

Community risk reduction



Empowering communities to take charge of their destiny

Bullock Heights, Somerton VULNERABILITY AND CAPACITY ASSESSMENT

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Foreword

The present VCA study was carried out through a series of community meetings in May,29-30,2010 with the residents of Somerton- Bullock Heights..

This study is part of the International Federation of Red Cross and Red Crescent Societies (IFRC) regional project "Improving the preparedness of Caribbean communities to respond to disasters affecting their locality". This program was implemented in 2010, through the support of the European Commission Office for Humanitarian Aid (ECHO).

Acronyms

CIA	Change / Influence / Accept
ECHO	European Commission Office for Humanitarian Aid
IFRC	International Federation of Red Cross and Red Crescent Societies
VCA	Vulnerability and Capacity Assessment
ODPEM	Office of Disaster preperedness and Emergency Management
MLSS	Ministry of Labour and Social Security
PDC	Parish Disaster Coordinator.
SDC	Social Development Commission.

Introduction

In May 29-30,2010 Bullock Heights, Somerton embarked on a journey of self-analysis, examining its strengths and weaknesses, the external and internal threats and the resources it has to cope with these threats. Heads of households, local leaders of religious and sports groups, workers of all trades discussed the history of their community and the problems they encounter. They shared their experiences and their tips for overcoming daily difficulties. As a group, they identified the main problems ahead and discussed the future of their common home.

The process was organized by volunteers and staff of the Jamaica Red Cross as part of a region-wide attempt to improve community-based disaster preparedness. The community work was based on the methodology known as "Vulnerability and Capacity Assessment", or VCA. The purpose of this assessment is to identify and understand the most pressing issues and threats in the community (vulnerabilities) while simultaneously identifying the local and external resources available to minimize the risks to the villagers (capacity).

The VCA approach is composed of a series of tools for community-based participatory consultations to ensure a better understanding of how the community functions. Behind this process lies the assumption that a community more aware of its own limitations can organize itself better to overcome them. In the context of the Jamaica Red Cross Society project, the stated objective was to improve the capacity of the community to cope with the disaster-related risks in its environment.

To this end, the first section summarizes the results from the VCA process, as carried out in Bullock Heights, Somerton it presents the history, the local dynamics and the coming challenges, as perceived by the people who live in Bullock Heights, Somerton. Although this program explicitly focuses on natural disasters and hazard mitigation strategies, the results presented in this first section provide guidelines for a broader approach towards sustainable community development.

The second section focuses on the output from the community focus groups in relation to the risks faced by the community: Which are the main risks? Can they be mitigated? By whom? Using the results presented in the proposed Action Plan, the community members – supported by JRC teams – will identify and implement strategies to mitigate these risks. The information gathered here will also provide the necessary baseline information for monitoring and evaluation the progress of the community.

Part 1: Vulnerability and Capacity Assessment of Bullock Heights, Somerton.

What is VCA?

Vulnerability and Capacity Assessment (VCA) is a participatory investigative process designed to assess the risks that people face in their locality, their vulnerability to those risks, and the capacities they possess to cope with a hazard and recover from it when it strikes. Through VCA, National Societies can work with vulnerable communities to identify the risks and take steps to reduce them by drawing on their own skills, knowledge and initiative. In sum, VCA helps people to prepare for hazards, to prevent them from turning into disasters and to mitigate their effects.¹

Vulnerability can be defined as:

The characteristics of a person or group in terms of their capacity to anticipate, cope with, resist and recover from the impact of natural or man-made hazards.

The definition of vulnerability suggests that it cannot be described without reference to a specific hazard or shock. So, the question that must always be asked is, "Vulnerability to what?" People living along coastal areas or rivers may be vulnerable to seasonal storms and flooding, while the inhabitants of countries with social, political and economic problems may face difficulties in achieving a satisfactory and sustainable

The reverse of vulnerability is **capacity**, which can be described as: The resources of individuals, households, communities, institutions and nations to resist the impact of a hazard.

quality of life.

The coping strategies of people in response to various hazards will differ from one society to another and will often change over time. People in chronically-prone countries facing multiple hazards, such as drought, locust infestation and civil unrest, find their capacity levels weakening, reducing their ability to mitigate the effects of the next crisis.²

¹ Quoted from VCA toolbox with reference sheets, IFRC, Geneva, 2007, page 6.

² Quote and definitions from *Vulnerability and capacity assessment, An International Federation Guide,* IFRC, Geneva, 1999, page 11-12.



How is the VCA carried out?

The VCA process relies on a few key principles:

Data collection: Preliminary data can be collected through the use of questionnaires, developed specifically for each community or for each type of hazard. However, as information is not always immediately available on the ground – because of time constraint, the availability of the residents and financial resources – the VCA process also relies on the gathering of secondary data. Precious information about the community was gathered from research by the SDC profile document for the community.

Community participation: The goal of the VCA process is to empower the community to allow it to respond on its own to the risks to which it is subjected – or allow it to identify those who can help it to respond. For this reason, community members constitute the core of the process. The main criterion for a successful VCA is the receptiveness of the local community and its willingness to be an active part of the process. Only if all vulnerable groups are included, can they find collective answers to the threats they face.

Sharing information: The VCA process helps the community understand its relation to its environment. Through discussions among neighbors and the collection of data, the community members will be better able to understand – and therefore reduce – the threats to which it is subjected. The final VCA document also offers an opportunity to share information beyond the community, by bringing up issues to the relevant authorities, partner organizations or local leaders.

The VCA is mainly used **to identify in advance, and change where possible, the conditions that create or contribute to the state of vulnerability of at-risk populations**.³ As such, the main usefulness of VCA comes from an improved understanding of the risks and of measures to mitigate that risk. To gather all information relevant to a better understanding of the community, the following steps have been followed:

- 1. Review of secondary sources: this first, crucial, step consists in collecting information that already exists, to avoid duplicating efforts already carried out. Most of this phase consists in collecting written material, or identifying all resources relating to a better understanding of the community;
- 2. Direct observation: A summary presentation of the community, by someone external, often allows to get a first impression of the local dynamics and main issues;
- 3. Focus group discussions: The heart of the VCA process lies in this phase of community interaction, using tools for the involvement of all stakeholders.

Based on these three steps (presented hereafter in points 1, 2 and 3), disaster-related information has been gathered and is presented in part 2

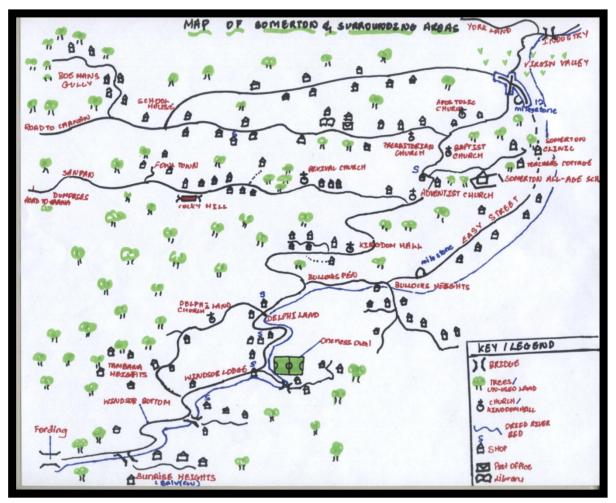
³ Idem, page 12, emphasis added.

1. Gathering data from secondary sources

Source: SDC Community profile for Bullock Heights, Somerton (2001)

Location of the community:

Somerton is a rural Community located in the Eastern section of St. James, approximately 24 kilometers from the capital (Montego Bay). It situated between the rural communities of Orange, Adelphi, Lottery and Dumfries.



MAP OF BULLOCK HEIGHTS SOMMERTON

Population of the village

It is estimated that the community has 1021 residents living in 295 dwellings or making a total of 340 households.

The population consists of: 500 Males - 49% 521 Females - 51%

Age	Male	Female	Total	Percent
00-04	51	46	97	10
05-09	60	57	117	11
10-14	57	74	131	13
15-19	52	42	94	9
20-24	36	39	75	7
25-29	42	34	76	7
30-34	25	34	59	6
35-39	39	43	82	8
40-44	33	47	80	8
45-49	32	16	48	5
50-54	9	18	27	3
55-59	15	13	28	3
60-64	21	10	31	3
65-69	16	10	26	3
70-74	5	10	15	1
75-79	6	17	23	2
80-84	1	8	9	1
85>	0	3	3	0
Total	500	521	1021	100

Somerton 2001- Population by age and sex

Based on Census for 2001

The community has one school which serves infant and primary level students. The highest level of education attained by some residents is primary level (40%).

The housing data is as follows:

Board structures: 44% Wooded structures: 6% Concrete structures: 32% Block structures: 15% Brick structures:3%

2. Direct observation

The Bullock Heights, Somerton community is in a formal housing settlement. It is a farming community with its main crop was sugar cane and banana. There is a river that is running behind the community which is the main source of hazard that has affected the community and continues to pose potential risk.

There are unfinished houses as well as two (20 flat bridges that are in disrepair. There is also a poorly constructed water drain.

3. Focus group discussions

The following tools were used during the focus group discussion:

- a. Historic profile
- **b.** Seasonal calendar
- c. Institutional and Social Network Analysis
- d. Mapping
- e. Transect walk.
- f. Living and coping strategies analysis.

Historical profile of Bullock Heights - Somerton

1929	The first church was built, Somerton Presbyterian.
1950	The construction of the first elementary school in Somerton
1941	The Somerton All-Age School was built
1951	Storm – Charlie
1950	Stand pipe was introduced, the establishment of the Health Center
1960	Introduction of electricity and asphalt road and transportation system and the
	former Prime Minister Mr. Percival Patterson gain full scholarship to Calabar
	High School.
1972	Construction of the first Somerton Housing Scheme .Bullock Heights Housing Scheme.
1983	Habitation of the Housing Scheme
1988	Habitation of the Housing Scheme Hurricane Gilbert
1990	Land lines phone was introduced to the community ,and the crime rate rose
	for a short period. The first female Speaker of the House of Representative
	was from the community.
2000	Cellular telephone sites was introduced to the community
2006	Road from Fording to Somerton was paved
2007	Somerton Community Center was re-built.
2008	Extension started on the Somerton All- Age School
2009	The developer of the Bullock Heights housing scheme died, the first Somerton Home Coming held in July, 2009 .
2010	Long period of drought from March until May 2010.

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	e construction of the first ELEMENTARY schools in SOMERTON CEDARHILL ELEMENTARY School House Elementary	
	The SOMERTON All-Age school was built	
10(-)	STORM	
1950'	Introduction of Electricity & Asphalt Road. Stand Pipe was introduced.	3
1950	Establishment of first health centre;	
1960"	improved to type I hearth centre in the 1980"	H
(CONSIGNATION OF THE OWNER OWNER OF THE OWNER OWNE OWNER OWNER OWNER OWNER OWNER OWNER OWNE	MR Foster, Confidence, MAcreath, Ms Kengie MA Reason.	E.
1972	Construction of the Somerton First Housing Scheme. The Bullock Heights Housing Siden	
1983	Habitation of Scheme	Aut of
19.88	Hurricane Guelbert	
1990 2000*	hand lines phone was introduced to the community	345
iaap	Cell cites was introduced.	1000
2006	CRIME was on the nee for a short period	
2003	Road from toroing to Somerton was paved. Somerton community Centre was re-built.	and the second
		and the second

Seasonal Calendar Bullock Heights - Somerton

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
Entertainment	*			*				*				*
Church outreach	*				*				*			
School sports				*								
Labour day project					*							
Rain						*	*	*	*	*	*	
Drought				*							*	
Cold	*	*	*									
Flooding		*	*	*								
Hurricane						*	*	*	*	*	*	
Influenza					*	*	*	*	*	*		
Pink eye								*	*			
Chicken pox		*	*									
Diarrhea	*	*	*	*								

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c. '1	J	F	M	A	M	J	J	A	S	0	N	D		
<u>Social</u> Entertainment Churches Outranh School Sports Labour Day Project		*		* *	* *			*	*			*		
Weather/Season Rainy Drought Cold	*	*	*		*	*	*	*	*	*	*	*		
Hazard/Disaster Flooding Hurricane						* *	* *	+	* *	* *	* *			
<u>Health</u> Influenza Pink Eye Chicken Pox Diarrhoea	*	**	* *	*		*	* *		*	*	*			/

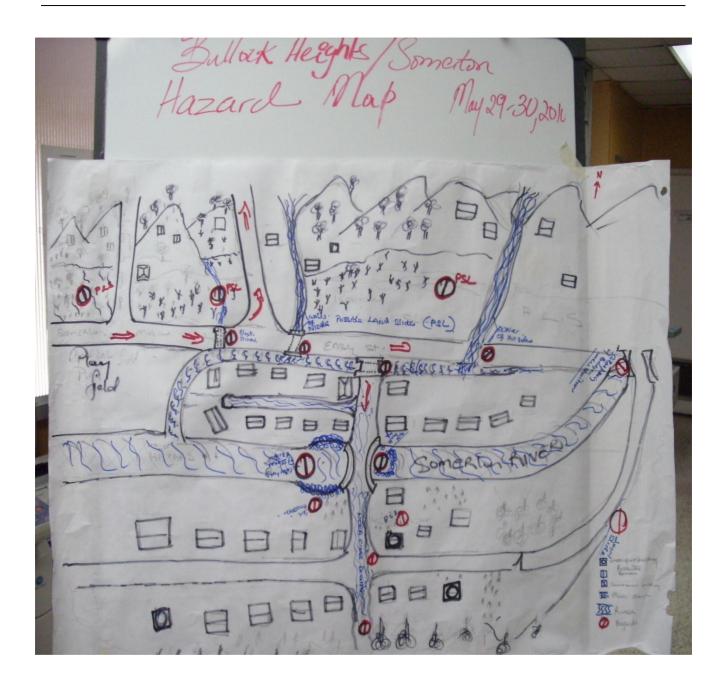
a. Institutional and social network analysis

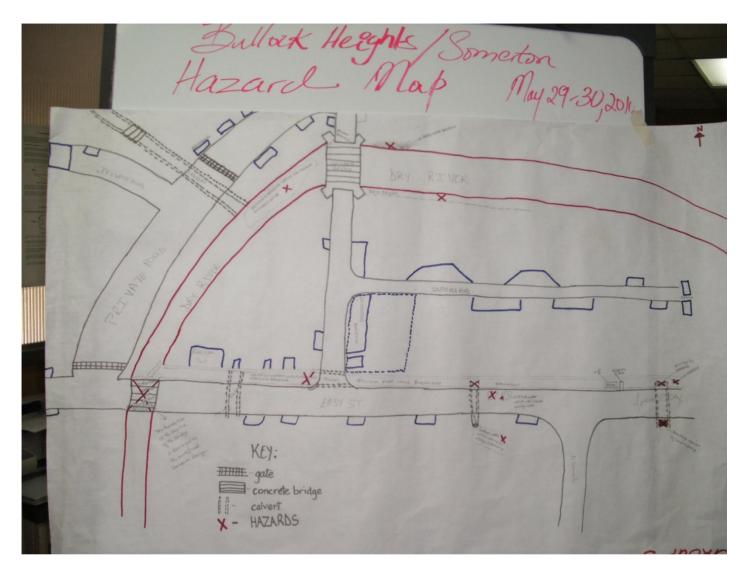
b. Livelihoods and coping strategies analysis

If relevant, complete this section.

c. Mapping

Picture: Capacity Resource map





BULLOCK HEIGHTS; SOMERTON - HAZARD MAPS

Part 2: Risk assessment in Bullock Heights Somerton

The VCA process made it possible for the Jamaica Red Cross Society (JRC) to get to know Bullock Heights-Somerton while allowing the community members to share their knowledge, their fears and their ideas. At the same time, the project has offered a unique opportunity to go from theory to practice.

The JRC – in collaboration with partner agencies and local community stakeholders – has used the VCA method to identify and solve problems within their capability. In particular, as the following pages will show, the implementation of the VCA tools improves understanding of:

- ✓ the nature and level of risks that vulnerable people face;
- ✓ where these risks come from;
- ✓ who will be the worst affected;

- ✓ what is available at all levels to reduce the risks; and
- what initiatives can be undertaken to strengthen the impact of programs to raise the capacity of people at risk.

Methodology for a Risk assessment

The following five-step approach was used with the Bullock Heights – Somerton community members:

- 1. The first step meant identifying for each hazard the **Potential Risks to the community**; the areas of vulnerability and capacity that exists within the community.
- 2. The second step required identifying for each Hazard **Actions that could be undertaken** to transform vulnerabilities identified into capacities.
- 3. The third step consisted in differentiating the types of measures, whether they related to prevention, mitigation or preparation for response.
- 4. The fourth step involves a CIA Analysis, in which participants considered each and every action to transform vulnerability into a capacity and decide whether such changes were realistic.
- 5. The fifth and final step involved identifying a Plan of Action that could be implemented by the community. While a number of actions were identified, this final step identified realistic actions. It should be noted that the information gathered and the specific actions identified below while not reflected in the final plan of action are still relevant and needed and could be utilized by other agencies.

The results of these five steps are presented hereafter (points 1 through 5 below).

1. Identifying hazards and their potential impact on the community

Hazard	Potential Risk	Vulnerability	Capacity
	Flooding of People houses roadway.	Persons living near the river	The community has the following limted resource so they depend on external assistance.

2. Local capacity to respond to hazards

HAZARD	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
Hurricane	Residents, livestock agricultural	Education and awareness. disaster preparedness and strengthen community capacity to manage disaster.
Flooding	Houses and content	Make improvised water table to direct the flow of the water. And improved strom drain system

Bullock Heegnes St Resource Map Someton Brillock How May 29-30,2011. Capacity Listing School Community Centre (Windsor) Riverside LAWN Churches Neighbours' houses Vehicles Power saw Phones Aenerator Police nurse Bullock Heights Catizens Association Tambara Citizens Association Somerton Cutizens Association/Youth Club

3. Type of measures to mitigate disasters

The third step consisted in differentiating the types of measures, along three categories:

- Prevention actions: action which tries to reduce to probability of a disaster in the community;
- Mitigation actions: action that attempts to protect, strengthen, rehabilitate or reconstruct;
- Preparation actions: action that aims to strengthen the capacity of the community of Bamboo to respond in an effective and efficient manner

Identifying prevention, preparation and mitigation activities

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
Education and awareness	*	*	*
Contour land to direct the flow of water	*	*	*
No dumping in the river	*	*	*
Desilt the river that run long side the Housing Scheme	*		*

4. Ability to act on hazards (CIA analysis)

The fourth step involves a CIA Analysis⁴, in which participants considered each and every action to transform vulnerability into a capacity and decide whether such changes were realistic. Each problematic situation had to be categorized according to the three possible options:

- the situation can be **changed** with the participation of the people at risk;
- the situation cannot be changed directly, but could be **influenced** by the people at risk so that third parties can offer a solution to the identified need; or
- the situation cannot be changed or influenced and the community needs to **accept** the threat as it is.

Actions to transform vulnerabilities into capacities	Prevention	CIA	Preparation	CIA	Mitigation	CIA
Contour land to direct the flow of water.			*	C	*	С
Education and awareness			*	С		

⁴ CIA: C = change, I = influence, A = accept.

5. Plan of action

Plan of action:

Concept	Activities	Time Frame	Indicators Achievement	Assumptions	Remarks

Conclusion: The next steps

Annex 1: List of participants in the Vulnerability and Capacity Assessment

Resource Personnel

#	Names	Addresses
01	Morine Thompson	VCA Trainer, NHQ
02	Curtis Palmer	VCA Trainer, NHQ
03	Ansel Williamson	Field Officer, National Headquarters (NHQ)
04	Sandra Mitchell	VCA Trainer, NHQ
05	Edna Facey	St James Red Cross Branch
03	Marva Brissett	St. James Red Cross Branch
06	Nickeisha Montgomery	St. James Red Cross Branch

Focus group meetings – Dates & participants

Addresses
Somerton
5



Participants external to the community

#	Names	Addresses
01	John Whyte	Social Development Commission
02	Neil Barrett	Jamaica Fire Brigade
04	Cecil Davis	Parish Council