

# PROVENTION CONSORTIUM

## Community Risk Assessment and Action Planning project

### BELIZE – Belize City and West Bay



Copyright 2002-2005, Maps-Of-The-World.com

The maps used do not imply the expression of any opinion on the part of the International Federation of Red Cross and Red Crescent Societies or National Societies or the ProVention Consortium concerning the legal status of a territory or of its authorities

## Belize Red Cross Vulnerability and Capacity Assessment Workshop

CRA Toolkit  
CASE STUDY

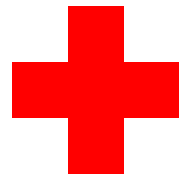
This case study is part of a broader ProVention Consortium initiative aimed at collecting and analyzing community risk assessment cases. For more information on this project, see [www.proventionconsortium.org](http://www.proventionconsortium.org).

**Bibliographical reference:** Xavier Castellanos, Nicole Williams, Maria Angelita, and Hubert Pierre, "Belize Red Cross Vulnerability and Capacity Assessment Workshop". Belize Red Cross, 2005.

Click-on reference to the **ReliefWeb country file for Belize:**  
<http://www.reliefweb.int/rw/dbc.nsf/doc104?OpenForm&rc=2&cc=blz>

**Note:**

A Guidance Note has been developed for this case study. It contains an abstract, analyzes the main findings of the study, provides contextual and strategic notes and highlights the main lessons learned from the case. The guidance note has been developed by Dr. Ben Wisner in close collaboration with the author(s) of the case study and the organization(s) involved.



# **Belize Red Cross**

## **Vulnerability and Capacity Assessment Workshop**

### **Belize Red Cross**

**9 – 14 January 2005**

#### **Facilitators:**

Xavier Castellanos  
Regional Disaster Preparedness Delegate  
(International Federation of the Red Cross, Red Crescent Societies)

Nicole Williams  
Sub-Regional Disaster Management Officer  
(International Federation of the Red Cross, Red Crescent Societies)

Maria Angelita  
Community Disaster Management Trainer  
Belize Red Cross

Hubert Pierre  
Disaster Management Coordinator & RIT  
St. Lucia Red Cross



**International Federation of Red  
Cross and Red Crescent Societies**

## Contents:

### UNIT 1

#### Introduction

#### Objectives

To introduce the course .....	Page 4
To state objectives of the course .....	Page 4
To state the aim of the course .....	Page 4
To gather expectations of participants .....	Page 4

### UNIT 2

#### To clarify the meaning of:

Vulnerability .....	Page 5
Hazard .....	Page 5
Risk .....	Page 5
Disaster .....	Page 5

<u>Understanding the Formula</u> .....	Page 5
--	--------

<u>Transforming Vulnerabilities to capacities</u> .....	Page 10
---	---------

### UNIT 3

#### Introduction of Tools

Historical Chart .....	Page 13
Fear .....	Page 14
Historical Profile .....	Page 14
Seasonal Calendar .....	Page 16
Institutional and Social Analysis .....	Page 17
Community Maps .....	Page 19

### UNIT 4

#### Research Methods

Primary Data .....	Page 22
Secondary Data .....	Page 22

Types of Data Collection

Direct Observation .....	Page 24
Semi-Structured Interview .....	Page 24
Questionnaires.....	Page 24
Surveys .....	Page 24
Sampling .....	Page 24

**UNIT 5**

Key Steps of VCA

Field Trip

Interview Questions .....	Page 25
Direct Observations .....	Page 26
Historical Chart .....	Page 27
Seasonal Calendar .....	Page 27
Institutional and Social Analysis .....	Page 28
Statistical Findings .....	Page 28
Disaster Cycle .....	Page 29

Conclusions

What went well? .....	Page 30
What were the difficulties? .....	Page 30
What were the lessons learnt?.....	Page 30
Activities we can do together .....	Page 30
Top Five activities .....	Page 31
Final Floor diagram .....	Page 32

**APPENDIX**

Contact Information .....	Page 32
Song "Change" .....	Page 33

\* Note: *Italics* mark participants comments/answers

# UNIT 1

## INTRODUCTION

### Objectives

#### **1. To introduce the course:**

VCA was introduced as part of the community based disaster programme by the Federation in 1995, with the objective of ensuring successful preparation and mitigation programmes at the community level. For the Federation, as with other organizations which use this methodology and these tools, it is vitally important to ensure that community leaders and the community in general, different levels of government (both local and national) as well as other organizations, are aware of the tools, and in their turn learn from others' experiences.

#### **2. General logistic information:**

General information was addressed, Meals – breakfast and lunch to be provided, lunch at 12:30 – 1:30, 2 breaks for the day one at 10 – 10:15 and then 3 – 3:15.

Bathrooms down the stairs to the left.

Telephone – suggested to international delegates to purchase phone cards at reception, and use internet service at lobby.

Asked international delegates to bring tickets to reconfirm flights, and also receipts for expenses incurred.

Dress comfortable, casual, especially for Thursday, when we will go on a field trip to downtown Belize, and also we might be working late that day.

The supermarket is about 2 blocks from the hotel. Please go in groups, taxis available if you call the front desk.

Incase of medical emergency, please call Lizet at 610-3301

PARKING LOT!!!

#### **3. To establish Ground Rules:**

Participants are requested to establish the behavioral rules during the course:

Results of the working groups:

These were the most acknowledge ground rules:

1. Do not let cell phones interrupt the session, keep on silent or vibrator
2. Orderly, on time, orderly questions, no interruption while people are talking
3. No chewing gum or popping
4. Try to keep from being in and out of the room
5. Flexibility

Others that have not being categorized: Be on time, Respect,

#### **4. Get to know each other:**

The participants get to know one another, through an exercise to build group dynamic.

Group Dynamic, couples were matched by pairs eg., brush and comb, knife and fork, hat and head, and given 5 min. to met the other person, and later on introduce each other

#### **5. Introducing the theme of disasters:**

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

For this exercise ask the participants to identify one threat per group and respond to the following questions:

- a. Who are most affected? People at risk, children, disabled, elderly, and location
- b. What's the impact? Lost of lives
- c. What is the root cause of the disaster? Lack of planning, access to infrastructure
- d. What impact do the threats have on the community? Impact on people
- e. What could be done to overcome the impact of the threat? Educate, awareness



### **Results of the working groups:**

#### **Group 1: Floods**

- a) over all communities that are low lying,
- b) loss of life, agriculture, and contamination
- c) no disaster preparedness, or preparation plan
- d) loss of infrastructure , loss of economic development, health deterioration

#### **Group 2 Landslides**

- a) people living on foothills, children, elderly
- b) loss of homes, lives, infrastructure
- c) Economic slow down, health, Environment , degradation, poverty, inability to get farm land
- d) Migration, psychosocial effect, loss of jobs, down turn in economy
- e) Environment awareness, education

#### **Group 3 Hurricane**

- a) children, disabled, elderly, low income
- b) loss homes, property, diseases
- c) nature, lack of preparation
- d) social effects, economic development
- e) development readiness, planning in high risk area, (Family planning, community planning)

#### **Group 4 Explosion**

- a) inhalation, gases disabled, elderly, sickly, community
- b) 24 hour (risk of explosion) gas
- c) poor transportation, poor storage
- d) disrupts normal life
- e) remove hazards

#### **Group 5 Fire**

- a) occupants, elderly, children
- b) property loss,
- c) carelessness, electrical

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

- d) displacement
- e) teach to prevent, improve

### **6. Objective of the course:**

Improve the knowledge of the methodology and tools of vulnerability and capacity analysis through a participative process which leads to more systematically-collected information as part of community based disaster preparedness activities.

Once the objectives of the course have been presented, facilitator highlighted the importance to hear the expectations of the participants, to achieve that one participant from the group lead the session.

### **7. Expectations:**

Understand the participants' expectations

### **Results of the working groups:**

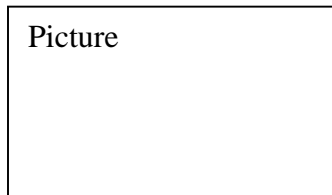
The group discussed a list of expectations, out of it, after sorting it out, come to the final conclusion:

Expectations on:

Training methodology,  
To learn more about VCA,  
Better understanding of VCA toolbox,  
Better understand of disaster preparedness,  
Sharing information and networking

### **8. Specific objectives:**

1. Strengthen the use and practice of applying VCA in identifying and solving problems in a practical, participative and consensual way.
2. Understand the importance of capturing, compiling and analysing information and recognise the usefulness of the requested data as part of the process.
3. Facilitate the design of a detailed country plan of action which links to the next step of the process.

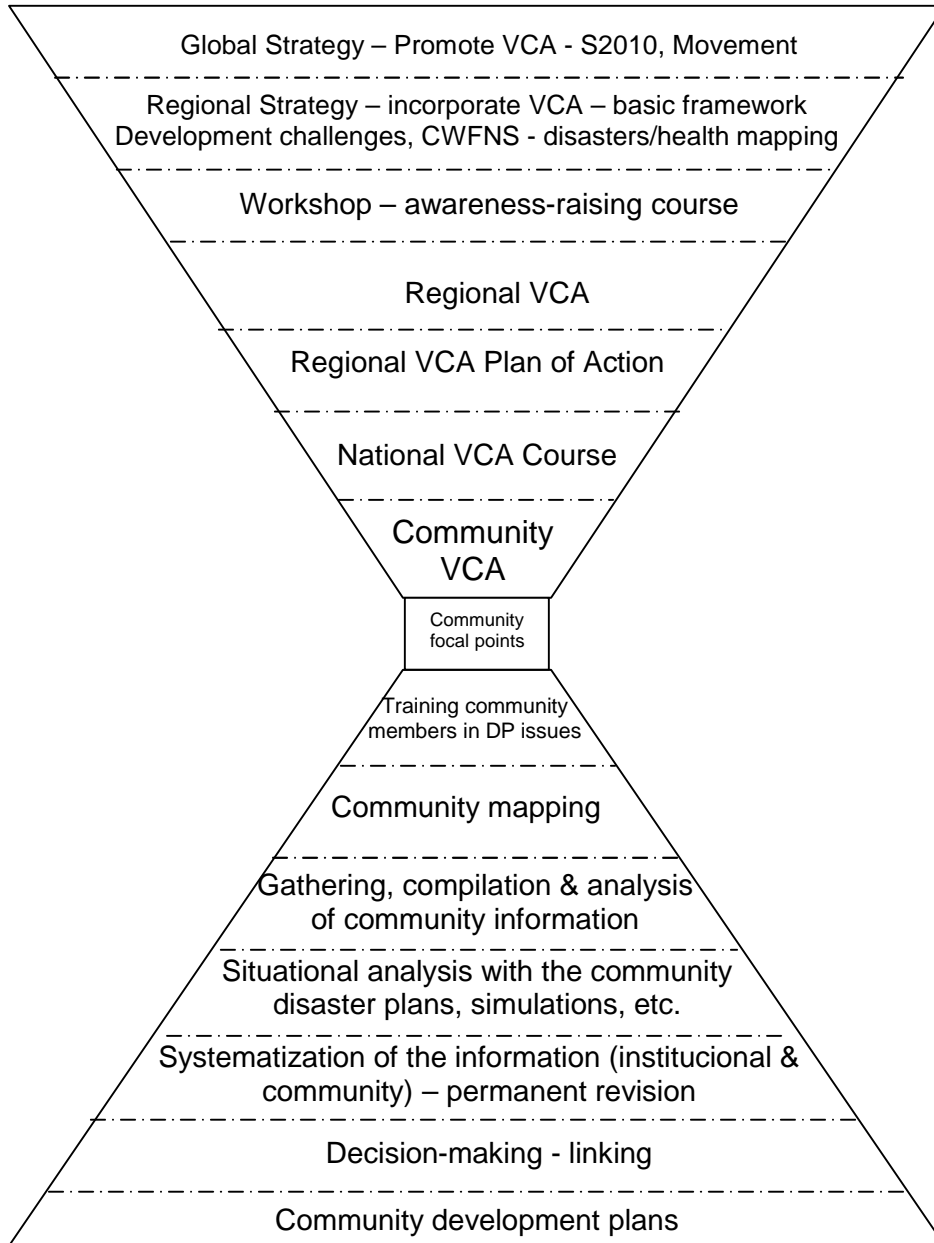


### **9. Diagram**

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc



Use the graphic to explain how the process works and to note that this process will increase the level of ownership as it evolves.



## **10. Critical Pathway**

Facilitator explained to the participants what the “critical pathway” is about within the VCA process and how the key elements of the pathway become the principles for a proper community analysis. It made reference to the seven principles of the critical path (beliefs, behaviour, attitude, environment, capacities, values and goal) and the journey that will lead the group through VCA.

Special attention needs to be giving as a VCA practitioners to what is relevant to a particular community. By using the seven principles mentioned above, we tend to avoid judging from our own perspective, and motivates VCA practitioners to analysis information from different angles. By doing so, the possibility for better understanding of community dynamics is bigger.

Facilitator requested five persons to stand in front of the group holding a letter which when put together spells the word “HABIT”. Asked everyone to go and sit beginning with the individual who has the letter “H”. The remaining letters will read ABIT, though it was requested to read a A BIT. Then the person holding the letter “A” was requested to sit and the remaining letter read “BIT”. Then ask the letter “B” to sit. The remaining letter would spell “IT”. Asked the “ I ” to go sit and the remaining letter is a “T” or cross which everyone still has to carry.

HABIT:

A - BIT:

BIT:

IT:

T:

## UNIT 2

### **11. To Clarify the meaning of number of concepts**

The group was explained that before getting to know more about VCA and its tools, it is important to understand some terminology/concepts:

Explain the methodology:

- a. Group work
- b. Presentation from each group
- c. Summary

At this point it was mentioned to the group that from this moment in the process there is no such thing as RIGHT or WRONG, that perception plays an important role in participative processes.

Results of the working groups:

After group discussion each group worked on one of the following words, and these were the results.

Disaster	Manmade or natural event or occurrence, that has negative consequences , eg. Fire, floods
Hazard	Harm, damage, destruction, dangerous something, eg. Fire, flood , storm surges, explosions
Vulnerability	Exposure to or being in danger of potential harm, (eg. Hazard, abuse, violence)
Risk	Chance, action a group/person (prepared to take) or not take a chance, decisions, sacrifice, opportunity positive or negative eg. HIV an unknown risk.

After participants developed their own concept and the group work in plenary made some additional comments, the facilitator shared the following concepts:

**DISASTER** – Event, either natural or man-made which causes intense negative impact on people, their property/possessions, services and/or the environment and which exceed their capacity or that of the state.

**HAZARD** – The *potential* occurrence of a natural or man-made event which would have negative consequences on people.

**VULNERABILITY** – The susceptibility of people, structures or systems to be affected *before* the occurrence of a threat.

**RISK** – The probability that a disaster will happen due to the combination of threat and vulnerability.

There was not consensus in plenary regarding the Hazard concept. Participants felt that the word “potential” it is not appropriate

### **12. Understanding the formula**

Understanding the formula:  $H \times V/C = R$

**(facilitator)**

Explain the formula: Hazard multiplied by vulnerability/capacity equals risk.

Emphasis that the word “*capacity*” within the formula is important to ensure that people recognize the capacities, resources and the potential that exist at the community level. The inclusion of “capacities” within the formula is important as it recognizes the dignity of community members and their abilities to transform vulnerabilities into capacities.

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

With the formula  $H \times V/C = R$  it is important to ensure that, through a participative process, the existing capacities are recognized and that the community is able to bring about beneficial changes and transformations.

Therefore,  $H \times V/C = R$  with a capital "C". Strong and consolidated capacities help to reduce vulnerabilities and therefore reduce risk. Transformational processes that start from the premise of strengthening community capacity result in more sustainable processes at the heart of the community.

$H \times V/C = R$

After the explanation, and the following example, the groups started to work with the formula.

Hazard: Drought

Vulnerability: Water shortages

Risk: Loss of crops and insufficient food

Immediate needs: Food for the families

Risk management: Drought-resistant seeds

### **13. Facilitator explained the exercise:**

1. Identify the hazard.
2. Determine all the potential risks (structural, social, economic, etc.) **What are the risks?**
3. Determine all the vulnerabilities that could weaken the community. **What makes people vulnerable?**
4. Identify all the existing capacities in the community and those that they would require in order to face up to the hazard. **What are the capacities?**
5. Identify the immediate needs in the event of a disaster occurring.
6. Identify the possible mitigation actions in the face of the threat.

### **Results of the working groups:**

#### **Group one: Floods**

Hazard	Potential risk	Vulnerabilities	Capacities	Immediate needs	Mitigation actions
Flood	Loss of life, loss property, loss agriculture, famine, disease, natural resource degradation, economic downturn, destruction of infrastructure, erosion	Squatters, low lying community/costal, clearing of vegetation, poor infrastructure, poor drainage, poor sanitation, lack of storage, lack of previous agriculture supplies, insufficient training, simulation of evacuation, inadequate training, lack of pharmaceutical (vaccine), lack pack of management plans	Educatio, training, history, skilled personnel, structural medical doctors, storage facilities (food, medicine), disaster plan, evacuation plan community site plan		

#### **Group two: HIV**

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

Hazard	Potential risk	Vulnerabilities	Capacities	Immediate needs	Mitigation actions
HIV	Poverty, reduction in the work force, increase health care cost, death	Ignorance, lifestyle, economics, drug users, cultural discrimination and stigma, peer pressure	Willingness – educators, togetherness, acceptance by community, ability to change, building awareness, media		

Needs: Awareness and education, increase health care, access to medication, counseling, alternate profession/sex traders

### Group three: Fire

Hazard	Potential risk	Vulnerabilities	Capacities	Immediate needs	Mitigation actions
Fire	Loss of lives, property, infrastructure, vegetation, memoirs, air pollution, respiratory disorders (health problems), psychosocial issues-mental, emotional, shift in priorities, effect on economy, industry, unemployment, family disintegration, social services disruption, increase in insurance premiums, social problems – (crime, theft etc.), forced relocation, setback in education	Wooden houses, lack of proper implementation of building codes, lack of education, traditions and beliefs, limited economic activity, clustered, improper building practices, zoning (improper), absence of evacuation plans, limited number of hydrants, inefficient fire-fighting services, warning and rescue procedures inadequate, limited social services/no assistance available, lack of medication			

### Group four: Hurricane

Hazard	Potential risk	Vulnerabilities	Capacities	Immediate needs	Mitigation actions

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

Hurricane	Loss of life, loss of property, damage and loss of utilities, economic downturn, displaced persons, food shortage, psycho-social trauma and environmental damage	Location, building codes absence, lack of proper planning, public awareness (education training), Poverty	Human resources (Doctors, teachers, labourers etc.), Donor agencies (NGO's, Service Clubs, Faith based organizations) Transportation, health system/service, communication systems, shelter and housing, food storage/containers		
-----------	--	---	--	--	--

#### **14. Transforming vulnerabilities into capacities**

After the groups have presented their previous tasks, they should focus in transforming the vulnerabilities into capacities. Having identified specific vulnerabilities within specific situations, it is necessary to break them down into more concrete actions. For example, if a group has identified that one vulnerability in a possible earthquake is the poor quality of construction, various practical activities could be undertaken, such as undertaking analysis of the construction techniques used by the community; accessing information regarding areas with a high risk of damage; structural analysis; identifying both safe and dangerous areas within homes; actions to be taken during and immediately after an earthquake; etc.

In order to analyse vulnerability conditions, the following analysis can be used, where one moves from the identification of obvious vulnerabilities via the causes of these vulnerabilities to considering the various actions that could be carried out to transform these limitations into capacities.

HAZARD – scenario	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
Earthquake	Poor quality construction	1. Analysing buildings to understand the construction methods used by the community. 2. Getting hold of information about areas of high risk. 3. Knowledge of minimum standards so that families can evaluate the quality of the construction of their homes. 4. Identifying safe and dangerous zones. 5. Knowledge of response plans. 6. etc.
	Unplanned urban settlements in areas of risk	Etc
	Others	

#### **Results of the working groups:**

##### **Group one**

HAZARD - scenario	Vulnerabilities	Actions to transform vulnerabilities into capacities
-------------------	-----------------	--

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

	<b>identified</b>	
Flood	Poor infrastructure	<ol style="list-style-type: none"> <li>1. Advocate for enforcement of building codes</li> <li>2. clean and maintain drains,</li> <li>3. request funds for proper and improve infrastructure,</li> <li>4. Request proper zoning and allocation of farm land</li> </ol>
	Poor agriculture practices	<ol style="list-style-type: none"> <li>1. Construct sealed storage for seeds</li> <li>2. Pre-arrange for supplies to have immediate access</li> <li>3. Plant crops with high water tolerance</li> <li>4. Construct beds/drains to manage flow</li> </ol>
	Inadequate dissemination of disaster plan	<ol style="list-style-type: none"> <li>1. Conduct regular practices ensuring entire community participation</li> <li>2. Conduct house to house visits and exercises/simulation</li> <li>3. Work with community based organizations (eg. Faith based)</li> <li>4. Inform residents with P.A. system and flyers</li> <li>5. Conduct school drills</li> </ol>
	Lack of skilled personnel	<ol style="list-style-type: none"> <li>1. Identify persons to assist community leaders with capacity building</li> <li>2. Identify persons to be trained in life saving skills – first aid, health information</li> <li>3. Network with NGO's and other sectors with specific capabilities for training</li> <li>4. Maximize the use of resources in the community</li> </ol>
	Living in low lying area	<ol style="list-style-type: none"> <li>1. Request funds and assistance to relocate</li> <li>2. Enforce settling in inhabitable areas only</li> <li>3. Install early warning system</li> <li>4. Build river containment walls, sand bagging, planting of trees, banking flood diversion drains</li> </ol>

### Group two

HAZARD - scenario	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
HIV	Lack of Knowledge, life style choices, economics – sex trade, stigma/discrimination	<ol style="list-style-type: none"> <li>1. Educate population – awareness campaign, (teens, parents, village council, religious leaders, teachers)</li> <li>2. Involve more organization</li> <li>3. Coordination among common clubs</li> </ol>
	Poor access to health care	<ol style="list-style-type: none"> <li>1. Sources \$ - approach, government for money <ul style="list-style-type: none"> <li>- Reg. &amp; International agencies</li> <li>- Local businesses</li> </ul> </li> </ol>
	Health care	<ol style="list-style-type: none"> <li>1. Access to testing facility, prepare/prevent</li> <li>2. Counseling, prepare/prevent</li> <li>3. Access to prevention/protection/abstain methods (family planning, religious tams, schools, youth leaders/clubs)</li> <li>4. Help families access \$\$</li> <li>5. Seek human and social service support for families with HIV/Aids members</li> </ol>
	Sex traders	<ol style="list-style-type: none"> <li>1. Link to human Services (prevent)</li> </ol>
	Support for families and education	<ol style="list-style-type: none"> <li>1. Women's bureau</li> <li>2. Businesses</li> </ol>

### Group three

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

HAZARD - scenario	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
Fire	Wooden Houses	1. development of a community fire prevention and response program (recruitment of volunteers, household plans, development/establishment of community home construction fund
	Lack of proper implementation of and adherence to building codes	1. Research on NBC 2. Dissemination of NBC 3. Implementation/adherence to National building codes 4. Retrofitting
	Lack of Education	1. Public awareness programmes (accessibility to and availability of information, identify agencies which can provide resources for education, edutainment, reforestation programme)
	Traditions and beliefs	1. Identify gatekeepers and opinion leaders and allow them to carry "the message" (effective channels of communication, create cultural norms, mentoring/role model programmes, create community ownership
	Dependence on limited # of economic activities	1. Diversification of economy – needs assessment (skills training, selfemployment, income-generation-alternative sources

#### Group four

HAZARD - scenario	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
Hurricane	Location	1. Re-location request 2. Build proper drainage 3. retro-fitting 4. Community 5. Mapping
	Building Code absence	1. Agitate for implementation of building code 2. Training in building codes 3. Self assessment of building codes
	Lack of proper planning	1. Site plans develop 2. Develop early warning system 3. Develop community based plan 4. Ensure an efficient management team exist
	Inadequate public awareness	1. Community meetings 2. Information dissemination (flyers, radio, newspaper, TV, schools and other public institutions
	Poverty	1. Provide transportation food, water, shelter, clothing and medical care

### **15. Identifying prevention, preparation and mitigation activities**

Once the group has carried out the vulnerability analysis and identified the actions to transform them into capacities, these activities can be identified as:

- Prevention actions
- Mitigation actions

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc



- Preparation actions

Each action which tries to avoid the possibility of creating a risk is a **prevention** action;

Each action that attempts to protect, strengthen, rehabilitate or reconstruct is a **mitigation** action, and

Each action that aims to strengthen the capacity of the communities to respond in an effective and efficient manner is a **preparation** action.

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
1. Analysis of structures to determine the type of construction technique used by the community.	x		
2. Access to information regarding communities in areas of high risk.	X	x	
3. Knowledge of minimum standards so that the families can evaluate the quality of construction of their own homes.		x	
4. Identify safe and dangerous areas.		x	
5. Knowledge of response plans.		x	
6. Strengthening the roofing structures.			X

Now, the community needs to consider each and every action to transform a vulnerability into a capacity and decide whether it can manage this change itself. In order to do this, each group needs to decide which of the identified actions:

- can be **changed** with the participation and decision of the people at risk;
- 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
- cannot be changed or influenced and that the communities need to **accept**.

In order to identify these actions, the group should assign the following initials CIA: C = change, I = influence, A = accept.

Actions to transform vulnerabilities into capacities	Prevention	CIA	Preparation	CIA	Mitigation	CIA
1. Analysis of structures to determine the type of construction technique used by the community.	x	I				
2. Access to information regarding communities in areas of high risk.	x	I	x			
3. Knowledge of minimum standards so that the families can evaluate the quality of construction of their own homes.			x	C		
4. Identify safe and dangerous areas.			x	C		
5. Knowledge of response plans.			x	C		
6. Strengthening the roofing structures.						

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

					X	C
--	--	--	--	--	---	---

This table demonstrates to the community that having identified the vulnerabilities and transformational actions required to turn these into capacities, given the will to change, they can change or influence change in the majority of cases.

### Results of the working groups:

#### Group one: Flood

Actions to transform vulnerabilities into capacities	Prevention	CIA	Preparation	CIA	Mitigation	CIA
1. Advocate for enforcement of building codes 2. clean and maintain drains, 3. request funds for proper and improve infrastructure, 4. Request proper zoning and allocation of farm land	X  X	I  I			X X	C I
1. Construct sealed storage for seeds 2. Pre-arrange for supplies to have immediate access 3. Plant crops with high water tolerance 4. Construct beds/drains to manage flow	X	C	X X X X	C I C C	X X	C C
1. Conduct regular practices ensuring entire community participation 2. Conduct house to house visits and exercises/simulation 3. Work with community based organizations (eg. Faith based) 4. Inform residents with P.A. system and flyers 5. Conduct school drills			X  X X X X	C C C C C	X	C
1. Identify persons to assist community leaders with capacity building 2. Identify persons to be trained in life saving skills – first aid, health information 3. Network with NGO's and other sectors with specific capabilities for training 4. Maximize the use of resources in the community			X  X X X	I I I I		
1. Request funds and assistance to relocate 2. Enforce settling in inhabitable areas only 3. Install early warning system 4. Build river containment walls, sand bagging, planting of trees, banking flood diversion drains	X X	I I			X  X	I  I/C

#### Group two: HIV

Actions to transform vulnerabilities into capacities	Prevention	CIA	Preparation	CIA	Mitigation	CIA
1. Educate population – awareness campaign, (teens, parents, village council, religious leaders, teachers) 2. Involve more organization 3. Coordination among common clubs	X  X X		X  X X	C C C		

1. Sources \$ - approach, government for money - Reg. & International agencies - Local businesses	X X X		X X X	C C C		
1. Access to testing facility, prepare/prevent 2. Counseling, prepare/prevent 3. Access to prevention/protection/abstain methods (family planning, religious tams, schools, youth leaders/clubs 4. Help families access \$\$ 5. Seek human and social service support for families with HIV/Aids members	X X X		X X X	C C C  I I		
1. Link to human Services (prevent)	X			I		
1. Women's bureau 2. Businesses	X X			I I		

### Group three: Fire

Actions to transform vulnerabilities into capacities	Prevention	CIA	Preparation	CIA	Mitigation	CIA
1. development of a community fire prevention and response program (recruitment of volunteers, household plans, development/establishment of community home construction fund	X	c	X  X X X	C  C I I	C  I	C  I
1. Research on NBC 2. Dissemination of NBC 3. Implementation/adherence to National building codes 4. Retrofitting	X X X	C C	X X	C I	X X	I I
1. Public awareness programmes (accessibility to and availability of information, identify agencies which can provide resources for education, edutainment, reforestation programme)	X X X	C I C	X	C	X	I
1. Identify gatekeepers and opinion leaders and allow them to carry "the message" (effective channels of communication, create cultural norms, mentoring/role model programmes, create community ownership	X X X X X	C C I C C	X X X X	C C I C C		
1. Diversification of economy – needs assessment (skills training, self employment, income-generation-alternative sources	X X X X	C I C I	X X X	I C I		

### Group four: Hurricane

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

Actions to transform vulnerabilities into capacities	Prevention	CIA	Preparation	CIA	Mitigation	CIA
1. Re-location request 2. Build proper drainage 3. retro-fitting 4. Community Mapping	X   X	A   C	X X X X	C I C C	X X X	I C C
1. Agitate for implementation of building code 2. Training in building codes 3. Self assessment of building codes	X   	I   	 X X	 C C	X   	I   
1. Site plans develop 2. Develop early warning system 3. Develop community based plan 4. Ensure an efficient management team exist	X   X	I   C	X X X X	I C C C	X  X	I  C
1. Community meetings 2. Information dissemination (flyers, radio, newspaper, TV, schools and other public institutions)	   	   	X X	C C	   	   
1. Provide transportation food, water, shelter, clothing and medical care	   	   	   	   	X	I

## **16. The “how” of transformation into concrete actions**

Explain to the participants that now they are going to analyse the mechanisms for ensuring that they can bring about the suggested actions. In order to do so, they need to bear in mind the following points:

1. That the transformational actions should be those that have been identified with either a “C” or with an “I”.
2. For each suggested transformational action, we need to ask the following questions:

A: Can this be sorted out immediately?

B: Does it require resources?

C: Can we find the necessary resources ourselves? If yes, how?

D: Does it require technical support?

The solutions need to be part of the existing skills and/or resources of the community. If the solution requires money, finding this financing needs to be part of the solution (with creative ideas such as raffles, parties, collections etc). If it requires certain skills, these need to be found within the community itself, including friends, relations etc. The last resort should be to have to turn to people who are outside the affected community.

Actions Short – Medium -Long	Can be solved immediately? S – M - L		Requires financing?	Can we find the resources ourselves? How?	Technical support?
1. Change the direction of the doors so that they open outwards  2. Increase the frame and the width of the doors  3. Repair the door	1. NO	M	1. YES	1. Ask for help from companies & shops from whom the school normally purchases supplies. 2. Organise a raffle and ask neighbours to give their support. Get prizes donated. 3.	1. NO
	2. NO	S			2. NO
	3. YES	S	2. YES		3. NO
1. Secure shelves and blackboards 2. Change shelves and blackboards that are in bad repair 3. Remove those shelves and blackboards that cannot be repaired 4. etc.	1. YES		1. NO	As above	1. NO
	2. YES		2. YES		2..NO
	3. YES		3. NO		3. NO

## Results of the working groups:

### Group one

Actions Short – Medium -Long	Can be solved immediately? S – M - L	Requires financing?	Can we find the resources ourselves? How?	Technical support?
Clean and maintain drains	Yes s – m - l	yes	Yes – Volunteering – using own tools - (capacity building) - Training persons to clean drain -Seek donations from stores to clean drains	Yes
Construct sealed storage for seeds	Yes L	yes	Yes - use local skills (deign estimate) - land donation for site - seek donors for material - Volunteer labor	Yes
Ensuring community participation in regular practice of simulation exercise	Yes S -	yes	Yes – - School, clubs, church, community center, sport center, local volunteers will conduct training, locals donate food/teaching aid	Yes
Install early warning system	Yes S	Yes	Yes - Provide radio/phone at strategic locations - Provide transportation for evacuation	No
Plant crops with high water	Yes S – M - L	yes	Yes - Diversify - Use local seeds that show water tolerance - educate farmers - implement seed program	Yes
Advocate enforcement of building codes	No	yes	Yes - Write proposals - Meeting with officials in housing and planning department - conduct house to house visits to find persons non-compliant with building codes - Inform and educate community members of correct codes	
Request funds for relocations	No L	yes	- network with land ministry - write proposal to fund relocation	Yes

## Group two

Actions	Can be solved immediately		Requires Financing	Can we find the resources ourselves? How	Technical Support
	Yes-No	S:M:L			
Awareness Campaign	Y	S-M	Y	Y People, talks, handouts & posters	N Knowledgeable people, pre-prepared handouts
Access to protection/prevention	N	M-L	Y	N Social Service; MoHealth, distribution points, personnel	Y Medical advice, Storage, condoms, brochures
Access to testing facilities	No	M-L	Y	Location/service provider, equipment, staff, maintenance \$\$	Y Medical, public service; access to lab., administration
Counseling	No	M	Y	N Counselors, location, admin. support	Y Counselors
Source \$ for programmes	No	M-L	N We can Draft docs	Y Have project ideas Investigate funding sources & submit applications	Y Advice for technical areas
Help families to access \$\$	No	S	N	N	Y Advice for technical areas
Link to human services	No	M	N	N	Y Social Welfare

S- 6mth – 1 yr; M 1-2 yrs; L > 3yrs

### Group three

Actions Short – Medium -Long	Can be solved immediately? S – M – L	Requires financing?	Can we find the resources ourselves? How?	Technical support?
Development of community fire prevention and response program	Yes S	yes		yes
Dissemination of National Building Codes	Yes S	yes	Yes – Community funds	No
Development of Public awareness programme	Yes S	yes	1. Elicit support of schools, groups, media 2. Use of existing education resources as print, audio, video 3. Community creative arts 4. Community fund raising	Yes
Creation of mentoring/role model programme	Yes s	yes	Elicit support of leaders and celebrities (as above)	Yes
Diversification of economic activities	No L	yes	1. Government agencies 2. Establish skills bank 3. Networking - integration	Yes
Retro-fitting of buildings	No L	yes	1. Establish of a community home construction fund 2. Proposal submissions 3. Community contribution- labor	Yes
Re-forestation	No L	yes	1. Environmental agencies – Government and NGO's 2. Community contribution - labor	Yes



## Group four: Hurricane

Actions Short - Medium -Long	Can be solved immediately? S - M - L	Requires financing?	Can we find the resources ourselves? How?	Technical support?
Building proper drainage	Yes M	Yes	Yes - ourselves 1. Create Proposal to SIF, Help for progress, area representative to help in providing financial and material support	Yes
Training in building codes	Yes S	Yes	Yes - ourselves, copies of building codes, selection of trainees, community meetings for dissemination, get technical personnel	Yes
Develop Community plans	Yes S	Yes	Yes - fund raising, donations from community members for bar-b-q, raffles, jumble sale etc.; contact NEMO, Red Cross and Human Development	Yes
Effective management team	Yes L	Yes	Yes - thru NGO's, Nemo and Red Cross; selection of trainees, get technical support from MENO and Red Cross; develop roles and responsibilities; create sub-committees; hold monthly meetings, training of trainers simulation drills.	Yes
Early warning system	Yes S	Yes	Yes - fund raising or thru NGO's Assign responsibilities, involve community leaders, police, churches, identify means of warnings, have simulation drills provide technical support, consult communication and warning committee	Yes
Site planning	No L	Yes	No, seek financing through GOB, Natural Resources, housing	Yes
Provide relief supplies	No S	Yes	No, seek help from Red Cross, Human development, NEMO, Programme for Belize, PACT, Salvation Army, Catholic relief, Ministry of Health, Ministry of Works, Community Emergency Management Team	Yes

## 15. The Disaster Cycle

Introduce the cycle:

### **(facilitator)**

Explain to the participants where VCA enters into the cycle, when it is most and least effective.

Stress that VCA is generally used in the phases "before and after". However, *during* the disaster phase itself, the primary and secondary information can be extremely valuable for planning actions oriented towards rehabilitation and development. Thanks to the information previously gathered, it is possible to tackle the response phase, through planning and developing projects.

Another aspect to emphasise is that generally in the "during" phase there are other evaluation and diagnostic tools that are more efficient, both for assessing damage as well as needs. Make reference to the importance of these tools.

**DEVELOPMENT** is defined as progressive increase and accumulation, both quantitative and qualitative, together with social changes, in terms of community property, services and resources; with the purpose of maintaining and improving both the security and quality of life.

The groups discussed and gave these suggestions. Process of growth that would improve the community,  
Growth: continuous economic, social, political, environment, health care and industrial.

Sustainability is define as meeting the needs of the present, without compromising the ability of future generations to meet their own needs\*

\* The World Commission on Environment and Development

The groups discussion led to:

Sustainability:-

1. having the capacity to keep up with
2. to continue what was started for a defined period
3. Being ale to have the proper resources to continue a plan project

It is a challenge to move from community based disaster preparedness to the handling and management of disaster at the community level. The latter is seen to involve the active participation by the people most exposed to threats in the planning process, in taking decisions and other actions aimed to reduce risk and better manage the effects of a serious disaster in a more appropriate manner.

The sustainability of community-based disaster management

means the ability to, or the capacity of a community to, maintain CBDM activities over time. It means that the community has a safer place to live, its vulnerability to disasters is reduced and that it has improved capacity to cope with future disasters. CBDM, under this concept therefore also contributes to sustainable communities. \*

\* The World Commission on Environment and Development

Group discussion were done and these are their suggestions, The community's capacity to consistently and continuously effectively address situations that can negatively affect them. Or the communitiy's ability to properly handle every situation that can harm them.

Also their was group discussion on Disaster Management: Implementation of A Plan of Action to minimize the impact of a natural or manmade disaster. This involves preparation mitigation before the disaster response during and recovery after the disaster.

VCA is a pre-disaster activity to ensure better preparation. The range of tools goes from the simple SWOT analysis in order to develop various organizational aspects to do with disaster management, to a detailed analysis, whether at the national or the community level. In the latter it is very common to use tools such as Participative Rapid Appraisal.

VCA seeks to establish a baseline which allows a better understanding of both the dynamics and the changes of risks and vulnerabilities.

## UNIT 3

### Introduction of Tools

#### Historic Calendar:

Gathering information about what happened in the past and producing a community profile and historical visualization. This gives us an insight into past hazards, changes in their nature, intensity and behavior. It helps us understand the present situation in the community (casual link between hazards and vulnerabilities) and makes us aware of changes over time. It shows historical visualization and a historical profile.

	People	Houses	Trees	Livestock	Health	Utilities
1970	€€€€€€	HHHH	PPPPP PPPPP PPPPP	õ õ õ õ	TB/yellow fever/cancer /malaria	• •
1980	€€€€€€ €€€€€€	HHHHH HH	PPPPP PPPPP PPPPP	õ õ õ õ	TB/ cancer/HIV Aids/ Diabetes	• • •
1990	€€€€€€ €€€€€€ €€	HHHHH HHHHH	PPPP	õ õ õ õ	TB/ cancer/HIV Aids/ Diabetes	• • •
2010	€€€€€€ €€€€€€ €€€€€	HHHHH HHHHH HH	PP		???????????	• • • • •

This is an example and the challenging part for whoever does this calendar is the analysis. It is recommended to analyze vertically all of the sections and then horizontal analysis and finally a diagonal analysis. The question we should always ask is what is this information telling me. Why is this happening?

Year	Description
1970	Smith – Brown families settle
1972	Huge migration population - 5,000 people arrived -
1973	First Built – school – Health center
1974	Strike – access to water – Hospital end with 2 death and several in jail
1980	Hurricane Jondo hits the island
1981	Red Cross is recognized by the government

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

1983	1 <sup>st</sup> Church built
------	------------------------------

**Participants were put in groups and asked to make their own charts:**

**Historical Profile:**

Year	Description
1935	1 <sup>st</sup> settlers from Mexico - 10 families (60 persons)
1940	Established 60 acres of farm land banana, corn, beans
1948	Alcalde system established (25 families – 130 persons)
1953	Construction of public schools and church
1955	Construction of 1 <sup>st</sup> wooden house
1960	Access road community
1961	Hurricane “Matie”
1965	Establishment of community center/hurricane shelter
1967	Type III health center/security post, post office
1968	Village market
1970	1 <sup>st</sup> motor vehicle
1979	Electricity and water
1985	Fire - killed 6 persons and destroyed crops, 1/3 homes
1987	Placement of fire truck in community
1989	Telephone service – installation of community phones
1990	Exportation of produce to U.K. (banana)
1993	Legislation for the protection of forest
1994	1 <sup>st</sup> tourist (eco-tourism)
1999	1 <sup>st</sup> HIV case diagnosed – 8 months later - 5 more cases
2000	1 <sup>st</sup> Carnival with international participation
2002	Population census – 3,500
2003	Development of Oakville Resort
2004	Out break of cholera, 10 deaths, - 3 adults, 7 children
2004	Ground – breaking for hospital site

Historical Chart:

**A Seasonal calendar:**

Can be used to show different events (hurricane, floods), experiences (recession, long periods of droughts), activities (carnival, harvest), and conditions (social and economic) throughout the annual cycle. It identifies periods of stress, hazards, disease, hunger, debt, vulnerability etc.. It identifies what people do during these periods, how they diversify sources of livelihood, when do they have savings, when do they have time for community activities and what are there coping strategies. The calendar identifies gender specific division of work both in times of disasters and during normal times.

**Example:**

D:\Documents and Settings  
Assessment.doc

Month	J	Fe	M	A	M	J	J	A	S	O	N	D
Access to work												
Festivals												
Credit												
Migration in – out												
Sources of livelihood												
Community meetings												
Illness												
Disaster												
Sports												
Increase Sexual behaviour												

ize\Vulnerabilty andCapacity

1. Seasonal Calendar showing times where there is more access to credit, migration etc.

	J	F	M	A	M	J	J	A	S	O	N	D
Financial	Mag a			Fisc al year				mag a	E nd of fe sti va l			
Immigration & Migration	X	X	X	X	X	X	X				X	X
Burglaries				X					X			
Assault	X	X	X	X	X	X	X	X	X	X	X	X
Drug trafficking		X	X	X					X	X		X
Vehicle accidents				X					X			X
Domestic violence	X	X	X	X	X	X	X	X	X	X	X	X
Homicides	X	X	X	X	X	X	X	X	X	X	X	X

2. Seasonal Calendar showing Illness/Disease

	J	F	M	A	M	J	J	A	S	O	N	D
Flu, coughs, colds	X										X	X
Stomach disease (vomiting, diarrhea)	X					X	X					X
Conjunctivitis			X	X	X							
Waterborne disease (fungi, sores)						X	X	X	X			
Headlice	X	X	X	X	X	X	X	X	X	X	X	X

3. Seasonal Calendar of Disasters

	J	F	M	A	M	J	J	A	S	O	N	D
Hurricane						X	X	X	X	X	X	
Forest fire	X	X	X	X	X							
Agriculture Fire						X	X	X				
Floods								X	X	X		
Fire												X

\* Man made disasters all year around. Natural disasters more subject to seasonal variations (maybe).

### Institutional and Social Analysis:

Draw a diagram that shows key-organizations, groups and individuals in a community, the nature of relationships and their level of importance. This is done to identify organizations (local and outside) their role/importance and perceptions that people have about them. Identify individuals, groups, organizations that play a role in disaster response and can support the community. This is done by the following steps:

1. in plenary, participants identified key organizations (6-8) on specific community
2. explain these organizations on their importance to that area on a scale of 1-5, 5 being the highest and 1 the lowest.
3. The organizations were then ranked on their closeness to the community, 5 being the closest and 1 being the furthest away.

This exercise shows that there are organizations that could be highly relevant to the community but are too far away from the community needs and that there are other organizations that are very close working with the community but have not been recognized by the community as relevant. The general idea is to reflect how some organizations can continue as relevant as they are but get closer to the community needs, while those organizations that are close to the community come become more relevant to the community needs. By using people in the area rather than assumptions there should be less mis-representation.

Participants were asked to go into four groups and perform an institutional and social analysis of a specific district considering no more than 10 institutions.

### Group 1: Flood

Institution	Relevant	Aver.	Important	Aver.
4 – H Club	(1-1-2-4-2)	3	(1-1-2-1-1)	1.2
Social Investment Fund	(4-5-2-3-4-5)	3.7	(4-5-2-3-5-4)	3.7
Red Cross	(4-4-5-5-2)	4	(2-3-4-5-5)	3.8
Police Force	(5-5-5-4-5)	4.8	(2-5-5-4-5)	4.1
GET (Small Grants Program)	(5-3-2-2-2)	2.6	(5-2-1-4-3)	2.5
Scotia Bank	(2-4-4-5-4)	3.8	(1-5-4-5-5)	4
AIDS Foundation	(1-4-5-4-1)	3	(1-5-5-4-2)	3.4
<u>Ministry of Health</u>	(3-5-5-3-5)	4.2	(5-5-4-5-5)	4.8

### Picture

Hazard: Flood, Risk: Famine

### Construction of Sealed Container for Seed Storage

4-H Club – Relevant to project but not very important. They could supply skills and volunteer for labor.

Social Investment Fund – They could provide grant so important and relevant

Red Cross – Even though viewed as important and relevant to community not helpful for this project

GEF – Small grant program – provide grant to purchase seeds

Scotia Bank – Could provide major loan

AIDS Foundation, Ministry of Health and Police Force – very important and relevant to the community but for this project NOT very relevant / important

## Group 2: AIDS

Institution	Relevant	Aver.	Important	Aver.
Local Government	5-2-5-1-4-3	3.6	5-5-5-5-4	5
Primary & Secondary School	3-3-4-4-4-4	3.6	3-5-5-5-4-4	4.6
Church	3-4-3-2-3-3	3	3-5-2-3-4-2	3.3
Rotary, Red Cross, Lions	4-3-4-5-5-3	4	4-5-5-4-4-4	4
Social Welfare	3-3-3-5-5-4	4	5-5-5-5-5-5	5
Police Station	5-2-2-5-4-5	3.9	5-4-3-5-2-5	4.2
Health Center	5-5-5-5-5-5	5	2-4-5-5-5-5	4.2
Shop	4-5-3-4-3-2	4.3	5-4-4-2-3-4	4
Bank	4-5-3-4-3-2	3.3	3-3-3-2-4-2	3.1

### Picture

Local Government – Need to include  
 Primary & Secondary Schools – Target group  
 Church - Keep in the loop- not too relevant or important  
 Schools – target group  
 Health center – must be involved  
 Social welfare - partner

## Group three: Fire

Institution	Relevant	Aver.	Important	Aver.
Church	5-5-5-5-5-5	5	5-5-5-5-5-5	5
School	5-5-5-5-5-5	5	5-5-5-5-5-5	5
Social Investment Fund	4-4-4-3-2-3	3	5-4-5-5-4-5	4
Embassies	3-3-4-5-2-1	3	2-1-5-4-3-3	3
Red Cross	5-5-4-4-5-2	4	4-4-4-5-5-5	4
Police	5-5-4-5-5-5	5	5-5-5-5-5-5	5
Hospital	5-5-5-5-4-5	4	5-3-4-4-4-4	4
Bank	5-4-4-4-5-4	4	5-3-4-4-4-4	4
Village Council	5-5-4-4-5-4	5	5-5-2-3-4-1	3

### Picture

Church – Very relevant and very important, will be a key player in changing traditions, beliefs and practices  
 School – Very important and very relevant as it will be crucial for the institutionalizing of new ideas and concept  
 Hospital – In regards to diversification it is not relevant but generally important  
 Police – Very important and relevant to a significant degree as they can contribute to the introduction of new concepts and fire prevention practices  
 Bank – Important and relevant as will provide the financial resources for diversification activities

## Group 4: Hurricane

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

Institution	Relevant	Aver.	Important	Aver.
Red Cross	4-4-4-4-5-5	4	5-5-5-5-5-5	5
COMPAR	4-2-4-1-3-5	4	4-5-5-4-3-5	4
HECOPAB	3-2-3-1-3-4	3	5-3-5-2-3-5	4
Salvation Army	1-1-1-1-3-1	1	1-1-1-1-1-1	1
School	5-3-5-2-4-4	4	5-5-5-5-5-5	5
PAHO	2-1-2-1-2-3	2	4-4-4-4-3-3	4
Church	5-5-5-2-5-3	5	5-5-5-5-5-5	5
CARE – Belize	3-1-3-1-3-4	3	3-3-3-3-4-3	3
Rural Development	5-2-5-2-5-2	2	4-2-4-2-5-5	3
Library/Post Office	5-5-1-1-3-3	4	5-5-5-5-4-5	5

## Picture

- Red Cross
- Technical training
    - groups and community
    - Family emergency plan
    - Survival kit
- COMPAR
- Technical training
    - families and individual
- HECOPAB
- Health education
    - provide educational and training materials
- Salvation Army – No contribution
- School
- Dissemination and education of system
    - provide staff for shelters
- PAHO
- Tracking maps
- Church
- Dissemination and education
- CARE Belize
- No contribution
- Rural Development - Community meetings
- Financial support for technical help and training
- Library/Post Office - Information Center

## Assessment of organization capacities

### What is the objective of this activity?

To determine the type of organizational support and the need for a structure for the communities so that they can manage their problems and risks and gradually improve their management capacities.

It is important to make sure that the objective of evaluating the various organizations is understood to mean understanding what networks could be developed, on the basis of the existing analysis.

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc



### Steps to carry out this activity:

1. Divide the group of participants into sub-groups in order to visit the different organisations that exist in the community and to follow the questionnaire which will be described later on.
2. The group of participants will then consolidate the results and carry out an analysis of the possible points of connection between the needs (of the community) identified by the group and the role/actions of each organisation, in order to search for common solutions.

### Evaluation of organisational capacities

#### Questionnaire:

- What is the history of the organisation?
- When was it created?
- Why was it created?
- How many members does it have? Active, passive?
- Is this number increasing or decreasing?
- What is their involvement during meetings?
- How are decisions taken?
- Does the group have a community development plan?
- Are the group's committees functioning?
- What has the group contributed to the community in the past?

#### Group One: Floods Oakville Farmers Coop

1. The coop formed to assist farmers with marketing and small loans provided by the credit union. There 30 members at the time and this has increased and the coop now offers ore services such as seed supply, rental of equipment and transportation.
2. 1968
3. To provide support to the farmers
4. 80 active
5. Increasing, new land distributed, sub-division of family lands
6. Training, provide management committee with information
7. One vote per person
8. Yes, committees for 1. marketing, 2. purchases, 3. public relations officer, 4. training
9. Yes, 1. MC - responsible for transportation, collection and distribution of sales, 2. PC - responsible purchase seed and equipment , 3. PRO - relate to media and public, 4. TC – organize training workshop and collect educational materials
10. Increase economic activity, food source, educate farmers, increase product value

#### Group two: HIV Waterville Red Cross Branch

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

1. Founded in 1986 – Mrs. Admilma Pacheco, RC First Aid Instructor
2. For First Aid training and other
3. 2004, 90 members, 22 active (25%)
4. Number increase since 1994, flood (from 40 persons)
5. Exchange of ideas decision – making , implementing
6. Decision by majority vote
7. Community development plan since 1994. 30% implemented due to the money shortage
8. Shelters, relief – first aid, disaster plan, since 2003 Aids awareness, T.W.C.

Functional

**Group three: Fire  
Community Leaders Alliance**

History:

1973, after major fire, 5 members of the community formed the group. Formed with the main purpose of land acquisition for crop diversification.

Present:

Membership – 12

Number - up and down dependant

Highly involved

Democratic decision – making community development plan – land for crop diversification

Committees functioning

\*Land distribution policy

\*construction of Town Hall

\*Development of community infrastructure development plan

**Group four: Hurricane  
Community Church**

1. Church constructed after 1961 hurricane to provide spiritual, emotional and physical guidance
2. 1961
3. Community members felt the need for a formal was to congregate to express their spirituality, faith and for support
4. 280 members, 140 active, 140 passive
5. Yes, it is increasing slowly
6. About 50% of members attend regularly for meetings that will make decisions in leadership and directions
7. Executive body (Board of Church) nominate by voting , consensus
8. No existing plan at this time
9. Yes, Youth Group has activities for young people, women´s group carry out fund raising, counseling and family support
10. Support – food drives, family help, spiritual. Positive activities – variety shows, bazaar, jumble sale

**Community Maps:**

One of the greatest importances of mapping is to collect data with more detail about the different levels of vulnerability and capacities. Nowadays the Geographical Information Systems provide a great level of detailed information regarding the vulnerabilities and that the information is extremely value for preparedness. Nevertheless, the importance of mapping is that it contributes to collect information that the technology can not offer up to this point, e.g. the existing capacities and resources at the community, the behavior and attitude of the people, the way the community is clear about the way they create new vulnerabilities, for example drainage system collapse by garbage accumulation etc.

Participants were given an area of Grand Cayman and asked to draw three separate maps with three separate hazards – flood, cruise ship accident, explosion at Texaco terminal :

D:\Documents and Settings\XavierC\My Documents\zca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

1. Spatial Map: an overview of the areas main features
2. Hazard/risk map: Identify a hazard/risks in the map. Each hazard should have a separate map.
3. Capacity/resource map: Draw a map showing local resources and capacities as well as the gender differences or land use zones.

## UNIT 4

### Research Methods

#### Objectives

- To present and discuss methods for the collection of data
- To provide participants with sufficient knowledge of data analysis terms to enable the critical study of the findings of others.
- To assist participants approach with greater confidence the design of their own research paper.

There are different types of data that can be used:

#### Primary Data:

New data gathered to help solve the problem at hand. You have control, you set parameters, you have the information when needed.

Advantages of primary data- direct observation:

- Reduce Bias
- Primary information
- Identify specific needs
- Creates greater impact on observer
- Initiate community involvement /perception

Disadvantages of primary data – direct observation:

- Due to the time of the visit – no true picture / sample size
- Residential Bias
- Observer Bias
- Political Influence
- Redundancy – repeat groups/ frequency of observer

#### Secondary Data:

Data that has been previously gathered. It gives us an overview of the situation and context; it saves time; it allows us to learn from experiences elsewhere. It is the collection of existing data and information about:

- Relevant background info on community (census, research findings, reports, maps, journalistic articles etc.
- Possible threats to the community
- Scientific information about hazards / threats
- Case studies about hazards / threats in other communities
- It is useful for a comparison and is cost effective.

### Types of Data Collection

**Direct Observation:** Systematically observing objects, people, events, relationships, participation and recording these observations. This gives us a better picture of the disaster/hazard situation, especially of things that are difficult to verbalize. It is a way of cross checking verbal information. There are two techniques:

1. Direct observation; informal observation
2. Participant Observation

The groups were asked to develop Direct Observation guidelines that could help them for the fieldwork experience. The following ideas from the groups were presented:

#### Infrastructure:

1. Drainage – availability, type, functional
2. Building – Architectural design, proximity, material type, shelter
3. Sewerage system – availability, septic, soakaway, sewer lines
4. Utilities – Electricity, water, telephone
5. Essential services – health clinics, police station, solid waste management

#### Practices and vulnerabilities

1. Clubs (night) – (Fire , violence) – nor fire detector, extengisher
2. Playground – (stampede) – no safety rails, only 1 exit
3. Gas station – (fire explosion), gas leakage, no fire hydrant
4. Ponds – (drowning, diseases) stagnant water
5. Church – Weak structure, old wood building

#### Socio economic

1. House structure – well or poorly structured homes, utilities
2. Environment – neighbourhood, is it clean, hazard free, street care
3. Family structure – if nuclear family is present or elderly, children taking care of children
4. Number of houses in a yard – congested yard, recreational
5. living conditions – a. the way the children appeared to be – well nourished , mal nourished, too crowded in the home,; b. are school age children in school or at home; c. are adult present with kids at home

#### Lifestyle:

1. Daily routine
2. diet
3. Family structures
4. Community interaction
5. Capacities
6. Skills
7. Application to family maintenance
8. Clsely bonded ommunity
9. Buildings as shelters/meetings
10. Teams, organized leaders

**Semi-Structured Interview:** these are discussions set out in an informal and conversational way and are the principal tool for the success of an appraisal. Instead of a formal questionnaire, it is more a checklist of questions being used as a flexible guide. There are different types of semi-structured interviews:

- Group interview
- Focus group discussion
- Individual interview

- Key-informant interview

The groups were asked to develop a Semi-structure interview guideline that could help them on their field work. This is what they produced.

1. What diseases have affect this community?
2. In the event of a fire, how would the community respond?
3. What do you do with your garbage?
4. (How do you go about) what are the guidelines for construction or extending a building?
5. Where do you get you're a) drinking water from, b) for washing, c) for bathing?
6. What is your daily routine?
7. Who are the persons living here in the home? A) age, b) sex, c) relationship
8. How do you feel about living here in this area?
9. Describe your family structure and how you provide for them?

Questionnaires: Participants were asked to come up with five questions. Good questionnaires may not necessarily have good interview results.

Surveys: are the systematic collection of facts about people.

Sampling: is a random group of people/things used to evaluate something in particular. Considerations when sampling are:

- Who do you sample?
- What do you sample?
- Where do you sample?
- When do you sample?
- How do you ensure validity?
- Can a sample be changed?

## UNIT 5

### Key Steps of VCA

- Sensitization
- Management process
- Realistic objectives
- Input ⇒ Output
- Gathering information
- Resources and training
- Analyzing data
- Making sense of data
- Data to action
- Dissemination and networking
- Monitoring and evaluation
- What comes after training and VCA?

## Community VCA "West Bay"

Participants went on a field trip to West Bay. This was an exercise on collecting data. Once participants returned, groups used the tools they had learnt and presented their findings.

### Interview Questions:

The following questions were previously agreed to take into consideration in the visit to the community.

1. What do you think of your community?
2. What is your greatest concern?
3. Were you all living in the community and how long have you lived there?
4. What is the name of your community?
5. What would you suggest can be done to fix the problems you are experiencing?
6. What infrastructure do you have in your community?
7. What were your concerns?

### Direct Observations:

Fabers Road – Belize City

#### Direct Observation:

The following elements were observed by participants at the community:

#### Infrastructure

- Existence of drains
  - \* stagnant
- Clustered buildings
  - \* aged
  - \* mostly wooden and small
- Zinc fences
  - \* haphazard
- good network of streets
  - \* abandoned vehicles
- schools, church, health post, day care centre
- community park
- utilities
  - \* water, electricity, telephone sewerage system

#### Life styles

- Very "laid back"
- gambling
- single mothers
- negligent fathers
- in-sanitary environment

#### Socio-Economic

- unemployment
- delinquency
- high crime
- multi-family dwelling
- improper solid waste disposal
  - fishing
  - unskilled labour
- efficient public transport
- sufficient private transport
- haphazard construction
  - (as necessary/unplanned)
- informal settlements
- domestic violence and child abuse
- drug use
- transient residents

#### Vulnerabilities

- informal settlement
- multi-family dwelling
  - proximity of houses
- proximity to coast
- dilapidated structures
  - stagnant water
  - high crime
  - high delinquency
  - drug use

- unkept yards
- improper solid waste disposal
- unsanitary environment
- lack of values

**Vulnerabilities:**

1. Reclaimed land – reduces storage and flow, low lying areas,
2. clogged drains or no increased run –off, poor drainage, public health risk
3. Public health – out houses
4. Buildings – one storey on the ground and 2 storey buildings – ground floor enclosed
5. Close proximity to sea / storm surge – clearing of mangrove from sea front for housing development
6. Dredging for cruise ship port, sewage treatment facility backup
7. Informal settlements – poor construction, poor infrastructure, old buildings

The group decided, as part of the exercise to concentrate in 3 vulnerabilities for the next step of the analysis. Notice that in real conditions every single of the vulnerabilities should be analyze and also, every single hazard relation with the vulnerabilities. In thi particular case, the working group selected:

As hazard:

Floods

Vulnerabilities:

1. Poor drainage
2. Low lying area/proximity to sea (clearing of mangrove)
3. Dredging of port and sewerage plant development

**Historical Profile**

Year	Description of Event
1930	Henry Faber and families moved in (East Indian)
1940	3 families
1961	Hurricane "Hattie" damaged houses and trees , fatalities
1964	Electrification of neighbourhood
1965	Old junk yards replaced by houses
1970's	Reclamation of creek, Belmopan became the new capital
1980's	Increase in crime rate
1982-83	Belize Port construction
1985	Construction of Port Layola Multipurpose building
1986	Sewerge treatment facility installed
1989	Creek continued to be filled and development of new housing settlement
1990's	Flooding, evacuation, pink eye
1992	Gas leak from port authority gas depot
1998	After election government started housing development
2000	Migration of new residents to the area
2002	Police substation from Racoon Street to Fabers Road
2002	Belize Port extension began – land reclamation
2002	Flooding in housing area, Construction of new library
2003	Cruise ship complex construction began
2003	New radio station (Peoples radio station)
2004	YMCA skills training center established
2004	Garbage truck service – to community
2004	Renovation of health center

### Group analysis of Historical Profile:

The community one in which the social services were not put in place initially but were gradually added over a period of time, eg. Electricity in 1960. From the profile we can deduce that the community suffered from some of these developments – reclamation of a creek for housing, construction of a sewerage treatment facility in natural drainage area, and the expansion of the by land reclamation. Criminal activities became prominent in the 1980's and the level continues to increase today.

Participants highlighted that certain elements from the community assessment have not been addressed and need to be taken into consideration, such as:

Historical:

- School Port Layola
- Hurricane happens
- People migrate to the northside
- People came back

The above example showed participants that information gathered from the communities need to reconfirmed.

In order to do that, there are different potential options as the Group suggested when asked:

**Where can we find additional information from?:**

National survey

Maps

Church

Public health department

Ministry of Education

Archive

Census office

Facilitators mentioned that when collection of information from other agencies, organizations and places, as a Secondary Data should be done before going to the field and after doing the initial assessment. Usually, after doing an assessment it is evident that different of the gathered information will need to be verified and secondary data could be an option.

Other ways to reconfirm or verify information could be done by using other information gathered techniques, such as questionnaires, interviews, surveys or additional focus group activities.

Historical Chart:





**Historical visualization chart Group Analysis:**

- Three families existed, low financial status, crime non-existent
- Minimum disease rate, one disaster, existence of creek and mangrove swamp
- Increase in population and crime, low economic status, few diseases and disasters, presence of swamp grws and wild life.
- Stable population. Existence of crime, low economic status. Existence of hurricane, floods which led to evacuation and migration
- A major increase in population, crime, financial status, diseases etc.
- A vast increase in population, crime, financial status and diseases. Construction of roads. Organization of electricity and water pressure.
- Increase in population, crime rate, diseases (HIV). Presence of clustered and dilapidated.
- No population change. A vast increase in crime-shootings, fighting's, thefts, rape, etc. Presence of HIV. Construction of the library and barber's shop. Houses still clustered and poorly built.

**Seasonal Calendar:**

Port Layola Jan. 13, 2005

Seasonal Calender	J	F	M	A	M	J	J	A	S	O	N	D
Hobbies watch TV - BET	X	X	X	X	X	X	X	X	X	X	X	X
Theft			X	X					X			X
Gang rivalry	X	X	X	X	X	X	X	X	X	X	X	X
Drugs	X	X	X	X	X	X	X	X	X	X	X	X
Doctor available Mon-Fri	X	X	X	X	X	X	X	X	X	X	X	X
Poor waste	X	X	X	X	X	X	X	X	X	X	X	X

D:\Documents and Settings\XavierC\My Documents\vca\2005 trinidad\belize\Vulnerabilty andCapacity Assessment.doc

management												
Pink eye									X	X	X	
Skin rash/ring worm											X	
Flu	X	X								X	X	
Finances Low High	X	X	X	X							X	X
Hazard												
Fuel pump	X	X	X	X	X	X	X	X	X	X	X	X
Over grown vacant property (crime)	X	X	X	X	X	X	X	X	X	X	X	X
Large trees near homes	X	X	X	X	X	X	X	X	X	X	X	X
Swamp land flood/sewage overflow	X	X	X	X	X	X	X	X	X	X	X	X

**Seasonal Calendar Group analysis:**

During the months of March and April when finances are at its lowest it is obvious that theft escalates.

When finances are high in December drug trafficking seem to be reflective of the overflow in sales.

Hazards: Because of poor waste management and no effort to reduce the unsanitary conditions, hazards remain throughout the year. However, flooding that is already an ongoing problem, the risk increases during the months of June – November (hurricane season).

**Institutional and Social Analysis:**

The Group previously worked on the ranking of each of the organizations and institutions that according to the community people seems to be the most relevant and important once. The selected once reflect the opinion of the interviewees.



### Group analysis of Institutional and Social net work analysis:

The following analysis is based on an specific "Action for transformation" does not reflect the level of work those named organizations will be able to do. For this particular example and specific actions, the following are the views from the participants:

1. Salvation Army: Considered not to be important or relevant
2. Clinic: Somewhat relevant but very important since they use it for health care
3. Police: Very important and relevant to assist in fighting the high crime rate
4. NHI: Very important and relevant since it assisted them for health care services
5. Supermarket: Very important and relevant for providing food stuff
6. Ministry of work: Very important and relevant for infrastructure (roads, drains, floods)
7. Women's groups: Relevant but not that important, since only assisted a few in the community
8. Pre-school: Relevant but not that important, not readily accessible
9. Government - Relevant but somewhat important, since they are not always provide, services needed.

### Focus Group Report

The following are the main findings of three focal groups made at the community level.

Subject: Parents, 11 – 13 year old, 16 years old children:

- Perceptive: community impoverished destitute, racial separation, gang rivalry, high criminal activity, informal settlements, not the worst.
- Infrastructure: School, church, community center, police station, health center
- Historical view: Used to be swamp 22 years ago, bushes and mangroves, stand by (roadside) gradually developed introduced more houses and removed the swamp. Population increased and so did crime. It is no longer a peaceful community. The also said they were the largest area and also the poorest in the city.
- Lifestyle: Dormitory community or self employed. Criminal activity including drugs, disrespectful teenagers, poverty, poor parenting, poor role models, peer pressure, idleness, (empty lot), kidnapping and rape of young children. Recreational activities, TV - BET, phone and sex. Some mothers encourage commercial sex for gain. Community produced professionals, domestic violence.
- Social services: Not enough police, garbage collection regular (2 times per week). Politics affects them seriously people depend on political leaders for jobs etc., have electricity, water and phone
- Social institution: Women's department, school wardens, private sector, police, YWCA can start

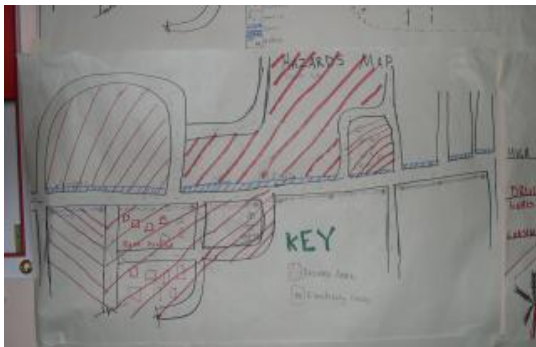
- Concerns: CRIME Fire explosion, hurricane, flooding, rape, drugs, racial discrimination, disrespectful, parent education – domestic violence, criticism, employment available, tradition, restricting teenagers from going out leads to them going wild when they go. Boys disrespectful to girls
- Recommendations: Remove political corruption, schools and parents should work with children, parents should influence them positively. Less TV, less BET. Mother's club, YWCA, they should learn about other culture. Stop slangs, respect each other, stop depending on politicians, remove drug from the streets, put criminals in jail, parents give right kind of encouragement, exercise their choice

Mapping

Physical Map – Land use



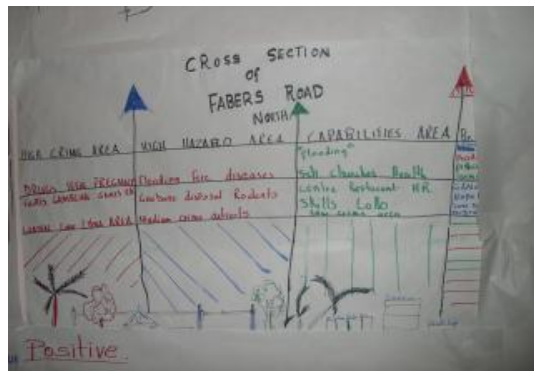
Hazard map



Capabilities map



Cross section map



Mapping: Group analysis of Institutional and Social network analysis:

Negative:

- Because of a negative outlook on life and lack of opportunities, crime is rampant throughout the area
- Poorly constructed and clustered houses are at high risk for flood
- People are migrating due to high rate and neglect of the area
- Poor drainage resulting in skin disease, flu like symptoms etc.
- Lack of garbage disposal results- in rodents and pest infestation
- Clustered houses = potential for block fires
- Entire area is at sea level which will result in flooding (prone to flooding)

Positive:

- 3 levels of education are found in one area
- willingness to pass on knowledge and skills (fishing-farming-mechanic)
- Health Center services providing needed health care
- New management for sanitation now addressing health concern issues
- Security presence is attempting to reduce crime rate
- Willingness to discuss issues affecting the community

Transform. Vulnerabilities into capacities:

In real community based assessments, the following charts should be developed with the communities. Once hazards have been identified and also vulnerabilities, the process for actions for transformation need to be developed with the community members. By doing it, communities continue increasing their level of ownership and will also be empowered for actions of transformation that made by their own communities.

HAZARD - scenario	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
Flooding	Low lying area/proximity to sea	a) Temporary relocation of residents b) Develop community using acceptable standards c) build sea wall

	Poor drainage	<ul style="list-style-type: none"> <li>a) identify leaders</li> <li>b) education on cleaning of drains</li> <li>c) per disposal of garbage</li> <li>d) group representation on subject to City Council</li> <li>e) Community meetings and for community team</li> <li>f) development plan for proper drainage</li> </ul>
	Dredging for Port and sewage plant development	<ul style="list-style-type: none"> <li>a) Build canal to drain water into sea</li> <li>b) fill individuals lots with dirt, above height of swamp</li> <li>c) build community drainage scheme</li> <li>d) community group to lobby to</li> </ul>

Actions to transform vulnerabilities into capacities	Prevent-ion	CIA	Preparat-ion	CIA	Mitigat-ion	CIA
a) temporary relocation of residents	X	I			X	I
b) develop community using acceptable standards	X	C		I	X	I
c) build sea wall	X	C			X	C
a) identify leaders	X	C				
b) education on cleaning of drains						
c) per disposal of garbage					X	C
d) group representation on subject to City Council					X	I
e) Community meetings and for community team			X	I		
f) development plan for proper drainage	X	I				
a) Build canal to drain water into sea					X	I
b) fill individuals lots with dirt, above height of swamp					X	C
c) build community drainage scheme					X	I
d) community group to lobby to					X	C

Actions Short – Medium –Long	Can be solved immediately? S – M – L		Requires financing?	Can we find the resources ourselves? How?	Technical support?
a) temporary relocation of residents	Yes	Med.	Yes	- Social Investment Fund - Application to government - Community fund raising	No
b) develop community using acceptable standards	Yes	Long	Yes	- Social Investment Fund - Community development fund	yes
c) build sea wall	Yes	Med.	yes	- Social Investment Fund - Private sector - Community fundraising	Yes
a) identify leaders	No	Med	Yes	- School support - Church dissemination of fliers,	Yes
b) education on cleaning of drains	Yes	sml	Yes	- City Council and sanitation programme, lobby with city council	Yes
c) per disposal of garbage	Yes	med	Yes	- Invite COMPARE, public health, training community leaders	Yes
d) group representation on subject to City Council					
e) Community meetings and for community team	Yes	sml	Yes	- Involve PAHO, UNICEF, Financial Support	Yes
f) development plan for proper drainage	No	lg.	yes	- Social Investment Fund, seek City Council	Yes
a) Build canal to drain water into sea	Yes	lg.	Yes	- Lobby with Port of Belize and Social Investment Fund	Yes
b) fill individuals lots with dirt, above height of swamp	Yes	sml	yes	- Donations, use of own resources	yes
c) build community drainage scheme	Yes	lg	Yes	- Social Investment Fund, and Ministry of Work	Yes
d) community group to lobby to	Yes	med/lg	yes	- Human Resources and printing materials	no

The above actions for transformation need to be taken into consideration for the next step which hopes to develop realistic activities within the community: the community Stake holder analysis previously done (Social and Institutional network analysis) will be an important starting point information tool.

The main idea at this stage will be to evaluate how the organizations named by their own communities as relevant and important, may help to start involved those named organizations into the transformation process.

