Have you noticed any changes in the river pattern?
	Yes No: to question 20)  If yes, please explain
	(B) What do you think is responsible for these changes
20	. What do you think would happen if nothing was done to change the situation?

## **SECTION 3. SLOPE STABILIZATION:**

21.	Which of the	following are	currently considered	a problem in you	r community?

	Tick appropriate boxes
Rock fall	
Cracks in the land	
Landslides	
Land slippage	
Water logged soil	
Soil erosion	
None of the above	

22.	Do you feel these problems pose a danger or threat to you or your community's

Other: Please specify\_\_\_\_\_\_.

	Level of THREAT					
Events	Not		Low	High		Not
	at all	Very			Very	exposed to
		Low			high	this event
Rock fall						
Cracks in the						
land						
Landslides						
Land slippage						
Water logged						
soil						
Soil erosion						
Other please specify						

So	il erosion						
Ot	Other please specify						
23.	What is you	r land beir	ng used	for current	tly?( Tick bo	oxes)	
	(a) Hous (b) Farm	sing ning/ anima	l use				

	(c)	Business
	(d)	Vacant lot
	(e)	Other ( Please Specify)
24.		No: if, no go on to question 25.
	yes, pieas	= expiaiii
	(B) What d	you think is responsible for these changes
25.	Do you t ?	nink it is necessary to further secure the land from erosion, landslides, etc
	Yes	No:
	Please expl	ıin
 26.	What do	ou think is needed to protect the area?
27	. What do	ou think would happen if nothing was done to change the situation?

## **SECTION 4 COASTAL DEFENCES**

COMPLETE THIS SECTION ONLY IF THIS COMMUNITY IS SITUATED NEXT TO THE COAST.

Please rate the following on a scale of 1 to 5: 1 (lowest) to 5 (highest) as explained below.

28		Does the coast pose a danger to you or your community?						
		None at all 1 2 3 4 5 Very High Risk						
29		How secure are you and the people living along the coast at present?						
		Very secure 1 2 3 4 5 Very Unsecure						
3	30. Do you think it is <i>necessary</i> to secure the Coast?							
		Not at all 1 2 3 4 5 Very necessary						
3	1.	Have you noticed any changes in the coastal front? (Sea level, beach erosion, etc.)						
		Yes No: (Go to question 32).						
If yes, please explain								
	(B) What do you think is responsible for these changes?							
32.	32. What do you think is needed to protect the area?							
33.	W	Vhat do you think would happen if nothing was done to change the situation?						

## **SECTION 5 DISASTER VULNERABILITY PROJECT**

## **ACTIVITIES UNDER THE PROJECT (DVRP)**

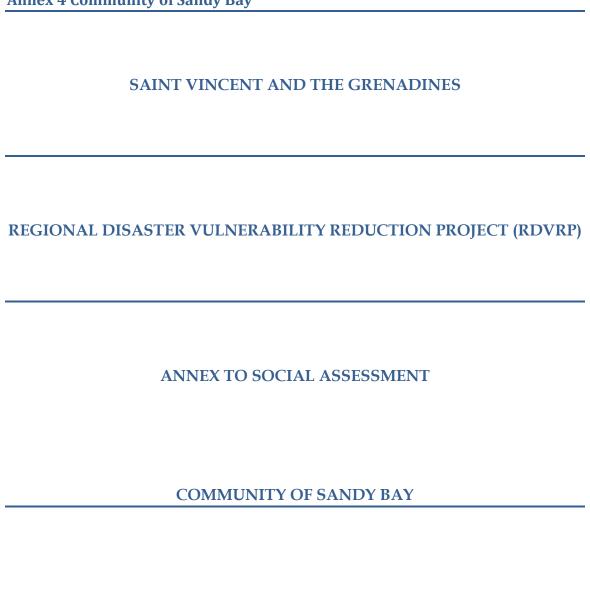
55.	. What are the	possible nega	tive impa	acts of the wo	rk? Please St	ate
36.	How would this	 s project activi	ity impad	rt.		
				IMPACT	LEVEL	
		Not at all	low	Not Sure	high	Very high
	You	at an	10 10	Suic	111811	very mgm
	The					
c	community					
	Agriculture					
	Health					
	Education					
	The economy					
7.	Do you find the	at the propose		s necessary to	your commu	unity?
no,	why.					

39.	Would you lik Yes	e further information on th	= =	
SEC	CTION 6	OTHER		
40. A	•	of climate change issues sever heard the term		
	(b) Somew	hat aware		
	(c) Aware			
	(d) Very aw	vare		
	Other, Please	Specify		
42.	Do you have	any concerns regarding p	ossible future disasters?	
Please			expl	lain
43.	In the event	of a natural disaster do you	u have any of the following currently:	
	(a)	Food supply that does no	t require cooking for at least 3 days	
	(b)	Battery powered radio		
	(c)	Lantern (battery/ oi)l		
	(d)	Flashlight		

Disaster Vulnerability Reduction Project

	(e)	Candles				
	(f)	Secure shelter				
	(g)	Plan of what to do	1			
	(h)	Important docume	ents secured			
	(i)	Other ( Please Spe	cify)			
44. Do	es your comr Yes	munity have disaste	er a preparedi	ness committe Don't l	-	
	L					
	ould you be blanning?	interested in beco	ming more a	ware of natur	ral disaster and disaster  Not sure	
46.	Would you li	ke to be involved in	n disaster red No	luction progra	mmes?	
47. W	hat do you thi	nk you can offer to h	nelp your com	munity in the e	vent of a disaster?	
48. What are the three best ways to inform you and your community about natural disasters? Indicate using a scale from 1-3, 3 being the very best.						
	Non governmentalRadioTelephone					
organiz	organizations /text message					
	Volunteer groupsTelevision					
	The local d	lisaster	N	ewspaper		
commit	tee					
	Friends, re	latives,	0	ther, please s	pecify:	
neighbors						

Annex	4	Com	munit	v of	Sand	v Rav
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April 2012

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### 1. Rationale

The Regional Disaster Vulnerability Reduction Project (RDVRP) is being implemented in Saint Vincent and the Grenadines (SVG). The initial social scoping of the project and subsequent social assessment indicated the presence of a Garifuna population in the project site of Sandy Bay. Therefore, it was determined that an assessment needed to be made as to whether the community met the requirements laid out in the Bank's policy on Indigenous people (O.P 4.10) and whether the policy was therefore triggered. It was concluded that while the community (Sandy Bay) self identify (and are also identified by others) as being a distinct indigenous community and while they do occupy a specific geographical location, they do not have distinctive customary cultural, economic, social or political institutions that are separate from the dominant society and culture, nor do they have an indigenous language different from the official language (English) of St. Vincent and the Grenadines.

In sum, while the community possesses some of the attributes necessary to trigger the World Bank's policy on Indigenous Peoples they do not fully meet the criteria and it has been decided (by mutual consent) by the World Bank and the Government of St. Vincent and The Grenadines that the policy is not triggered in the case of the Garifuna population.

Nevertheless, it was felt that it was important to conduct "extra due diligence" on these communities to ensure that project impacts are positive and that any potentially negative impacts are successfully mitigated, particularly given the higher than average poverty rates among the community.

The planned intervention in Sandy Bay under the RDVRP is the construction of a Satellite Warehouse which seeks to provide for basic emergency resources in the event of a natural disaster - thus, reducing the vulnerability of the communities.

## 2. Social Assessment Objective

A Social Assessment was undertaken during project preparation to assist in the identification of potential social benefits and potential negative impacts. Specifically the aim was to identify potential positive and negative impacts associated with the construction of the Satellite Warehouse in Noel Sandy Bay.

**3. INVESTIGATION DESIGN:** The methods used in the development of the Social Assessment were as follows:

(a) Type of study: Exploratory

(b) Method Deductive

(c) Techniques and Instruments

Techniques	Instruments	
<b>Doc</b> umental or Desk research	Maps	

Interviews	Risk assessment
Observation	Observation
	guide
Site visit	Surveys
Community discussion	Focus groups

### 4. EXTRA DUE DILIGENCE

Sampling Method to ensure extra due diligence in Sandy Bay. A Survey was conducted at all project sites. A representative sample was selected by the Census office based on the population on each census division. A number of 7 persons were suggested to be interviewed in Sandy Bay however, the survey was conducted on 37 persons in order to ensure extra due diligence.

This included persons in close proximity to project sites, persons living near to rivers, persons living near to the coast, residents of communities near the coast and persons who own lands or operate businesses in the communities of interest. Similarly, discussions and informal interviews were held with key personnel, who, through participation in community/ environmental organisations or previous experience with disaster, made them of interest to the assessment.

## Respondent Note on Methodology:

Key informant interviews in the communities of Sandy Bay and Fancy noted that these areas are of particular interest to many External groups due to high levels of poverty and the possible presence of Indigenous People.

## **Social Assessment Response**

The Social Assessment Team notes that these communities have also been subject to increased scrutiny and participatory research, and instead employed the use of key informants to ensure that quality data was collected.

### 1. Obtaining the Information:

- Community Development Officer was identified
- The Director of the Sandy Bay Government School
- An anthropologist living in the Sandy Bay Area
- Community members
- Children from the School

## 5. Diagnostic of Community:

### **OPERATIONAL DEFINITION:**

- (A) It's a rural community from the mouth of the Noel River on the coast in a westerly direction. All the way to its source in the Waterloo Mountains in the vicinity of the parish boundary, then northward along Acayau River to the coast at Belleisle Gutter, then along the coast back to the start.
- (B) The parish is Charlotte. its geographical coordinates are 13° 21' 0" North, 61° 8' 0"
- (C) Problems identified by the community study for the RDVRP
  - Poverty
  - High unemployment
  - Teen pregnancy
  - High vulnerability to natural disaster
  - Landslides
  - Sea blast
  - Coastal erosion

### Location:

Sandy Bay is a rural coastal village on the North Windward coast of St. Vincent and the Grenadines in the parish of Charlotte. It lies approximately four (4) miles north of Georgetown (a main town on St. Vincent Island) and south of the La Soufriere Volcano. The community is also in close proximity to one of the island deadliest rivers, the Rabacca Dry River. This river, which flows directly from the volcano for regularity is DRY in nature but very powerful when flowing. The village is accessible by land and sea.

### **Background:**

The village comprises of two (2) major sections old Sandy Bay and New Sandy Bay. The old Sandy Bay section is believed to have existent in 1797 after the Carib wars with the British. The area comprises mainly of decedents of the Yellow Caribs, a small number of African slaves referred to as Black Caribs the ancestors of the Black Caribs became the first permanent non-carib settlers in the island in 1675 mainly survivors from the sinking Dutch ship. During the 1900s the community had numerous upsurges from heavy flooding, hurricanes and volcanic eruption.

## Population

The population according to the 2001 census, was two thousand eight hundred and sixty- seven (2,867). This is the entire Sandy Bay census division that comprises surrounding communities. The economically active population is seven hundred and twenty -two (722) the lowest of all census division in the island, of which 537 are male and 185 are female. The unemployed women are engaged in household chores, while the men seek odd and end tasks.

### Livelihood

The community livelihood is embedded in subsistence and commercial farming, of crops including cassava, peas, sorrel and sweet potatoes.

### Culture

The traditional Carib culture is not practiced; however, members of the community practice the Quadrille dance. November 1 (the day of the Dead) is also celebrated by the cleaning and lighting of candles on their deceased relatives graves. In December, like all other communities in St. Vincent and the Grenadines the members visits each other homes to bring a message of glad tidings and joy.

### **Family Structure:**

The family composition is single parents and extended families living in small to medium size concrete and partly wooden houses. Approximately 96 percent have electricity, and domestic water supply. Telephone in the homes is very common however a number of people have cellular phones. Approximately 15 percent of the population use pit latrines. Teen pregnancy seems to be the dominant social problem in this area.

### **Physical Infrastructure**

The institutions present in this community are one (1) health clinic, two (2) preprimary schools, one (1) primary and one secondary school, Churches from all religions (Anglican, Catholic, Spiritual Baptist, Adventist, etc.) one resource centre that serves as an office for teachers in the Secondary school, Adult Continued Education Programmes and community meetings. Additionally the community has its' own radio station, the Garifuna radio, post office, police station, playing field and cemetery. Other businesses that can be found in Sandy Bay include hairdressing, bakery, and retail shops.

## 6. Key Social Findings

The Social Assessment revealed the need for the project activities to help to reduce the vulnerability of the communities in the event of natural disaster.

Employment opportunities for unemployed youth, men and women on some
the project sites, for example the construction of the satellite warehouse, river
and coastal defence. In Sandy Bay some residents indicated the possibility of
having the opportunity to make basketry to display next to the coastal
defence, thereby improving tourist attraction and create employment.

### **Coastal Defence:**

The Coastal defence assessment was conducted in the communities of Sandy Bay. The coastal front in some areas in St. Vincent and the Grenadines is developmental land for tourism. Prime beneficiaries of these activities consist of grocery shops operators, landowners. In addition to questionnaires, informal interviews were conducted with entrepreneur living along the coast. In these communities, 95.2 percent of the respondents indicated that this activity was necessary for the community. 92 percent felt that the people living along the coast were unsecure and 90 percent of the respondents felt that it was necessary to secure the coastal front. They anticipate that the sea defence would help in flood and disaster mitigation and highlighted the following positive impacts:

- In Sandy Bay respondents anticipated that coastal defence would prevent beach erosion. This would enable the residents to reintroduce beach sports such as cricket, football and volleyball. Additionally, this would promote a sense of security among parents who indicated that their children would be safer while playing on the beaches.
- It would protect properties along the coastal front and provide environmental beautification.
- It would reduce the risk of loss of human life resulting from natural hazards. Particularly, in the communities of Georgetown and Sandy Bay, which are located near the Atlantic belt, where residents are endangered as high waves are frequently observed.
- The coastal defence work would protect the infrastructure particularly roads in some of the communities for example, Sandy Bay and Dark view. The roads in these two communities are an essential part of the road network and connect communities (in the north) to the rest of the island.

Generally the residents approve the objectives of this activity and indicated that if not implemented, there can be negative consequences to individuals, communities, the economy and the environment. Some of their responses are presented in the table below.

The respondents say: If the project was not implemented then:

Individual	Community	Physical Infrastructure	Natural
muriduai	Community	i nysicai iniiasti ucture	
			Environment
"people living in	"many roads	"in the next five years about	"damages to the beach
the area will have to	and homes along the	fifty homes will have to be	and people's homes"
find other places to	coast lines will get	relocated (SANDY BAY)"	
live"	damaged"		
"very little or no	"the sea will	"the sea will continue taking	"the sea water may
beaches recreational	take more lands"	land until it takes the public	continue to reclaim and
areas"		road"	erode the lands"
	"there will be a	"the water will destroy	"there would be no
	total cut off in some	infrastructure like roads and	land for living and in some
	areas, main road	other buildings along the	areas of the community the

will be destroyed. residents of low	coastline"	roads will be completely destroyed"
lying areas will have		desiroyed
to move to higher		
ground"		ļ

## Satellite Warehouse at Noel, Sandy Bay: Consultation

Sandy Bay Site Visit. A site visit to Sandy Bay was conducted in order to consult with stakeholders regarding the project in general and location of the Satellite Warehouse specifically. The site visit took place on April 10, 2012. Residents in Sandy Bay were informed of the planned consultation by flyer (see attached) and by local community radio on Sunday April 8. In the event attendance was limited with 9 community members participating (see list of attendees) along with 6 representatives from Central Planning, NEMO and the World Bank. The discussion was a rich one however and the issues raised related to:

The location of the Satellite Warehouse and suggestions by several community members to situate the warehouse on the site of the abandoned Old School more centrally located within the community. The proximity to the sea of the Old School and its ownership by the Anglican Church were discussed. The fact that the suggested location is on Crown Land (thereby circumventing land acquisition) and the broader catchment area of the proposed Warehouse was viewed positively by the community. The pros and cons of the various sites were discussed and ultimately the benefits of the proposed land in terms of an extended catchment area and land ownership status were sufficiently attractive to the community members present.

The procurement process was explained to the community by the PCU Procurement Specialist. The community raised concerns about the importance of hiring local contractors in order to generate employment and concerns that some local contractors might not have the necessary documentation although registered. Community members were assured that contracts will be locally advertised.

**Contents of the Satellite Warehouses.** The NEMO representative addressed community questions regarding the contents and use of the Warehouse.

**Temporary storage of emergency equipment.** In addition, with hurricane season fast approaching, it was agreed that a temporary storage site should be established to house some emergency equipment given that the construction of the warehouse could be 6 months or more away. The Principal of the Sandy Bay Government School, Mr. St. Elbert Walters, offered to provide two small storage rooms in the school to house a limited amount of equipment prior to Satellite Warehouse construction.

**Emergency Management Committee.** The need for a Community Emergency Management Committee was discussed and the need for it to work with District level preparedness groups. Central Planning agreed to assist as necessary in the organization and establishment of the group.

Community Fatigue with Consultations. Several community members expressed frustration with consultations which lead no-where. Examples were given of consultations that have taken place in the past and led by NEMO, the Red Cross and others (unrelated to the RDVRP) which for years have promised Disaster Relief initiatives in Sandy Bay which have not materialized.

**Limited Attendance.** Limited community attendance was explained in terms of the message not sufficiently getting out and in terms of community fatigue with meetings that lead no-where. It was agreed that a further consultation would be organized during a Parent Teacher Meeting at the Sandy Bay Government School within the next month in order to reach a wider segment of the community given that construction going ahead in the foreseeable future.

### 7. Risk Assessment

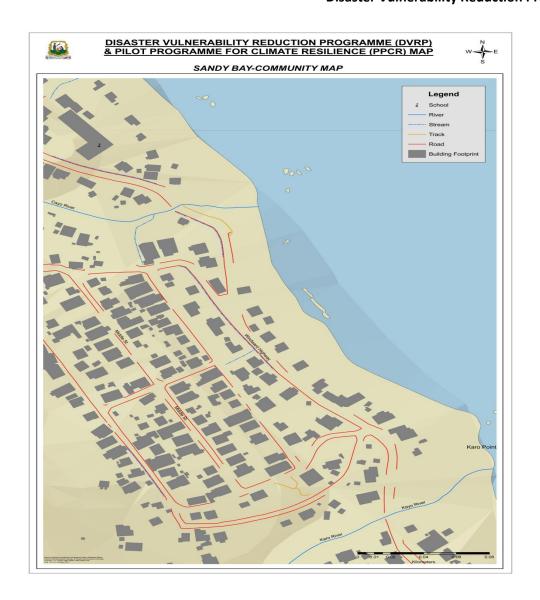
Commu nity	Potential hazards	Who is at risk	How	Existing control measures	Preventati ve measures
Sandy Bay	Environment al –socio – economic	Children, elderly, woman, disabled etc.	There is not enough work, hardly any recreational spot	Nil	Skill training classes art and craft, etc.
	Crossing the river without a bridge – only way to the house	elderly,	Unpredicted flooding, water level may be higher, pregnant women may fall	rainy take	
	Approximatel y 15 informal dwelling on the sea coast	children,	Sea waves can come to the land and wash away houses and crops	None ¿what do you do in the event of an eventuality? Just watch the sea	Relocate houses

### 8. Next Steps

The "extra due diligence" on the communities of Sandy Bay has taken the form of a sampling method during the social assessment which sought to "over sample" the community as well as additional consultations during implementation and planned in the coming months. The Satellite Warehouse at Noel (to be situated on Government Land) has been positively greeted by the community and no planned negative social impacts are envisaged under the project,

### **Community Map**

# Disaster Vulnerability Reduction Project



### SATELLITE WAREHOUSE - MAGUM, SANDY BAY

### Addendum to Social Assessment:

## **Disclosure of Land Ownership & Consultations**

# REGIONAL DISASTER VULNERABILITY PROJECT ST. VINCENT AND THE GRENADINES

### 1. Introduction

The Regional Disaster Vulnerability Project (DVRP) is sponsored by The World Bank to provide assistance [Grant and/or Loan] to the Governments in the Region to measurably decrease the vulnerability of people and national economies in the Eastern Caribbean to climate change and natural hazards. The construction and equipping of nine (9) satellite warehouses throughout St. Vincent and the Grenadines are among the activities to be realized. The Satellite Warehouse in Magum, Sandy Bay is on the list of investments.

During project preparation it was decided that extra due diligence needed to be conducted in the implementation of sub-projects in the Sandy Bay area given the presence of persons of Garifuna ancestry, this despite the fact that the project did not trigger the Bank's Policy on Indigenous Peoples (OP/BP 4.10). Nevertheless the social assessment included an Annex on Sandy Bay and consultations with the community were held in order to inform the community of the planned Satellite Warehouse and provide an opportunity for feedback. This note is part of the extra due diligence required in Sandy Bay.

The DVRP triggered the Bank's Policy on Involuntary Resettlement (OP/BP 4.12) since some of the sub-projects under consideration might entail land acquisition and/or relocation. As a result a Resettlement Policy Framework (RPF) was developed and publically disclosed during project preparation in order to clarify resettlement principles, organizational arrangements, and design criteria to be applied to subprojects to be prepared during project implementation (See OP 4.12, paras.26-28).

In the case of the Magum, Sandy Bay Satellite Warehouse no land acquisition is entailed for its construction and the land is fallow. This sub-project will not entail (as per OP/BP 4.12):

### (a) The involuntary taking of land resulting in

- o Relocation or loss of shelter
- Loss of assets or access to assets; or
- Loss of income sources of means of livelihood, whether or not the affected persons must move to another location; or

### 2. Objective: Disclosure of Land Ownership

The objective of this document is to disclose the land ownership status of the land to be used for the construction of the Magum, Sandy Bay Disaster Management Satellite Warehouse and to further document consultations conducted with the Sandy Bay community. Specifically, this note serves to document that:

- The Warehouse is to be constructed on Public Land (Crown Land) (See Annex A Cabinet Memo 427/12 dated November 7, 2012);
- A series of additional consultations have taken place with the Sandy Bay Community (Annex
   C)
- Extra due diligence required of this geographic area (See Social Assessment) has been conducted.

## 3. Sub-project Location

Project: Satellite warehouse Census Division – Sandy Bay Location: Magum

Expected users: 2535 members of the community (2012, Census)

Cabinet granted approval for 6,017 sq. ft. of land to be reserved for the exclusive use of NEMO for the construction and operation of this Disaster Management Satellite Warehouse. The satellite warehouses would include a small office and washroom that can be used for meetings and converted into a Community Emergency Operations Centre, and a storage facility for critical disaster response equipment. The warehouses would be managed by the local district disaster committees.

## 4. Monitoring & Implementation

The PSIPMU will have overall responsibility for monitoring project activities and the Social Development and Communications Specialist within the PSIPMU will monitor the implementation of this sub-project and consult regularly with the community. In addition, two members of the Sandy Disaster Committee will sit in on all Stakeholder meetings

# Annex A: Cabinet Memo No. 427/12 – Request to Vest Exclusive Use of Crown Land in NEMO

### MEMORANDUM

GOVERNMENT

YOUR FILE:

OF

ST. VINCENT AND THE GRENADINES

OUR FILE:

FROM: Cabinet Secretary

DATE: 07th November, 2012

**TO:** PS/Housing etc. Director of Planning PS/National Security etc.

SUBJECT: REQUEST TO VEST EXCLUSIVE USE OF CROWN LAND IN NEMO

### IN CABINET ON MONDAY, 05TH NOVEMBER, 2012

1078. With reference to Memorandum No. 427/12 on the captioned subject, Cabinet granted approval for 6,017 sq. ft. of land as shown on Plan No. C21/37 at Magum, Sandy Bay, to be reserved for the exclusive use of NEMO for the construction and operation of a Disaster Management Satellite Warehouse.

The project will be financed through grants and loans by the World Bank under the SVG Regional Disaster Vulnerability Reduction Project.

Mounty Cabinet Secretary

## Annex B. Survey Plan No. C21/37. Land Location

### MEMORANDUM

GOVERNMENT

YOUR FILE NO

OUR FILE NO

OF

ST. VINCENT AND THE GRENADINES

FROM:

Chief Surveyor

DATE: July 05, 2012

TO:

PS/Ministry of National Security etc.

SUBJECT:

Site selection for satellite warehouse- Sandy Bay Regional Vulnerability Project.

Reference to your memorandum of 11<sup>th</sup> May, 2012 on the above captioned subject.

Attach is a certified copy of plan C21/37 as requested.

The land identified has been fallow and qualifies as 'Virgin Land' since the land was only surveyed in February 2012 to be utilized by NEMO.

The land belongs to the Crown and NEMO is an entity of the state.

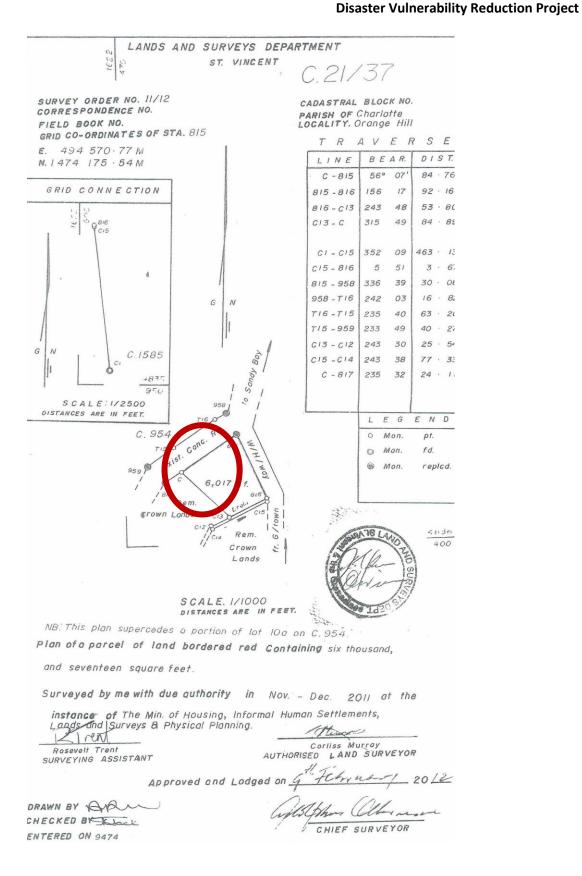
MINISTRY OF NATIONAL SECURITY JUL 06 2012

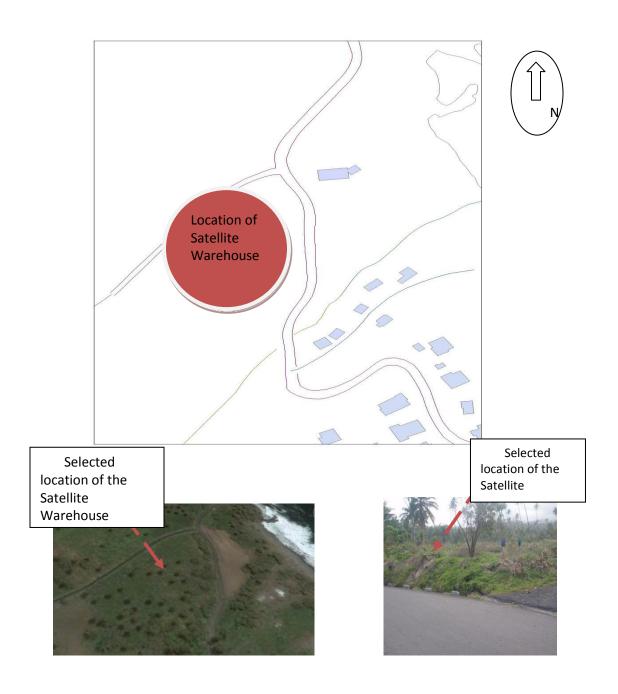
dolphus Ollivier

the

CM/pp

May ...





Source: Statistical Office, 2012 GIS

# Annex C. Consultations APRIL 10, 2012

In attendance

NAME	GEN	COMMUN
	DER	ITY
Hoyte Alford	M	Biabou
Jordon Ronette	F	CPD
Ralph De-Anna	F	CPD
Stewart Chiaka	F	CPD
Peters Hulda	F	NEMO
OSMENT Kendol	М	Sandy
		Bay
Hoyte Nesta	F	Sandy
		Bay
May Andrea	F	Sandy
		Bay
Walter St. Elbert	М	Sandy
		Bay
Ballantyne Peters	М	Sandy
		Bay
Hepburn Sheldon	М	Sandy
		Bay
Lavia Alex	М	Sandy
		Bay
Ballantyne Christian	М	Sandy
		Bay
Fraser Patsy	F	Sandy
		Bay
Locke Justin	М	WB
Oppong Yaa	F	WB

Sandy Bay Site Visit. A site visit to Sandy Bay was conducted in order to consult with stakeholders regarding the project in general and location of the Satellite Warehouse specifically. The site visit took place on April 10, 2012. Residents in Sandy Bay were informed of the planned consultation by flyer (see attached) and by local community radio on Sunday April 8. In the event attendance was limited with 9 community members participating (see list of attendees) along with 6 representatives from Central Planning, NEMO and the World Bank. The discussion was a rich one however and the issues raised related to:

• The location of the Satellite Warehouse and suggestions by several community members to situate the warehouse on the site of the abandoned Old School more centrally located within the community. The proximity to the sea of the Old School and its ownership by the Anglican Church were discussed. The fact that the suggested location is on Crown Land (thereby circumventing land acquisition) and the broader catchment area of the proposed Warehouse was viewed positively by the community. The pros and cons of the various sites were discussed and ultimately the benefits of the proposed land in terms of an extended catchment area and land ownership status were sufficiently attractive to the community members present.

- The procurement process was explained to the community by the PCU Procurement Specialist. The community raised concerns about the importance of hiring local contractors in order to generate employment and concerns that some local contractors might not have the necessary documentation although registered. Community members were assured that contracts will be locally advertised.
- **Contents of the Satellite Warehouses.** The NEMO representative addressed community questions regarding the contents and use of the Warehouse.
- Temporary storage of emergency equipment. In addition, with hurricane season fast approaching, it was agreed that a temporary storage site should be established to house some emergency equipment given that the construction of the warehouse could be 6 months or more away. The Principal of the Sandy Bay Government School, Mr. St. Elbert Walters, offered to provide two small storage rooms in the school to house a limited amount of equipment prior to Satellite Warehouse construction.
- Emergency Management Committee. The need for a Community Emergency Management Committee was discussed and the need for it to work with District level preparedness groups. Central Planning agreed to assist as necessary in the organization and establishment of the group.
- Community Fatigue with Consultations. Several community members expressed frustration with consultations which lead no-where. Examples were given of consultations that have taken place in the past and led by NEMO, the Red Cross and others (unrelated to the DVRP) which for years have promised Disaster Relief initiatives in Sandy Bay which have not materialized.
- Limited Attendance. Limited community attendance was explained in terms of the message not sufficiently getting out and in terms of community fatigue with meetings that lead no-where. It was agreed that a further consultation would be organized during a Parent Teacher Meeting at the Sandy Bay Government School within the next month in order to reach a wider segment of the community given that construction going ahead in the forseeable future.

## CONSULTATION: November 5th 2012

## Sandy Bay Annex (2)

Action: Consultation in Sandy Bay on November 5, 2012.

Residents in Sandy Bay were informed of the planned consultation by local community Disaster Preparedness committee, through Patricia Fraser community member.

### Discussion

### The location of the Satellite Warehouse

Suggestions were made by several community members to situate the warehouse on the site of the abandoned Old School more centrally located within the community.

An **explanation** was given that the Satellite Warehouse is to service all communities north of the Dry River 'Rabacca". Additionally, the proposed site [Old Sandy Bay school] is in a vulnerable location and opened to high winds. The ownership of the land lies with the Anglican Church. The suggested location is Crown Land. The spacing is adequate.

The members embraced the idea[use of Crown Land] unanimously agreeing to use the suggested area, it is a bit far from Sandy Bay "proper" however, the Disaster Group is prepared to work together to protect it.

### The procurement process

Ms. Stewart explained to the community the procurement process.

- The community members enquired about the possibility of using local residents to be a part of the project.
- The World Bank requirements were explained; indicating that any Bids that are disqualified, must be submitted to the Bank any decision taken would be in keeping with the Bank Guidelines.
- The community members felt that they would feel more ownership of the project if they are given the opportunity to work during the construction period on the project. There are many available tradesmen in the area who are competent and this would significantly increase the prospects for community development and participation.

### Contents of the Satellite Warehouses.

The NEMO representative addressed community questions regarding the contents and use of the Warehouse.

- Community members felt it would be necessary to buy a tractor (small) or excavator because of the frequent Landslides that block off Fancy from time to time and Orange Hill from Sandy Bay. They further explained in the event of a disaster the notification may not be timely for the community of Fancy given that most of the members leave at 5:00 a.m or before and even with the VHF radio they may not be notified on time. Therefore they recommend that an excavator can be used to clear the blockage and be included in the list of equipment for the Satellite Warehouse.
- Emergency Management Committee. The disaster Management Committee has been reactivated the members present were keen on the possibility of the Warehouse;
- they requested information on how to organize the management committee of the warehouse as well as the sustainability.

**Disaster Vulnerability Reduction Project** 

- Nemo and Central Planning agreed that the management would be entrusted to the Disaster Preparedness Committee with ex- officio members from the Police, Nemo, Health, however as plans move forward the management committee would be established.
- It was agreed that at the next meeting of the Disaster Committee two members should be selected to serve on the Stakeholders committee so as to keep members informed.

### Other Questions:

Does anyone present here know of any reason why the land of Magum cannot be use? Eg.. Religious/sacred

No.

Is the site selected an old burial ground? No

## **Possible positive Impacts**

- Ideal storage of equipment to be used for communities North of the Dry River
- Accessibility
- Readily available tools to be mobilized during a disaster.
- Possible creation of employment.
- Educational information distributed about disasters
- Very high positive impact on most sector of the community

### Possible negative impacts

- Possible bad management
- Community not involved in decision making
- Lack of project information
- Lack of commitment from community
- Police interference
- Changes in the natural landscape
- Less land for agriculture
- Bad security of the building

# Other areas the project should address?

- Training in management
- Training in the use of equipment
- Proper security of the building.

## In attendance

NAME	GENDER	COMMUNITY	Telephone
Davidson Baptiste	М	Sandy Bay	•
Sonia Child	F	Sandy Bay	
Shirile Child	F	Sandy Bay	
Pearl Lewis	F	Sandy Bay	
Michael Hoyte	F	Sandy Bay	
Patricia Glasgow	F	Sandy Bay	
Carol Delves	F	Sandy Bay	
Josiane Cordice	F	Sandy Bay	
Avonel Lewis	F	Sandy Bay	
Deana Lewis	F	Sandy Bay London	
Jennis Baptiste	F	Old Sandy Bay	
Shaldon May	F	Sandy Bay	
Denise Francois	F	Sandy Bay	
Clorine Baptiste	F	Sandy Bay	
Rosanell May	F	Sandy Bay	
Camelita Williams	F	Sandy Bay	
Tita Hoyte	F	Sandy Bay london	
Catherine Lavia	F	Sandy Bay	
Ann Brackin	F	Sandy Bay london	
Gracie John	F	Sandy Bay london	
Drucilla Nero	F	Sandy Bay	
John Baptiste	М	Sandy Bay	
Nesta Hoyte	F	Sandy Bay	
Camey Ballantyne	M	Sandy Bay	
Enos Francis	М	Sandy Bay	
Carl Toppin	М	Sandy Bay	
Norit Baptiste	М	Sandy Bay	
Maxwell Francis	М	Fancy	
Lelewyn lavia	M	Sandy Bay	
Carl Roberts	М	Sandy Bay	
Davail Roberts	F	Sandy Bay	
Kendol Osment	M	Sandy Bay	
Patricia Fraser	F	Sandy Bay	
Melena Bowens	F	Sandy Bay	
Monique Hoyte	F	Sandy Bay	
Sekai Stewart	F	CPD	
Howie Prince	M	NEMO	
Richard Macleish	M	CPD	
De-Anna Ralph	F	CPD	