TRINIDAD & TOBAGO – Speyside Community, Tobago

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Vulnerability Capacity Assessment

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.

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

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 Stephanie Bouris in close collaboration with the author(s) of the case study and the organization(s) involved.

COMMUNITY RISK REDUCTION

EMPOWERING COMMUNITIES TO TAKE CHARGE OF THEIR DESTINY

Vulnerability and Capacity Assessment
Speyside Community, Tobago.

20th to 24th August 2007
Venue: Speyside Community Centre

Lead Trainer: Dr. Allan Bachan

Acknowledgements

Special acknowledgement is extended to all the VCA training participants, the Speyside Village Council, the Speyside Pre School Management for use of the facilities, all of the residents of Speyside Village and all those who were consulted in the programme.

Thanks is given to all partnering agencies Tobago House of Assembly (THA), UNICEF, Trinidad and Tobago Alliance for Sport and Physical Education (TTASPE), and the Trinidad and Tobago Red Cross staff and volunteers for their assistance to this project and the Turtle Village Trust for their input on tourism and conservation..

Preface

The fundamental theme of this programme is participation. It is not about community members endorsing community plans but rather a process where community members gain the skills and knowledge necessary to make decision about strategies and actions that affect their lives. It is our role to ensure that the power to decide, while involving the Red Cross, principally remains in the hands of community members.

The findings outlined in this document were that of the participants and members of the community. This document reflects the value of community and their inputs. We need to "respect" and "listen". Our work must continue to empower communities to take charge of their destiny if we are truly committed to sustainable community development

Overview

Risk continue to spur us to seek more effective ways to anticipate and reduce the impacts of natural and man made hazards on human life. Neither enlightened social policy nor individual good intentions alone have been effective. Mitigating risk impacts in a community requires a deep understanding, collective imagination, and integration of a culture of safety into the fabric of society at all levels of social organization. It calls for a comprehensive approach and broad participation. A very wide range of stakeholders must be brought into contact with one another interacting cooperatively and synergistically with people outside of their usual domains.

The community-based approach is now seen as an integral component of building resilient communities for risk reduction.

Further, we hope that this report would foster exchanges and linkages among government, practitioners, communities and organizations involved in risk management at the local and community levels. Community-based risk management is an emerging trend which encourages multidisciplinary support and draws all stakeholders towards a progression of safety, resilience, and people-oriented development.

Definitions of vulnerability frequently refer to resource impoverishment, but seldom to the critical lack of access to the specific knowledge needed by large populations for self-protection. Powerlessness in the face of hazards has been linked over and over again to the failure of communities to anticipate and to take protective measures against events that, however infrequent, have been described by scientists as expected. Knowledge denial is perhaps the most subtle form of oppression, because among technical experts knowledge of the hazards seems widespread and obvious. Yet until this information is shared with the people who must make use of it, it cannot provoke the reciprocal knowledge needed to generate feasible and effective solutions.

Similarly, it is common to hear technical experts focus on the need to reach "decision-makers" at the policy level and thereby lose sight of the significant decision-making or decision-avoidance that is taken everywhere by individuals in small groups, in the family, the workplace, the school, indeed in every social setting. While it is clear that at the policy-level important decisions must be taken about legal frameworks, the use of collective resources, and research priorities, it is equally and sometimes more important to assure that understanding and compliance must make those policies realistic and effective. There are many examples where public awareness, grassroots efforts and steady cultural change precede enlightened policy-making.

A very important part of the action to reduce vulnerability is a series of small steps that must be implemented at the level of the neighborhood, the organization, the community and at the household level. Ultimately each piece of the puzzle is in the hands of a human actor who can contribute consciously to the solution, or is in danger of unconsciously undermining it.

Each social unit in a community needs to regard itself as stakeholders in this process. Vulnerability and decision-making exists at many levels, and so too must preparedness and mitigation. The effort and the collaboration must be sustained for a long period of time, in order to reduce risk significantly

For government agencies, international funders, non-governmental agencies, and citizen activists, the desire to make a significant impact is strong. But where should they begin? What should they do? What are the missing and urgent tasks? These are questions that are best answered collectively through the discovery and interaction of an ever-widening group of stakeholders whose shared goal is to decrease deaths, injuries, and economic, social and cultural losses due to disasters with natural or man-made triggers. This is what the VCA training is about.

Our desire here is to create a process and some tools that will:
- provide a credible framework for a comprehensive needs assessment
- act as a template for a baseline report, and recording, monitoring and communicating subsequent progress in disaster mitigation in the city.
- share information for raising awareness and communicating risk and a systematic rubric for communicating a complex array of information.

1.1.

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1. <u>Introduction</u>

1.1. Programme Background

This project is a Vulnerability and Capacity Assessment of the Speyside community which designed to provide baseline data on the community Vulnerability and Capacity to social, economic and environmental risk.

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

The project is part of a wider programme on youth development using sport as a community development transformational tool for Nurturing Child Friendly Communities through Sport for Development in Tobago, leading to the establishment of an Active Community Club (ACC).

This project is managed by the main implementing partner, Trinidad and Tobago Alliance for Sport and Physical Education (TTASPE), which will provide coordination, technical assistance, monitoring and evaluation working closely with UNICEF other UN, Ministry and NGO partners, including: UNDP, Ministry of Sport and Youth Affairs, Tobago House of Assembly Division of Education, Youth & Sport, Trinidad & Tobago Red Cross Society.

The project is part of a community Capacity Building effort that will be put in place to engender ownership and empower a wide social cross-section of leaders and volunteers in the targeted community. Through the use of Trinidad and Tobago Red Cross Society (TTRCS) Vulnerability and Capacity Assessment (VCA) and TTASPE's validated programs and methodologies the project will provide community members with the necessary competences and support for program coordination, administration, implementation, monitoring and evaluation of sport for development and edutainment activities and events during a period of 12 months.

TTRCS will carry out a participatory consultation process in order to develop a VCA in Speyside; the information collected on vulnerabilities, capacities, needs, desires, and risks of the community will input the necessary baseline data for project monitoring and evaluation.

Working with Communities the Red Cross Community Based Development Programming (CBDP) process
Working with communities in a participatory manner is at the heart of CBDP programming.
The underlying objective of CBDP activities is to reduce vulnerability and increase capacity. The International Federation of the Red Cross IFRC defines vulnerability as "The characteristics of a person or group in terms of their capacity to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard." Those that are most vulnerable are in situations of greatest risk from situations that threaten their survival or their capacity to live with a minimum of social and economic security and dignity.

The reverse of vulnerability is capacity or the resources of individuals, households, communities, institutions and nations to resist the impact of a hazard.

Working in a co-operative and participatory manner with communities, if done properly, can reduce the impact that disasters have on the lives of people.

Community work:
- encourages maximum co-operation
- encourages high participation
- leads to action on the part of community members
- moves away from dependency on outside resources/experts to the use of community resources/expertise
- is a way of working to obtain a goal
- is a way of working with (rather than for) people
- is self-determined
- is based on local leadership and initiative
- attempts to maximize citizen control of decision making
- is network based
- focuses on strengths and capacities
- is human resource intensive
- is sustainable

It is also important to note that working with communities is not any service that we provide or deliver in the community; nor is it simply collaboration with other agencies, institutions or community groups or advocacy work.

Defining the needs and issues of communities and developing strategies/services

Service delivery is a process of agencies/institutions defining the needs and issues of communities and developing strategies/services to remedy the problem while community work is more a process of supporting community groups in their identification of important concerns, issues and helping to increase their ability to plan and implement strategies to mitigate their concerns and resolve their problems.

Effects and Causes
Rather than providing only services which deal with the EFFECTS of problems, community work involves having members address the CAUSES of problems:

- Service Delivery vs. Capacity Building Facilitators
- Service Delivery Capacity Building Facilitators
- Reactive Proactive
- Needs driven Core-problem driven
- Minimum participation High participation
- Top down approach Bottom up approach
- One approach Constantly reinventing approaches
- Creates dependency Power shifts to community
- Static Adaptive as situation changes (dynamic)
- Low training needs High training needs

Participation

Another fundamental theme of community work is participation. Participation does not refer to having community members endorse branch plans but rather a process where community members gain the skills and knowledge necessary to make decision about strategies and actions that affect their lives. It is our role to ensure that the power to decide, while involving the Red Cross, principally remains in the hands of community members.

Community work is not easy. It takes time, commitment, knowledge and skills. The better trained volunteers are the more successful will be the results of the activities you carry out. Working with communities in a process where they determine their needs as well as implement appropriate solutions will lead to sustainable actions that reduce vulnerability and promote a better quality of life.

1.2. Project Scope

This report focus is on a Vulnerability and Capacity Assessment of the Speyside village/community (referred to as the project area), which is designed to provide baseline data on the Speyside community Vulnerability and Capacity to address social, economic and environmental and risk and to recommend a hazard mitigation strategies to ensure the holistic sustainable development of successful preparation and mitigation programmes at the community level.

1.3. Project Methodology

Vulnerability and Capacity Assessment

The methodology used for this report is the Red Cross Vulnerability and Capacity Assessment process which was introduced as part of the Community-based Risk Management (CBRM) program by the IFRC in 1995.

This methodology and tools require those involved to learn from the experiences others.
The data gathered focus the community to ensure the development of realistic action plans. These plans are then analysed to zoom in on the activities that can be done. The VCA process helps identify who should be involved and what financial and other resources are available or can be sourced.

Trinidad and Tobago Red Cross Society has used the VCA method in collaboration with partner agencies and local community stakeholders. Thus, using VCA, communities are able to identify and solve problems within their capability, and reduce the impact of severe hazards man made or natural.

VCA is a community based risk reductions programme which objective is for ensuring successful preparation and mitigation programmes at the community level. For the Red Cross, 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.

VCA is an 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 risk management, to a detailed analysis, whether at the national or the community level.

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?

Objective of the Programme:
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 risk reduction and preparedness activities.

Specific objectives:

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

What are the Value Added of the VCA Programme?

VCA will contribute to a greater understanding in the community of Speyside 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 programmes to raise the capacity of people at risk.

1.4. Programme Constrains/Limitations
The main project constrains/limitations was working with a limited sample of the entire community stakeholders, but most views were captured through community interviews and changes in the local weather to periods of rain that limited some of the field survey time during the training period.

1.5. Programme Management

The process was managed by the Trinidad and Tobago Red Cross Society (TTRCS) team who were based in the Speyside community during the project community training period.

The following were the main project steps:
- Definition and scope and project approach
- Review existing secondary data and literature pertaining to the project area.
- VCA training and data collection from within the community
- Analysis of the data collected and generated to provide assessment of the Speyside community.
- Reporting the VCA findings.

2. First Impressions of Speyside

The first impression of Speyside village from the Speyside hill top road side look out, is a visually impressive and beautiful seascape set within a large aqua marine coloured bay, with a rugged coastline with two large off shore islands. Towards the coastline one can see a small hillside village with houses along the foot hill ridge line towards the shoreline, which has a large sports field.

Speyside village first impression is a slow paced village which main economic activity is oriented towards fishing and tourism. The main tourism related activities and services range from small hotels/ inns, restaurants and dive operations. There are a small number of locally made artesian fishing boats along the beaches and along the shore with a well constructed concrete landing jetty. Views of the coast can be easily seen as one drive along the Windward Main Road coast.

Driving through the villages gives the first impression is that it is clean and that people are happy. The main sports ground located along the Windward main road give an impressive feature of the village as a sporting village, due to the sports grounds being well keep. The over all level of investment in the sports ground gives an indication that the community has a high sporting activity and interest.

The number of new and developing food and beverage services mainly small privately owned restaurants, new looking small inns/hotels and dive shops along the coastal main road indicates the village has a strong basis to developing demand for marine focus tourism as a main economic activity.

From documentation the population of Speyside has a population of approximately 1000 people.

Speyside is one of the main fish landing sites in the northeast part of Tobago, and second only to Charlottesville in the number of fishermen and boats operating from the community. The fishermen have a fish handling facility, but no cold storage or ice making facility.

Agriculture in the village is generally non-intensive and at a subsistence level with farmers producing bananas and cash crops mainly for domestic use. Cattle and goat rearing is also a common agricultural activity.

Marine tourism activity is significant, with dive centre, glass bottom tour guiding take e advantage of the coastal reefs and also Little Tobago Island. Other economic activities include agriculture, tourism accommodation, and government employment.

Visitors to the community have a tourism information office, beach facilities, three medium size hotels and a number of guest houses and host homes accommodation, at least six good restaurants, some small bars, and small shops. The THA Department of Public Nullities as a main depot in the community and the NEMA has a CERT station.

The education services available to the community are 1 Pre School, 1 primary school and 1 secondary school (350 students). Government post secondary continuing training programmes YIEPP and MUST programme are also available.

3.Community Overview

3.1 Community location

The community of Speyside is located in the north eastern, Atlantic coastline of the windward side of the island of Tobago. Tobago is located within the coordinates Latitude 11^0 N, Longitude 60^0 W.

Map of Tobago showing the location of Speyside in the north east region

The Speyside village on the land ward side the village is surrounded by the Tobago Main Ridge and the highest peak in Tobago Pigeon peak. On the sea ward region the village is boarded by the Atlantic Ocean with two major small islands and islets.

The village of Speyside has thee main sub watersheds valleys with settlement located along the valley floors and along the slopes and coastline bays.

The village is accessed via the primary major windward road which passes through the village with branches secondary and tertiary access roads entering the sub village regions. The main village to the south of Speyside is Delaford and to the north is the village of Charlotteville. The village has access from both towns and from the sea for beach or jetty landing. There is a community foot ball grounds that can accommodate a helicopter to landing.

For the purposes of this report the community is divided into three zones:
- North zone (From Starwood and blue waters junction to the government housing settlement communities),
- Central zone (Top hill communities, Top hill and Crapaud Village,),
- South zone (Windward main road junction, Lucy Vale village to Lucy Vale Bay).

View of North and Central zone communities

Government housing settlement scheme

Central zone view of Top hill communities

Top hill communities

View of South zone - Lucy Vale village communities

The project area also encompasses the wider watersheds bays from south to north from:
1. Lucy Vale Bay
2. Indian Bay
3. Tyrrels Bay
4. Anse Bateau Bay
5. Anse Gouleme Bay
6. Belmont Bay
7. Starwood Bay

3.2 Environmental profile

3.2.1   Climate

The climate is a tropical maritime climate with the region influenced by the north east trade winds.

Tobago normally experiences two seasons per year – a wet and dry season. A dry period occurs (approximately) between January to May, and the wet season from June to November. June and December are transitional months that may exhibit either dry or wet conditions.

Rainfall in all months is significantly higher along the north east and north coast of Tobago. The average annual rainfall ranges from about 1500 mm in the extremer northeast to 3800 on the Tobago Main Ridge.

The average annual temperatures of Tobago ranges between 210 C and 33 0C. January, February and March are normally the coolest months but minimum as well as maximum temperature can occur throughout the year depending on local weather conditions and locality.

Average monthly relative humidity across the island generally lies within the range of 73 to 84 percent.

Wind speeds across the island is generally low – the directional orientation is along a east – north- east / west – south- west – axis- generally blowing directly into the Windward and Leeward sides of the island. Monthly average wind speeds at Crown Point varies between 8 and 17 km /h. The lowest monthly average wind speed tends to occur in May and June and the highest in October to January period.

There have been historical accounts of hurricane for Tobago and the project region.

Climate change is expected to affect the region coastal lowlands where beaches are backed by a flat valley, a rise in sea levels will push the beach back, where the back is backed by steep cliffs, the result would be elimination.

3.2.2 Geology

The underling geology of the project area is known as North Coast Schist, mostly referred to as the Parlatuvier Formation, which are the oldest rocks on the island.

The island as a number of fault zones, the most significant been the Central Fault System which lies is oriented in a rough east – west line from near the Main Ridge crest south of Englishman's Bay to the centre of Tyrrels Bay (Speyside).

The North Coast Schist is a rather unstable formation, and coupled with generally steep slopes and frequent earth tremors, this makes the project area highly susceptible to land slips. The region has been assessed for landslide susceptibility[1] which has a medium to high landslide susceptibility. The project area is within a high risk zone for man made structures.

Landsides in the region is caused by practice of agricultural stripping of vegetation from the hillside have been observed which exposes the surface soils/ geology to higher impacts of rainfall and rain water infiltration or runoff, also the steep building of roads or building site cuts which change the angle of slop, adding weight of buildings and infrastructure, etc tend to exacerbate the natural slope failure risk which could lead to slope failure anywhere.

3.2.3 Soils

Soils and land capability for Tobago and for the project region with the soils in Tobago being referred to as 'immature and many are influenced so much by topography that there are in a state of constant flux '[2]. Geological boundaries are also synonymous with soils boundaries. The valley soils are most part classed as Hermitage Clay Loam, poorly drained soil derived from schist.

The beach zone at Lucy Vale end of Tyrrels bay is a heavy colluvial, imperfectly drained Richmond Clay Loam derived from a mixture of schist, volcanic and ultra-basic rock.

The significance of the above description is the suitability of soils for various agricultural activities. Where slopes are relatively level, all soils are classed very good for agriculture provided that effective soil management is practiced. On steep slopes soils are at risk to soil erosion. Over the project are most soils are classed for suitable only for tree crops or forest.

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[1] GoTT, 1991
[2] Brown et al, 1967.

3.2.4   Topography

The dominant features of the relief of the project area is the Tobago Main Ridge highland area running north east to southwest and rising approximately 575m (1900 feet) at the highest point (Central and Pigeon Peaks). The ridge slopes off steeply to the north east and the landscape is heavily dissected. The project area has a 3 major, small valley floors, 3 main coastal bays, and 2 major offshore islands.

Listing of the main landforms features		
Mountains 1. Tobago Main Ridge 2. Central Peak 3. Pigeon Peak (highest peak in Tobago) 576 m	**Bays** 1. Lucy Vale Bay 2. Tyrrels Bay 3. Anse Bateau Bay 4. Anse Gouleme Bay 5. Belmont Bay 6. Starwood Bay	**Beaches** 1. Lucy Vale Bay 2. Tyrrels Bay 3. Anse Bateau Bay (Batteaux) 4. Anse Gouleme Bay 5. Belmont Bay 6. Starwood Bay
Small Islands 1. Goat Island 2. Little Tobago also know as Bird of Paradise Island	**Islets** 1. Black rock 2. Middle rock 3. North east rock 4. South rock	**Rivers** 1. Doctor river 2. Trois Riveries 3 rivers 3. Starwood river

3.2.5   Hydrology

The project area has 4 major small stream which flows are mostly short and steep. The main streams are Doctor river located within the north of Tyrrels and Trois Riveries 3 streams which out flow into Tyrrels bay are located in the south region of Tyrrels bay Lucy Vale beach Valleys and Starwood river located within the Starwood Bay Valley.

There are two small coastal wetlands at North and South ends of Tyrrels Bay valley system.

3.2.6 Vegetation

Using Beard's[3] classification of the natural forest floral formations of Tobago the following are the 6 main forest formation within the project region:

1. Lower montane rainforest
At the for the region upper Main Ridge slopes as lower montane rainforest (above 244 m) at the time of his research. The forest structure is considered as altered as a result of Hurricane Flora in 1963.

Main Ridge slopes with lower montane rainforest

2. Lowland rainforest
On the lower slopes lowland rainforest occur up to 366m.

Lower montane and lowland rainforest NW of the village

3. Littoral coastal woodland
Along the coastal zone strip represents a narrow band of only remaining littoral coastal woodland vegetation most or almost all of the natural littoral coastal woodland forest have been modified.

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[3] Beard, 1944

Littoral coastal woodland vegetation

4. Wetland mash formations
Small patches of wetland mash formations occur at 3 river mouths at Doctor river located within the north of Tyrrels and Trois Riveries located to the south region of Tyrrels bay Lucy Vale beach Valleys and Starwood river located within the Starwood Bay Valley.

5. Deciduous seasonal forest dry
Little Tobago represents the only remain area in Tobago of the vegetation type characterized as an important example of an offshore island deciduous seasonal forest dry forest and rocky coastal ecosystems.

Deciduous seasonal forest dry forest and rocky coastal ecosystems

6. Secondary forest
Secondary forest occurs along regions where human settlements have modified natural forest along slopes coastal and valley floor regions.

3.2.7 Terrestrial Environment

Ridges

The downward sloping ridges that slope towards the sea within the project area extend on either side of valleys with the various bays within the project area. These main ridges sub divide the watershed in to sub valleys of each bay.

Only main downward sloping ridges within Tyrrels Bay have the major human built settlement and infrastructure along the ridge line and inner face. The ridge settlements of Top hill and Lucy Vale demonstrate these features.

Valleys

There are two main valleys classes in terms of land area size:

The larger valleys are:
- Tyrrels/Lucy Vale community Valleys

The smaller valleys are:
- Starwood Bay Valley
- Anse Bateau Bay (Batteaux) Valley
- Anse Gouleme Bay Valley
- Belmont Bay Valley

The main valleys with human built settlement are within the Tyrrels/Lucy Vale Valleys.
One small/medium size hotel (Blue waters inn) is located within Anse Bateau Bay (Batteaux) valley and slope.

Rivers/Streams

There are three main fresh water streams with associated reverie ecosystems with in the project area which are:
1. Doctor river located within the north of Tyrrels
2. Trois Rivers located to the south region of Tyrrels bay Lucy Vale village beach valley
3. Starwood River located within the Starwood Bay Valley.

Trois Riveries located to the south region of Tyrrels bay Lucy Vale village beach valley

There are over 5 main paved drainage streams that all outfall into the sea, which are present with the project area, some drains are unpaved and paved which all outflow into coastline.

Location and numbers of drainage outfalls within the over all project area:
South 2
Central 2
North 3

3.2.8 Marine Environment

Rocky coastlines
The Speyside coastal seascape region is characterized by rocky and rugged coastline. consisting of bedrock cliffs and beaches. The bedrock cliffs from headlands around a series of deep indented, therefore sheltered bays that assist with the stabilizing or anchoring of beaches.

The tidal ranges from less that 2m and are subject to erosion due to wave action. No rates of erosion of the coastline were available.

Beach formations
Rivers have been found to contribute very little sediment to the development of beach formation. Removal of sand from a beach can lead to an imbalance in the sediment budget, and a result of which erosion may occur.

The following marine coastal beach environments occur:
Sandy beach environments
Rocky beach environments
Near shore beach environments
Off shore island coastal beach environments

All of which are used for a combination of recreational and economic activities, including swimming, snorkeling, diving, mooring yachts, and fishing.

Coastal oceanography
The Coastal oceanography is affected by the seasonal Orinoco discharge which is stronger during the rainy season but the region is not subjected to pronounced influences as Trinidad.

The wave climate consist of locally generated seas originating from the northeast trade winds, waves generated by intense extra – tropical depressions crossing the North Atlantic, and swells activity from North Atlantic cyclones.

Coral reefs ecosystems
The project area has significant formation of coral reef ecosystems. The Coral reefs ecosystems within the Speyside coastal region are mainly reported from Tyrrel's Bay which has the reported largest brain coral formation.

The following is the reported number of Coral and Fish species reported at Speyside Reefs which have been reported is being one of the most healthy coral reef systems in Tobago.

Table 2.
Number of Coral and Fish species reported at Speyside Reefs[4]

Total coral species	44
Total fish species	65 (216)

Off shore Islands

There are a number of small to large off shore islands with associated dry forest and rocky shoreline formations in the project area coastline. The largest offshore islands are Goat and Little Tobago Island with the latter having a sea bird roosting and nesting sites.

3.2.9 Environmentally sensitive areas / species for conservation

The Tobago Main Ridge
The Speyside village upper watershed ridge forms part of the Tobago Main ridge. It is a Government forest reserve which was declared a Crown Reserve on 13th April, 1776 signed by Governor Sir William. The Forest reserve is the oldest declared state reserve in the western hemisphere. It is over 4,000 ha. The area is a critical environmentally sensitive area due to its watershed and natural resources functions.

Coastal beaches
Within the various Bays in the Speyside region have beaches ranging from sandy to rocky beaches.

Coastal wetlands
The major coastal wetlands within the Speyside region are 2 two small wetland sites which are located within the north and south regions of Tyrrel's Bay.

Little Tobago Island
Little Tobago Island also know as Bird of Paradise island. The island became owned by the government in 1928 when it was designated Wildlife Sanctuary, the island one of the 13 GoTT wildlife Sanctuary in Trinidad & Tobago managed by the Forestry Division of the GoTT.

The island is the largest sea bird nesting site in the southern Caribbean for a variety of resident and migratory sea birds. The Island has the only nesting colonies of Magnificent Frigatebirds and Red –footed Boobies in Trinidad & Tobago[5]. It also supports nesting colonies of Brown , Red-billed Tropic birds, Sooty Terns, Noddy

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[4] Hardy 2001 unpublished data
[5] Dinsmore and Ffrench 1969

Terns, Audubon Shearwaters, Bridled Terns and Laughing Gulls, all of which species are classified as vulnerable or endangered[6]

The island was once the site of an introduced colony of 29 Bird of Paradise birds brought by Sir William Ingram in 1909, which population became extinct from the island some time after hurricane flora in 1963.

The island represents the only remaining and an important example of an area in Tobago with the vegetation type characterized as deciduous seasonal dry forest with associated and rocky coastal vegetation ecosystems.

Goat Island

Goat Island is a small island at the SW of Little Tobago Island which has similar environmental features as Little Tobago but has much more steeper slopes and rocky coastline. Both islands should be conserved for their seascape and marine features and habitat functions.

Illegal poaching of sea birds, marine life and wildlife is reported from all islands and from the main land forest of protected species. It is recommended that an active enforcement and protection programme of community participation and co management strategies be put in place and maintained.

View of Goat Island in the foreground and Little Tobago in the back ground.
Note the single house on Goat Island at the centre**.**

Coastal Coral reefs

There are a number of shallow and deep water coral reefs with in the Speyside coastal area.

Over 15 named dive sites with coral reef associations which are officially reported for the Speyside area. At Kellision drain dive is located the largest brain coral which size is16 feet wide and 12 feet high The Speyside coastal area is being proposed to be a marine park and environmentally sensitive area under the EMA act.

Named dive sites n the Speyside coastal area

1. Inner space
2. Lucifer's bay

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[6] Morris 1976 and Thelen and Faizool 1980.

3. Spiney bay
4. Shark bay
5. Bookends
6. Alps
7. Special
8. Picker
9. Black Jack Hole
10. Kellestion Dive/Coral Gardens
11. Flying Manta
12. Japanese Gardens
13. Angel Reef
14. Aquarium
15. Sleeper

Environmentally sensitive species

Tobago fauna is predominantly South American in origin, although some West Indian species also occur on the island[7].Tobago has some species that do not occur in Trinidad.

Five of the 11 resident bird species that occur on Tobago and the mainland do not occur on Trinidad and re represented by wholly endemic subspecies.

Little Tobago supports the only nesting colonies of Magnificent Frigatebirds and Red –footed Boobies in Trinidad & Tobago[8]. The island also supports nesting colonies of Brown , Red-billed Tropic birds, Sooty Terns, Noddy Terns, Audubon Shearwaters, Bridled Terns and Laughing Gulls all of which species are classified as vulnerable or endangered[9]

There are 4 endemic species of frog, one endemic snake and on endemic lizard. A high degree of endemism has also been found in the invertebrate fauna.

The following is table of a comparison of species diversity and numbers of vertebrate fauna for Tobago and Trinidad.

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[7] Hardy 1982
[8] Dinsmore and Ffrench 1969
[9] Morris 1976 and Thelen and Faizool 1980.

Table 3. The species diversity of the number of vertebrate fauna for Tobago and Trinidad

Taxonomic group	Tobago No. of species	Trinidad No. of species
Mammals [10] Terrestrial bats	16 18	32 47
Birds[11]	210	411
Reptiles & Amphibians[12] Frogs Lizards Snakes Turtles Crocodilians	13 16 24 3 1	N.a.

Specially noted environmentally sensitive species

Marine sea turtles
The Speyside coastal region is an environmentally sensitive nesting and ecological habitat for 3 species marine sea turtles such as for the nesting of Hawksbill (Caretta catta) (more commonly nest with in the region), Leatherback (Dermochely coriacea) and Green Sea turtles (Chelonia mydas) sea turtles nesting is also reported from the region, both are listed as threatened species.[13]

All marine sea turtle in the waters of the state of the republic of Trinidad & Tobago are classed as environmentally sensitive species for conservation under the EMA Environmentally sensitive species Act.

Coral reefs and associated ecosystems
There are a number of Coral reefs ecosystems within the Speyside coastal region, 44 coral species reported at Speyside Reefs[14].
 It is reported that the Tyrrel's Bay has largest brain coral formation.

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[10] Goodwind & Greenhall 1961
[11] Ffrench 1992
[12] Hardy 1984, 1982
[13] Eckert and Herron 1998
[14] Hardy 2001

Speyside community main historical sites

Archeological sites

Boomert, [15] reports a number of archeological sites on Little Tobago, Lucy Vale bay Tyrell bay, and close to Doctors River.

The Speyside water wheel and sugar processing ruins

This site has a water wheel with supporting buildings which was used for sugar processing; the present ruins are located at the mouth of Doctors River. It was part of the 200 acre estate owned by Mr. John Piggott. The water wheel and infrastructure ruins date back to 1768.

Water wheel and sugar processing ruins- Doctor River

Bird of Paradise Inn/ Mr. Lau estate

The Bird of Paradise Inn was located on Mr. Lau estate which was formally John Piggott estate. The Bird of Paradise Inn located on the hill over looking the Speyside water wheel and sugar processing ruins was comprised of a main house with an Annex and bungalows with supporting infrastructure on to the beach.

The Bird of Paradise Inn started in the 1950's when the estate and estate house were converted into a hotel resort and nature sanctuary. The site at the mouth of Doctors River developed into a hotel resort and restaurant with a small wildlife menagerie with local snakes, birds and wild animals.

The hotel was burnt by fire in the 1970's possibly linked to social human rights protest action of the "black power revolution" protest actions against the owner Mr. Lau. The hotel ruins are located on the hillside and beach front still exist today.

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[15] Boomert, 1996
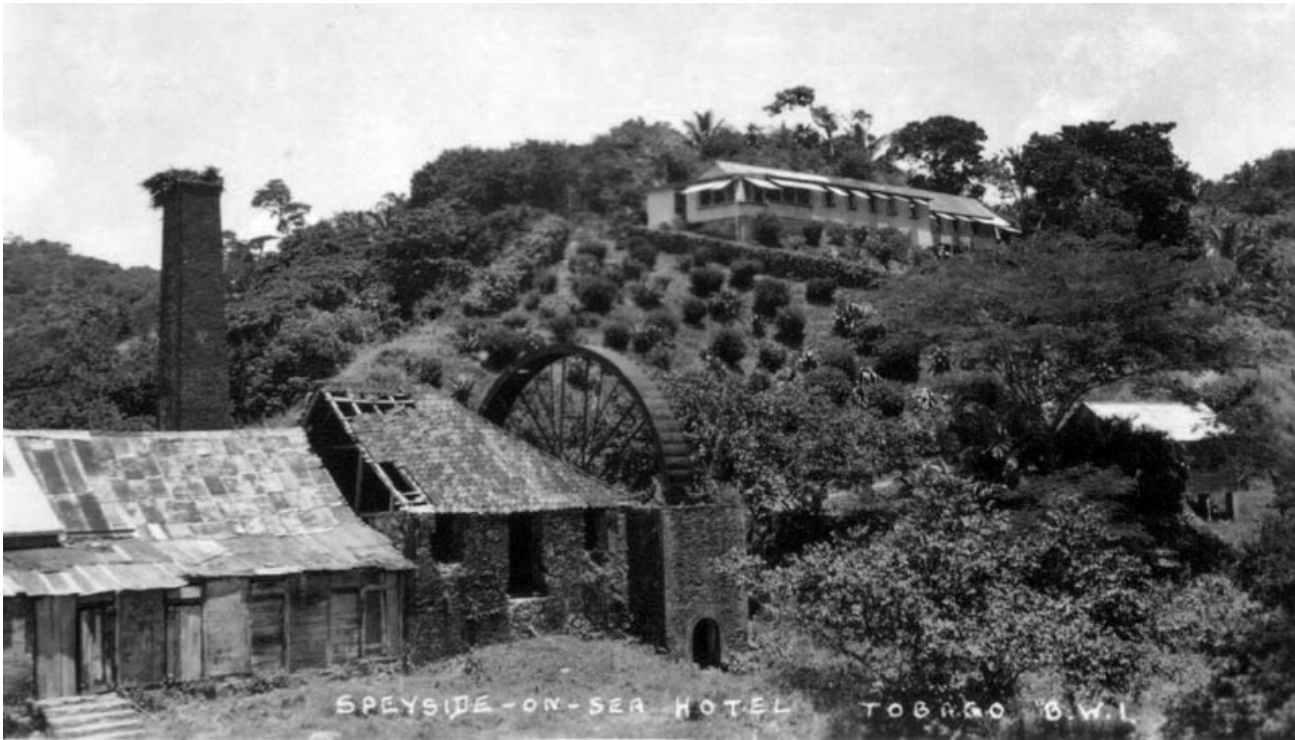
Historical images of the Bird of Paradise Inn was located on Mr. Lau estate

Ruins of the Bird of Paradise Inn/ Mr. Lau estate ruins- Doctor River

Belmont point Cannon

A single cannon is located at the Starwood and Belmont bay junction which is also a public look which the Speyside village and marine coastal area can be viewed.

Belmont point Cannon

Speyside village post office

The Speyside post office buildings and supporting infrastructure was identified as one of the oldest surviving public building in the village from the colonel period.

Speyside Post Office

Little Tobago island

The island was reported to have had an Amerindian hunting and fishing settlement in pre Colombian to historical periods up to the 17th to1800's. It was reported that Pirates may have used the island as a landing site in the 1700's. A cotton plantation was developed during the colonial period from possibly after 1788 with the development of a plantation house and slave labour [16].

In 1812 the island was forfeited to the State for non payment of taxes and sold to an English adventure for £ 805 but later abandoned. In 1898 Sir William Ingram bought the island from the state for £ 225. The island land owner Sir William Ingram in an effort to conserve a decline in the species of Birds of Paradise imported in 1909 (from the Aru Islands in the Pacific) and released 29 birds on the island as a conservation experiment. The island was managed by a care taker who feed and conserved the birds. The birds are no longer extant on the island the birds mainly due to Flora in 1963.

In 1928 the then Governor declared the island a bird sanctuary. Today the site is a national wildlife bird sanctuary managed by the Tobago Forestry Department.

Goat Island

A privately owned island which it was reported lived a single woman alone for some time. Later Goat Island became the island holiday home of Ian Fleming, author of the famous James Bond books and movies. The island is also in close proximity of Little Tobago and the high interest in bird watching in the local area gave Ian Fleming access to the name of the series hero, as the main book used for bird watching at the time was by the author James Bond author of the book Birds of the West Indies.

Goat Island, later changed ownership and became a guest house and is a private home. The island was recently in 2007 advertised for sale for $20 million TTDS in the local news papers, but has been reported to be being purchased by the Tobago House of Assembly, for the state.

Goat Island in the foreground and Little Tobago Island in the background

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[16] Ottley, C. R. 1969.

Tyrell Bay
Possibly named after Captain Richard Tyrell of the HMS Buckingham who after the 7 year war between France and Britain was authorized to go to Tobago to be an Administer.

Speyside lookout
Speyside lookout is one of Tobago's most aesthetic public road lay by lookouts over looking Tyrell Bay it give a panoramic view of Goat and Little Tobago islands and the Speyside sea and coastal landscape.

Speyside look out view

Speyside look out nature and view Park

Lucy Vale
Reported to be one of the two sisters Lucy and Charlotte born in the area where one remained in Speyside and the other went to Charlottesville. The great house where Charlotte lived in Charlottesville is reported to be hunted.

Captured village oral history

Agriculture
Village cocoa was sols fro ½ cent per pound. It took 8 days to dry and to dance the cocoa paid an individual 1 day penny

Fishing
Wooden fishing boats made from local forest trees.
Fishing boats had sails made of cocas bags
The with in living memory the village has only had 5 boats

The early Speyside village had 24 houses - Top hill 12 and Lucy vale 12

Some of the elders reported to be over 80 are
- Harold Sandy
- Eric Davis
- Lucile Davidson
- Tapcy Warrick

Owing to the main revenue generation by the community being tourism, It is recommended that a Speyside community museum and historical and environmental conservation programme be developed and supported by the community

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4. History of the Community

The history of the community an be divided into 5 important development periods:

1. **Pre Colombian Amerindian settlement**

2. **Colonial Plantation period**
   a. Early plantation development
   b. Sugar plantation period
   c. Sugar / Cotton / Cocoa/ Coconut plantation period

3. **Post African Slavery Emancipation & Abolition period**
   a. Peasant farming development period

4. **Post independence period**

5. **Current Development period**

Origins of Community

1 Pre Colombian period
The community has reported archeological finding that indicate evidence of Amerindian presence in the region. Historical accounts record Amerindian settlement to the main land and on Little Tobago. There activities were primarily hunter gathering activities. Agricultural settlement activities were also recorded.

2 Colonial Plantation period
During the colonial period the settlement and development of the region developed when the land use was was broken up into several estates mainly separated by land ownership was divided by various bays. Little Tobago was one estate.

The main commercial agricultural periods and crops that were grown were:
Tree crop period Cocoa and Coffee on the foot hills
Sugar cane period sugar cane was grown on the coastal flat lands and up along the main watershed slopes.
There was a cotton plantation period, were cotton was specifically grown in large amounts on Little Tobago.

Main infrastructure development which modification of land use
Plantation estates
Plantation homes
Slave housing settlements
Cocoa production and drying houses
Sugar cane growing and processing systems
Water wheel for sugar cane juice extraction
Sugarcane, sugar processing house with distillation "coppers" and storage faculties

3 Post African Slavery Emancipation & Abolition period

After emancipation & abolition African slavery, peasant farming developed with some commercial cash crops being maintained mainly Cocoa and Coffee.

Main peasant food crops	Main Cash Crops	Main Livestock	Domestic animals
Ground Provisions Plantation Dashine Corn Pigeon Peas	Cocoa Coffee Limes Coconuts	Chickens Goats Sheep Cows Rabbits	Dogs Cats

Human settlement development
Human settlement and population shifted out of main estates into marginal lands in the two man villages of Top hill and Lucy Vale, thus creating a reduction of population of local estate settlements.

4 Post independence period
The main economy of the village during this period was active commercial hillside agricultural farming and sea fishing.

Economic diversification
During this period the development of tourism activities and infrastructure hotels and guest houses occurred with interest in beach Tourism with the development of commercial Air access to Tobago. Specialized ecotourism of Bird watching was maintained and marine tourism developed as the access road to Speyside expanded making vehicular access easer to the village after the Second World War.

Human settlement development
Human settlement and population expansion occurred in the two man villages of Top hill and Lucy Vale, reduction of estate settlements. Development and expansion of public infrastructure was primarily done in this period.

5 Current Development period

Economic diversification expansion of the village economy
During this current period the development of a strong local tourism economy, with expected development growth in the service sectors, of accommodation and food and beverage.

Growth in Tourism services
Hotels
Guest houses
Cottage rentals
Private cottages/ Indian bay/Goat Island

One private island home
Goat Island guest house.

Growth in the Marine sightseeing services
Dive services
Glass bottom boat rides
Little Tobago bird watching

Food and beverage services
This sector expanded with development of formal restaurants in hotels, private road side restaurants, bars and mini marts.

Expansion of public social services

Settlement public infrastructure services
Expanded drainage works on hillsides and valleys
Development of more public buildings, community centre, pre school, upgrade of primary schools, beach facilities, tourism information centre, fishing facilities, sports grounds, fishing jetty, the building of a high school was the most recent major public infrastructure investment.
Street and road improvements, development of a coastal sea wall, and regular road and drainage works
Expansions of public utility services, electricity and access to cell phone services and Direct TV as signals are difficult to receive in the village.

1. Historical Profile: The community of Speyside

Historical Profile: The community of Speyside

Year	Description
Pre 1498 Pre Colombian	• Amerindian settlement within the community and off shore islands. • Land use hunting (sea fishing and land animal hunting) and gartering • Agricultural activity of cassava and tobacco
1500	• Permanent European settlement in South west Tobago. • Development of Tobacco and indigo export cultivation.
1763	• Subdivision of the island of Tobago into blocks for sugar cane estates. • Development of Speyside regional sugar estates
1770	• First export of sugar from Tobago.
1780-88	• Cotton a major crop on little Tobago[17]
1824	• The number of estates in Speyside region: • Belmont estate 58 males and 58 females • Lucy Vale estate 42 males and 37 females • Speyside estate 106 male sand 126 females [18] • The *Emancipation of Slaves* was introduced in 1834. The *Apprentice System*, under which slaves were bound to their former masters for four to six years, came into force.
Mid 1800	• Sugar remained the main crop
	▪ In 1807 the slave trade was abolished in all British dominions. At that time there were 15,000 slaves on Tobago. ▪ By 1812, an Indian called Louis, and his family of about 200, were the only remaining settlers on the north coast of Tobago.
1833	• 66 Estates reported from Speyside with the key owner being J&A Gordon
1847	• A disastrous hurricane proceeded by an earthquake and accompanied by thunderstorm passed over the Island in 1847.

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[17] Ottley, C. R. 1969.
[18] Ottley, C. R. 1950

	Private property valued at $150,000 was destroyed and led to the British Government granting a loan of $50,000 to help those affected.
1850	• Development of coco as a main crop also with coconuts, lime
1862	• The number of estates declined to 59 Estates reported from Speyside
	• Tobago's crops failed in 1800 and there was a grave shortage of imported food.
1908	• Cocoa was well established on Tobago by 1908 and coconut palms were beginning to replace the sugar cane.
1920-1960	• Cocoa becomes the principle cash crop in the Speyside regional area
1963	• Hurricane Flora devastates Cocoa and all other agricultural activity and human settlement • Hurricane Flora destroyed many houses, estates and large parts of the rain forest, with a total loss of 17 lives. This was the first disastrous hurricane since 1847. • Food crop production declined
1976	• Trinidad & Tobago independence
1980's	• Improvements made in health and community infrastructure
2007	• Current development period of expansion of the Tourism sector with ecotourism (bird watching and dive tourism) being the main tourism markets.

Group analysis of Historical Profile:

The community went through 5 important periods of development
1. Pre Colombian Amerindian settlement
2. Colonial Plantation period
   a. Early plantation development
   b. Sugar plantation period
   c. Sugar / Cotton / Cocoa/ Coconut plantation period
3. Post Slavery Emancipation & Abolition period
   a. Peasant farming development period
4. Post independence period
5. Current Development period

Speyside started out as an Amerindian settlement within the community and off shore islands. Land use was mainly hunting (sea fishing and land animal hunting) and gartering. Agricultural activity of cassava and tobacco existed.
Life in these times was simple and families while few lived in small wooden houses.

Permanent European settlement in South west Tobago developed Tobacco and indigo export cultivations. With the advent of the British Sugar plantations became the mainstay. Cocoa was well established on Tobago by 1908 and coconut palms were beginning to replace the sugar cane.

In 1963 Hurricane Flora devastated the community. Hurricane Flora also devastates Cocoa and all other agricultural activity and human settlement. Food crop production declined. Fishing has always been a mainstay of livelihood in the community. The rich abundance of fish they enjoyed was provided due to the proximity of the reef and continues to this day.
The agriculture in the community got a further blow when the youths in the community sought jobs in the construction, service industries as well as in stores and other businesses. The current trend with young people is the Government programmes in the community.

In the community the utilities were not put in place initially but as the community grew were gradually added over a period of time in the 1980's.   From the profile we can deduce that the community suffered from the increase in the population and some of these developments – reclamation of forests for housing, construction of schools, health centers, and churches led to landslides; Livelihood risks became prominent in the 1990´s and the level continues to increase today as more and more youths are not willing to work the lands as their parents did but prefer to acquire easy money. The Government attempted to address this issue by introducing a reforestation programme and offering skills training however it has been indicated that the programmes were not relevant to the community.

Since 1990's the impact of disasters has been greater not owing to the decline of trees in the community but the construction techniques used. A lot of houses are built on the slope of the hills hence drainage and erosion of soil has created a greater threat.

Tourism is the main economy in the region followed by government assisted programmes. There are three small inns in Speyside as well as a number of guest houses and host homes.

Other Social and Health problems also developed within the community
The use of drugs became an issue
Teen pregnancy became an issue
Domestic Violence became an issue

5. Historical visualization: The community of Speyside

Year	Population	Infrastructure	Trees	Tourism	Fishing	Agriculture	Health	Utilities	Disasters
Pre Columbian period	👤	🏠	🌲🌲🌲🌲🌲		**FFFF**	Small subsistence gardens			
1700's	👤👤👤👤 Early plantation settlement	buildings	🌲🌲🌲🌲		**FF**	Tobacco	scurvy		
1800's	👤👤👤👤👤👤👤👤	🏠🏠🏠	🌲🌲🌲	👤 Ecotourists	**FFF**	Sugar Cane			
1900's	👤👤👤👤👤	🏠🏠🏠	🌲🌲🌲🌲	👤👤 Ecotourists	**FFFFFF FFFFFF FFF**	Coco/ Coffee 🐐🐐🐐 Goats, Chickens,			
1970	👤👤👤👤👤👤👤👤👤👤	🏠🏠🏠🏠🏠🏠🏠🏠 buildings	🌲🌲🌲🌲🌲	👤👤 Ecotourists	**FFFFFFF F**	Cocoa, Development of market gardens 🐐🐐🐐 🐐🐐🐐 Cows, sheep Goats, Chickens		🛢🛢 🚰	🌧
1990	👤👤👤👤👤👤👤👤👤👤👤👤	🏠🏠🏠🏠🏠🏠🏠🏠🏠	🌲🌲🌲🌲🌲	👤👤👤👤	**FFFF**	market gardens 🐐🐐🐐 Sheep Goats	Dibertise Hypertension Domestic Violence drugs	🛢🛢 🛢🛢 🛢	🌧
2000 - 2007	👤👤👤👤👤👤👤👤👤👤👤	🏠🏠🏠🏠🏠🏠🏠🏠🏠🏠🏠🏠	🌲🌲🌲🌲🌲	👤👤👤👤👤👤 Ecotourists Divers	**FFF**	Small market gardens 🐐🐐 Sheep Goats,	Dibertise Hypertension Domestic Violence drugs	🛢🛢 🛢🛢 🛢🛢 🛢	🌧 Flooding, Storm

6. SEASONAL CALENDAR THE COMMUNITY OF SPEYSIDE

Social	J	F	M	A	M	J	J	A	S	O	N	D
School term	x	x	x	x	x	x			x	x	x	x
International tourism high season	x	x	x	x						x	x	x
Low income Initial Residents; Farmers	x	x	x	x	x	x	x	x	x	x	x	x
Seasonal Employ Skilled		x	x	x	x	x						
Unemployed Youth	x	x	x	x	x	x	x	x	x	x	x	x
Drug Use	x	x	x	x	x	x	x	x	x	x	x	x
Alcoholism	x	x	x	x	x	x	x	x	x	x	x	x
Domestic violence	x	x	x	x	x	x	x	x	x	x	x	x
Health	j	f	m	a	m	j	j	a	s	o	n	d
Colds / Flu								x	x	x	x	x
Diabetes and Hypertension	x	x	x	x	x	x	x	x	x	x	x	x
HIV/AIDS risk	x	x	x	x	x	x	x	x	x	x	x	x
Hazards/Disasters	j	f	m	a	m	j	j	a	s	o	n	d
Storms							x	x	x	x	x	x
Flash Floods							x	x	x	x	x	x
Land slides							x	x	x	x	x	x
Forest fires			x	x	x	x						
Festivals/Holidays	j	f	m	a	m	j	j	a	s	o	n	d
School Break							x	x				x
Village Harvest						x						
Fishermen fete						x						
Heritage Festival							x	x				
Christmas												x

Group analysis of Seasonal Calendar:

Analysis findings from the Seasonal calendar are that there is a correlation of the specific activities centered on the seasonal changes during the year.

The influence of the rainy season and the wet season is linked to seasonal health symptoms of colds and flu. During the rainy season and occurrence of rain storm caused hazards or dry season risk of forest fires.

The community of Speyside suffers from low income earners and unemployment through out the year. The community does experience an increase of employment during the months of February to June, due to this is the period that is considered the dry season which means skilled laborers can do construction and building work. There is a huge dependence on Government programmes existing in the community and International Tourism during peak season.

Drug use is more prevalent during the months of June, July, August, and December since school is out for the year. Also a number of out of school youths are engaged in this practice throughout the year. Marijuana smoking is considered no different to cigarette smoking and its participants see nothing wrong.

Alcoholism and Domestic violence are prevalent through out the year with an increase around the holidays and festivals.

Flu and colds have an increased prevalence during the rainy season of August, and December. Diabetes and Hypertension are prevalent through out the year due to lifestyle changes in diet and activities.

Hurricane Season is August to December. Before hurricane season begins the Disaster Community can provide a simulation exercise in the emergency action plan. High wind and rain occurs during the months of October through January. The roofing structures should be strengthened and the homes should be retrofitted before this period.

Speyside celebrates holidays and festivals through out the year. It is important to identify the holidays during the year since training should not occur on these days but at the same time it may be wise to do community mobilization activities to disseminate information.

7. Social Institutional Network Analysis of the Speyside Community, Tobago

SOCIAL INSTITUTIONAL NETWORK ANALYSIS
Of the Speyside Community, Tobago

Dive Shops

CERT

Health Centre

Village Council

Police

Church/ Religious groups

Schools

Family Groups

Hotels Restaurant

THA Projects

Bar

Shops Mini Marts

Fire

Post office

Division of Works

| 5 | 4 | 3 | 2 | 1 |

The SIZE OF CIRCLE = IMPORTANCE TO COUNTRY and
The CLOSEST TO CENTER = RELEVANCE TO COMMUNITY.
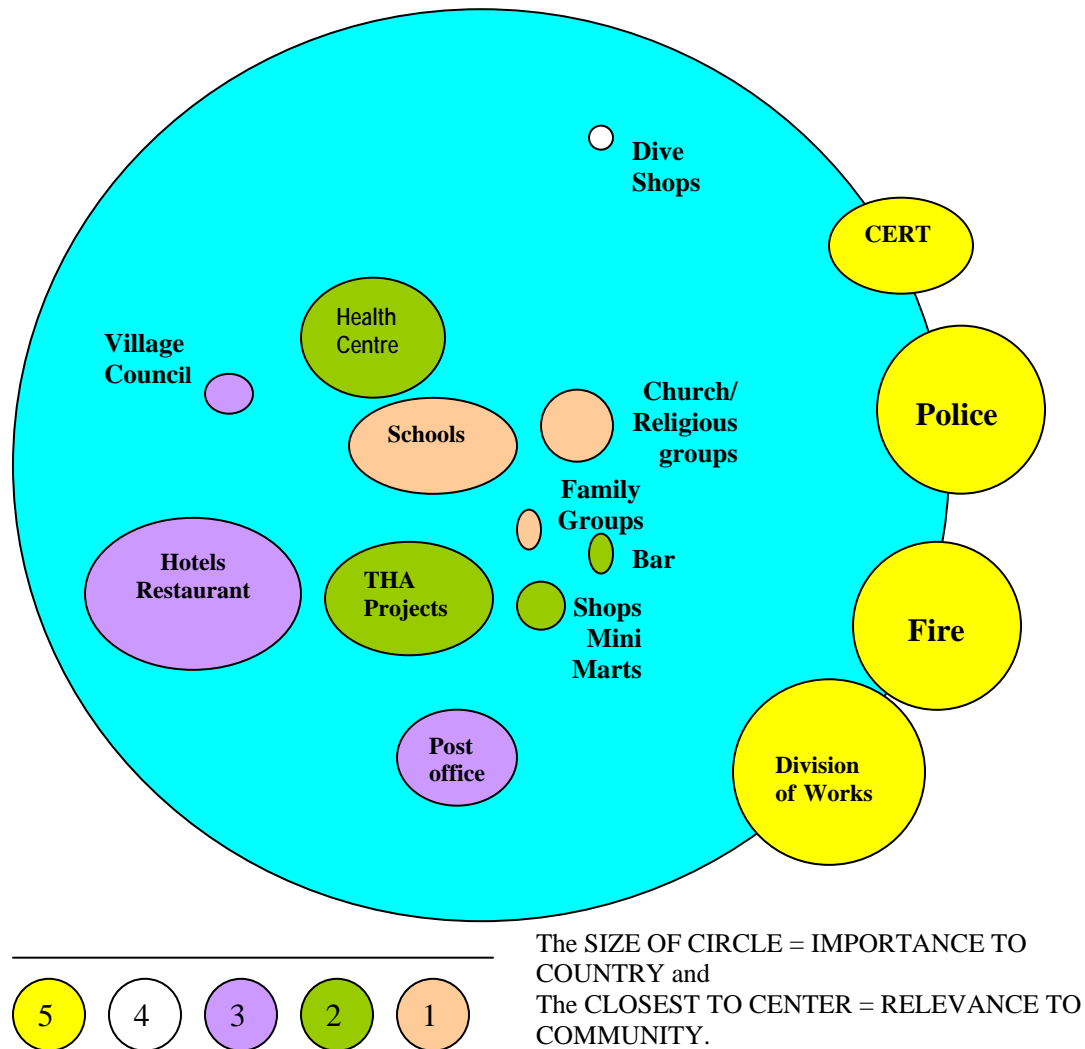
When reviewing the capacity of the community we see the influential players in the community of Speyside are the schools and preschools; the Church and religious groups. In order to implement any Plan of Action these groups should be focused on.

The Bar was seen as a central meeting and socializing place especially for the older residents and fishermen.

The THA Projects were also viewed by the community as relevant especially from a livelihood perspective.

The Health Center was also viewed by the community as relevant however concerns were expressed as to the opening hours.

Shops and Mini marts were also viewed by the community as relevant but only to the surrounding residents.

The Village Council was not seen to be close to the community as first perceived. Residents, especially the youth's expressed concerns that it was not representative of the makeup of the community and decisions were made by a few.

Restaurants and especially the hotels were viewed by the residents as "out of bounds". It was found that all the hotels were owned by outsiders of the community who did not really engage the community.

Police and Fire while important in the National Context are not relevant to the community due to the lack of presence.

There exists a CERT team who provide awareness for disaster mainly in schools however they are not seen to be close to the community. A lot of community members have voiced dissatisfaction that community residents were not trained for the positions. They also voiced concern that the CERTS did not engage or support the community in disaster planning, evacuation or simulation exercises.

Assessing people, organisations in Speyside

What are the relation and structure among people in the community?

Youth Group (Anglican youth group)
* It unites the community during its annual fisherman weekend (1st weekend in July).

Village Council
*This group takes care of the needs of the community.
*Provides employment.
~ Lack of communication.

Sport Clubs
*Unites the youths within the community.

Cadets
* Unite the youths within the community.
* Provides discipline.
* Promotes and assist in developing leadership qualities among the youths.

Churches
* Provide spiritual enlightenment through spiritual knowledge.
* Unites the entire community.

CERT
* Provide preparedness programs and relief in times of disasters\hazards.

Health Centre
* Provide primary health care within the community.
~ Require more doctors.
~ Do not provide a twenty four hour service.

Schools (Pre School, Primary School and Secondary School)
*Promotes education.
*Promotes and encourages socialization skills.
* Prepare the young individuals for a higher level of education\employment.

Fitness Group
  * Promotes healthy lifestyle.

Livelihood Analysis

The people of Speyside find employment though, agriculture, in hotel industry and there are skilled work men in the community that find work in Government programmes. The bars, shops and supermarkets provide employment; others travel out of the community to work mainly as State employees. Fishing is a major means of employment and livelihood.

Government sector/ Public sector

THA /State employees	Government programmes
• Works • Teaching Service • Postal service • Health service	• Urban Relief Programme URP • Conservation and Environmental Protection and Enhancement Programme CEPEP • THA Development programmes • Government Reforestation programme

Private sector

Agriculture	Restaurant and food beverage sector	Small business	Tourism sector
Farming Livestock rearing Agricultural cash and market gardening crops Food processing Fishing	Cook Waiters Cleaners Managers Security guards Support staff	Restaurant Bars Mini marts (Small shops) Taxi	Guest house staff Hotel staff Dive shop Hotel Transport Sightseeing Glass Bottom boat Tour guiding

It is recommended that all jobs and programmes be made public and that development of community skills to meet job demands be put in place. Local enterprise should be encouraged and developed.

Glass bottom glass tours and tour boat operator facilities

8. Community Profiling

Layout

Speyside village has a typical ribbon developments along the roadway and seaside . The majority of properties are detached single household units. There are several guest houses and restaurants.

The Speyside communities can be divided into three settlement zones:
- North (From Starwood / Anse Bateau Bay (Batteaux) Valley Blue Waters Inn junction to the government housing settlement communities),
- Central (Top hill, Crapaud Village communities),
- South (Windward main road junction, Lucy Vale village to Lucy Vale Bay).

The project area encompasses the wider watersheds valleys and bays from south to north direction from:
- Lucy Vale Bay
- Tyrrels Bay
- Anse Bateau Bay
- Anse Gouleme Bay
- Belmont Bay
- Starwood Bay

Profile of Bays in the region

Anse Gouleme (Starwood bay)
The location of Anse Gouleme (Starwood bay- named after the estate of that name) is at the northern section of the region, 2.5 km northeast from Speyside main village centre. Access is via a single earthen track.

The geographic position is approximately 11 0 19' 00" N- 60 o 31' 15" W.

The bay is uneven semi-circular shape and oriented facing SE. The bay has two sides north and west. The east side is mainly composed mainly of a number of rock islands. The seaward access is only from the south. The west side of the bay the land rises steeply from the shore line, to the north of the bay is a narrow sandy beach which encompasses the length of the bay. The back beach has a small wetland that makes a transition to secondary vegetation. To the west side of the bay a lager stream from the north. A narrow river valley floor rises to the north. The dominant tree growth on the valley floor is coconut plantation trees and secondary shrubs and grasses. The upper slopes are covered with secondary forest and scrub.

The bay is approximately 250 m wide at its mouth about 400m in depth. The fine to medium coral sand beaches us about 250 m long and gently curved. No where is more than 5 m wide. Immediately behind the beach is a sand ridge about 5 m wide and 1 m above sea level (asl). This sand ridge contains a wetland that is some 50 m in with. The central part of the beach is fringed with coconut palm the eastern part with sedges, and the western part at the river mouth cane grasses.

The local area faun is rich in bird fauna; reported sea turtles (mainly Hawksbill) reported to nest at the beach.

The bay has a number of coral beds, mostly associated with rock islands.

There is no current permanent settlement with land use being mainly hunting. The waters of the bay and river are classed as being clear and not likely polluted. The sand is clean and no debris reported along the tidal-line zone.

Road to Starwood and Belmont Bay at Anse Bateau (Blue Waters Bay) junction
Note the road is paved up to Anse Bateau (Blue Waters Bay) thereafter it is unpaved surface.

Anse Brisant (Belmont Bay)
The location of Anse Brisant (Belmont Bay named after the former estate of that name) is approximately 1.8 km North West of Speyside central village. The access is by a single earthen track.

The geographic position is approximately 11 0 18' 35" N- 60 o 31' 40" W

The bay is a large U shaped oriented facing SE. The land on the west and east sides of the bay rises very steeply from the shoreline, but on the north side there is a narrow sandy beach behind which is gently sloping valley through which a relatively large stream flows from the north entering the bay at its NE corner. There is a narrow beach fringed with a mix species of trees and scrubs. The back beach valley is narrow where on either side is steep and covered in secondary forest.

The bay is 500 m wide at its mouth and about the same depth. The mixed fine/medium coral sand / pebble beach is about 400 m long and gently curved. No where is more than 5 m wide.

There are a number of coral beds in the bay but most are reported as being dead.

The land use is indicates the bay has a number of several buildings behind the beach but not are not in active, use. It has been reported that a hotel application was proposed for the bay.

The bay and stream is reported to have clear waters and are not likely polluted. The beach is clean and no reported debris has been noted on the tidal line.

Anse Bateau (Blue Waters Bay)

The location of Anse Bateau (Blue Waters Bay) named after the hotel located within the bay) is 1 km from NE of Speyside central village. Access is via a paved gated road way.

Anse Bateau (Blue Waters Bay with view of Blue Waters Inn jetty and Inn)

Controlled access with security gate and guard to Anse Bateau Bay- Blue Waters Inn. Note that it was reported that community rights to access private beaches was a concern. It identified by a community member that an unconfirmed community access path way is proposed to Anse Bateau Bay-

The geographic position is approximately 11 0 18' 15" N- 60 o 31' 45" W

The bay is cup shaped and oriented facing SE. The land on the west and east of the bay rises steeply from the shoreline, on the north side there is a sandy beach behind which is a small area of level land. This area is entirely occupied by the Blue Waters Inn.

The bay is approximately 400 m wide and about 250 m in depth. The fine / medium coral sand beach is about 200 m long and gently curved.

There are several coral beds in the bay area.

The land use is occupied by Blue Waters Inn facilities, car park, generator rooms, sewage treatment plan, dive shop and a landing jetty.

Blue Waters Inn Car Park
The hotel maintains the beach site and the waters of the bay are reported to be clear.

View from the right to left Anse Gouleme (Starwood bay) /Anse Brisant (Belmont Bay)/ Anse Bateau (Blue Waters Bay) Region

Tyrrels Bay
Tyrrels Bay (is made of 2 beaches as is divided by two bays Speyside and Lucy Bay beaches and a small cove with Indian Bay) the bay is divided by a small rocky promontory at approximately at mid point. The principle community on the bay is

located on the western side. The community of Lucy Vale is located at the southwestern corner of the bay.

Speyside Bay looking north

The geographic centre of the bay is approximately 11 0 17' 40" N- 60 o 32' 00" W.

The bay is crescent shaped and oriented facing east towards Little Tobago and Goat Island. It is approximately 1.2 km wide at its mouth and 600 m depth.

Speyside Beach
Speyside Beach is located along the north half of Tyrrels Bay and is marginally the largest beach on the bay. It is backed by large, nearly level plain that is now occupied by the community of Speyside. The large stream of Doctor River enters the bay near the northern end of the beach. At the point on shore current s shift the beach so as to black the rive mouth creating a small lagoon between the beach and the road crossing.

Upstream view of Doctor River

Doctor river coastal river mouth
Note the sand bar at the river mouth forming a small lagoon

The hill/ mountain surrounding the community rises to a ridge height of 545 m at Man of War Hill / Pigeon Peak.

In the past the river flood plain and the lower foot slopes were extensively cultivated with agricultural cash crops and very little natural vegetation exist on the lower slopes. The present vegetation is mainly secondary growth and tree crops.

The area is relatively rich in bird fauna. Sea turtles are reported to nest on beaches in this region.

The lands use of the region is mainly build settlement of 2 hotels/inns Manta Lodge and Speyside inn, restaurants, dive shops, housing settlement, government buildings, and commercial shops and supporting infrastructure of road and drainage network. There is a coastal sea wall along some parts of the bay.

Manta Lodge hotel

Speyside Inn Hotel & Restaurant

Extra Divers Dive Shop Speyside Bay

Coastal sea wall along the Speyside Bay Windward Main

Road   Red Man Restaurant along the Speyside Bay Windward Main

Davis Guest House along the Speyside Bay Windward Main Road

Jemmer's Restaurant along Speyside Bay Windward Main Road

Jemmer's Restaurant

Bird watchers Restaurant along the
Speyside Bay Windward Main Road

Sea front settlement and business along the coastal wall
Note clearance of sea front buildings

The beach is use by visiting tourist and local users. There are no public tourist beach changing facilities on this region of the beach. At the northern end is runs of a sugar mill and hotel where the coastline area has a small community 'park' like maintained along the beach front with rest areas, benches and landscaped plants.

The beach are is cleaned daily by local Community Environmental Protection and Enhancement Programme CEPEP and the beach for the most pat is clean except where it is close to discharge grey water drains from the community and restaurants.

Lucy Vale Beach or Trios Rivieres Beach (within Tyrrels Bay)

The location of the beach is in the southern half of Tyrrels Bay. It is backed by large nearly level plain that is now occupied by a high school, playing field, and wetland, and community services such as a jetty, beach facilities, and a fish handling facilities, a forestry building and tourist information boot.

Lucy Vale Beach or Trios Rivieres Beach (Tyrrels Bay)

Lucy Vale Beach and Speyside Beach Junction
Note main exposed water main and main Road signage

Three stream flow across the food plain and enter the bay near the centre. The streams converge near the beach and create a wetland conditions. On shore currents have shifted the beach along with resent of a paved road way which has created a barer, to block the mouth of the stream outlets, creating a small lagoon conditions.

Lucy Vale Beach or Trios Rivieres Beach (Tyrrels Bay) wetland

Lucy Vale Beach or Trios Rivieres Beach (Tyrrels Bay) wetland
Note drainage water line and road way bridge which on the beach side can block drainage flow

The hill/mountains surrounding the community rise to a height of 545 m at man of War Hill / Pigeon Peak to the North West 389 m at Windson Peak to the southwest and 270 m at Lucy Vale Peak to the south east.

In the past there slopes and flood plan was extensively used for cash crop agriculture estates which ahs removed the natural vegetation. The present vegetation is secondary growth and tree crops.

The land use is build settlement in the Speyside and Lucy Vale communities immediately back of the back that receives a significant amount of daily interface.

The area is relatively rich in se bird and wetland fauna. Sea turtles are reported to nest on the beach.

The built communities of Speyside and Lucy Vale are immediately back of the beach and there is significant amount of human interface and influence. At the southern end of the beach the concrete pier is used by fishermen, glass bottom boat operators, dive operators and community shore fisher folk.

Only the beach facility, fish handling depot, tourist information and forestry offices occupy the area immediately behind the beach. The beach is fringed with coastal vegetation of trees, coconuts and sea grape trees. Some life stock grazing and husbandry is one along the wetland area behind the beach. The southern end of the beach is used for sea bathing and recreation for relaxing.

The condition of the site is considered clean, considering that there is a significant built community located adjacent to, and immediately behind, the beach, and that this is a significant fishing port. The waters of the bay and stream are clear.

Wetland is subject to run off flooding which has flooded the high school complex.

Lucy Vale bay

Lucy Vale bay is located approximately 1 km SE of the south end of Tyrrels Bay, from which access is by a single earth track from the top of the hill behind Lucy Vale bay community.

The geographic centre of the bay is approximately 11 0 16' 50" N- 60 o 31' 40" W.

The bay is a small V shaped, oriented facing SW. The land on either side of the bay rises very steeply from the shoreline, with the NW corner having a narrow sandy beach behind which there is a small gently sloping valley.

The bay is approximately 250 m wide at its mouth and 350 m depth.

The bay has no human settlement and isolated and is primarily used only by local community which is only accessible by foot.

Indian Bay

Indian bay (possibly named after the Amerindian heritage of the village) is a very small cove with one holiday home owned by the Bermudez family owners of a large commercial business based in Trinidad.

Indian bay   Lucy Vale bay

Infrastructure

The following is a profile of the main infrastructure facilities for Speyside village.

Road network and infrastructure
There is one main road that traverses the village, the Windward Main Road which is paved there are also paved secondary access roads providing into village sub communities. Some roads have slipper drains.

Unpaved agricultural access roads and pathways access hillsides and some undeveloped bays on the outer edges of the Speyside village.

The main paved road access in and out of Speyside village is only the Windward Main Road to either Charlottesville or Delaford villages.

The Windward Main Road is subject to a number if land slippages

Most sections of the road need repaving and road signage upgrading. Road safety is seen as a risk as speeding is not monitored or regulated. It is recommend that speed bumps may be need for some sections of the village that pose a risk to pedestrians and the construction of pavements are needed in some sections of roadways.

It is recommended that road engineering and design address the risk of road construction and slope failure safety.

A major landslip between Delaford and Speyside.

Main Windward road through Spayside village
Note Road signage and no pavements present. Road in need of resurfacing and demarcation. Traffic speed risk hazard especially at night.

Landing Jetty

A modern concrete landing jetty is located on the southern region of Lucy Vale Beach Tyrrels Bay.
It is recommended that maintenance and jetty safety should be managed at all times.

Concrete landing jetty located on the southern region of Lucy Vale Beach Tyrrels Bay

Road safety

There are limited road signs within the region.
Though there are street signs it is recommend that more speed and safety signs are need through out he community due to lack of pavements, life stock and stray animals along roads.

Marine hazard public safety notice

Along the Speyside bay there is a sign giving notice of marine hazards.
More important community signs are recommended through out the community.

Marine hazard public safety notice

Swimming safety sign at Speyside jetty

Drainage

Man made paved drainage
There is paved drainage systems present through out all main sub communities
The Top hill community has paved hill side drainage
Some road sides have run off drains.
All communities need to address drainage design, capacity and management to address water flows and runoff especially during rain storms.

Examples paved drainage channels within Speyside Village

Example of steep hillside drainage   Above the drain is filled with garbage
(Top Hill Village)   which outflow is to the sea coast.
Note the steep slope of the drainage   (Settlement village)
System,

Post Office/ Mail Services
1 Post Office is available with 1 other TT Post outlet advertised along the Windward
Main Road. The mail system is still an important service within the community
especially for pensioners. The post office is some ward isolated from the main village
communities.

Speyside Post Office

Public Recreational facilities
1 public beach facility with 1 beach life guard tower at Lucy Vale village bay
1 Speyside main sporting ground located within the Speyside/ Lucy Vale valley
1 small sporting grounds in Lucy Vale village
3 small public rest stops parks
There are a number of public benches along the sea coastal road. Many are in need of
repair. It was observed and recommend that there is need for more through out the
community.
Over all sport development has to be supported with a sustainable system of training,
skill development, services and education. The community sporting programme
should look at traditional and non traditional development for all age and genders.

There was the express of the need for sea sports and training in water safety, swimming and water first aid.

There is need for upgrade and development of public parks through out the community to build community pride and recreational spaces. A purpose built children's playground was recommended.

Example of a public bench along the sea coast

Speyside public beach facility

Speyside main sporting ground
Note viewing stand under construction

Speyside main sporting ground

Public Rest Park

Speyside Water Wheel Beach Park

Speyside Public Art park

Speyside look out nature and view Park

Community centre

There only one main village community centre is present which is being upgraded. The Speyside community centre was seen as needing more upgrade and use. All villagers express that there is need for common meeting places with proper services.

Speyside Community centre

Libraries

There are no public libraries in the village. The Speyside high school has a school library.

There is a recommend need for a community public library. It identified that illiteracy was present in the community and the need for library services.

Public sidewalks and steps
There are some public side walks and steps within the community. Paved steeps can be seen in the Top Hill community but public side walks are limited along main and secondary roads.
It was observed that there is critical need for side walks and steps as pedestrian are at a high risk walking along street especially the main roads as there are many blind corners and some drives driving vehicles at high speed through the village above the speed limit.

Example of a paved steep in the Top hill region

Coastal sea wall
There is a coastal sea wall which is constructed along Tyrrels Bay Speyside bay in two main parts of the Bay. The wall plays a critical function against sea erosion defense and to act as a sea retaining wall for the Windward Main road way as well as to protect human settlement on the coastal margin. The community is vulnerable to storms, sea surges, and coastal erosion. The north region of Tyrrels Bay/Speyside bay has been reported considerable of coastal shore erosion. All of the region coastal beaches and lowlands valleys close on or close to sea level of all bays are at risk to sea level rise impacts.
It is recommended that the risk of coastal erosion be addresses and that the sea wall infrastructure be upgraded and redesigned for foreseeable future hazards such as storm surges and sea level rise.

Tyrrels Bay Speyside bay south sea wall
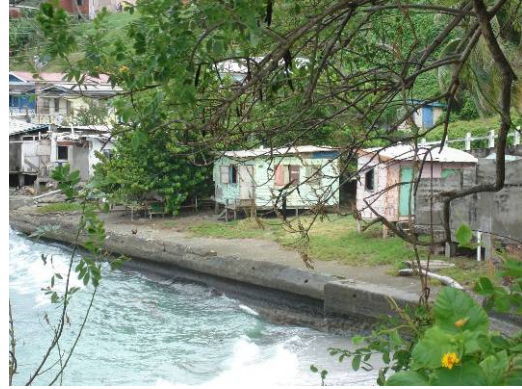
Tyrrels Bay Speyside bay north- sea wall
Note the proximately to human settlement and road way to the background

Public housing
There is a public housing scheme located in the central village.

Housing is identified as a community need where it is recommend that land tenure regularization and housing improvements and development assistance be assessed and addressed.

Gas stations.
There are no gas stations in the village.
The closest gas stations are located in Roxborough and Charlotteville.

It is recommended that an assessment for a community gas depot be assed due to the need for fuel for fishing boats and cars.

Ice making facilities and Cold storage
There is no ice making or cold storage facilities in the village.
It is recommended that a local private of public system be developed to support the supply of this service.

Cooking Gas supply

House hold and commercial gas supply is trucked into the village.
It was observed a possible hazardous management of LPG tanks at on Hotel along
Speyside Bay.
It is recommended that a system of supply and safety assessment of LPG cooking gas
be done and monitored to maintain safety standards of use and storage.

Example of a commercial operation with poor LNG storage controls. Mata Lodge
Hotel

Fish processing facilities
The main Speyside fish processing facilities is located away from the min jetty and
there is only a basic fish cleaning facility in the village which can be upgraded to a
storage/ processing facility. All processing waste is disposed into the sea. The Lucy
Vale fishing depot is in need for a clean processing facility, landing bay and a boat
house for repairs and storage.
It is recommend that a physical upgrade and health and safety standards be put in
place and be maintained fish processing facilities. A fish processing facilities with
high f health and safety standards or Lucy Vale fishing depot is recommended.

Speyside Fish processing facilities

Current Lucy Vale basic fish processing facilities

Public cemeteries
There are two public cemeteries in the village one on Top hill and the other along the main road at the entry of the village from Delaford.
It is recommended that public cemeteries be maintained and health and safety standards be maintained.

Public cemeteries in the village of Top hill

Utilities

Electricity
Public electricity supply present for all village communities. The community experiences fulgurations in electricity supply which poses a risk to household appliances. Most electrical poles are in need for repair and stabilization and would be a hazard in the event of strong storms.

Tobago is supplied with electricity via two submarine cables between Toco (Trinidad) and Tobago that have capacity of 20.0 MW. Scarborough has a Power Station which is a standby with capacity of 10.7 MW +. The electricity supply for Tobago was considered to be 99.7 percent reliable and Tobago is completely served with electricity.

The community reported problems in the supply and regulation of the electricity supply which causes damage to house hold appliances.

It is recommended that the risk of a stable electricity supply to the village and upgrading of all electricity poles and street lighting be addressed as a high priority.

Examples of hazardous electrical poles

Village lighting
Road and street lights present in some areas.
Increased street lighting is recommended in critical areas through out the community.

Examples of hazardous electrical poles

Potable Water supply
House to house piped drinking water supply present with most houses and business having private water tank storage systems.
The system of supply of water is via intakes from the rivers coming from the surrounding forest which is captured and treated via chlorination and filtration. Production quality and quantity varies with the dry and wet seasons, which affects turbidity. No documented information on the size, condition, and efficiency of water supply for Speyside village sourced. The community has access to drinking water also via a limited number of public standpipes.
The community is at critical hazard risk if water supply is affected. A more effective system of water supply management and distribution is recommended in the event of lost of supply or contamination due to heavy rains.

Examples of private storage tanks
Speyside Inn

Private home

Main water main passing along the Speyside Windward Main road.
Note exposure of pipe line passing over a min paved drainage water way at risk of damage during flooding or accidents off the crossing bridge.

Exposed drainage pipe line along the road to Anse Bateau (Blue Waters Bay) which supplies Blue Waters Inn

Example of a functioning public stand pipe

Sewage, Storm water and Grey water and liquid waste control

Septic tanks and latrines have been the traditional way sewage has been controlled in for Speyside village.

Blue Waters Inn was the only identified operation which has a private functional sewage treatment plant.

There are no facilities for storm water, grey water and or liquid waste disposal in place in the village for control and treatment of run off and or house holds/business liquid waste. Almost all liquid waste is drains into the sea coast increasing the pollution levels of the bay.

It is recommend that an assessment and designed upgrade of septic tanks and latrines to improve public health risk, also storm water, grey water and or liquid waste disposal control, treatment and management should be addresses holistically.

Drainage waste outfall for the road and hotel on into Doctor River mouth on Speyside bay

Storm drain along the Speyside Windward main Road that was reported that becomes flooded due to limited capacity during rain fall

Example of a poorly designed flood drain which can pose a hazard

Example of a roadway (Lucy Vale Top hill) which turns into a flooded drainage course due to absence and poorly designed side drains to carry off surface water during rain downpours.

Example of a private sewage Septic tank in installation process

Community waste management

Liquid waste
All gray water and household liquid waste is disposed of down public drained that all access the coastline. This is a serious health and safety hazard to the community as well as an ecological treat to near shore environments. Liquid pollution of waste and fresh water run off can impact negatively on the coral ecology of the bay.
A community waste management programme is recommend for the community.

Solid waste
Weekly public solid waste disposal collection is done in the village
1 Hotel (Blue waters Inn) disposes of waste out of village to the main public land fill.

It was reported some homes and hotels burn solid waste, which is a fire hazard to the community and properties.

Solid waste bins and open garbage heaps were observed through out the community that are not regularly cleared. They all pose a health hazard and is a poor aesthetic feature of the village for tourism and local environmental quality and standards.
Observed garbage comprise of a lot of plastic and paper materials.
It is recommended that the community critically needs to address waste management control and disposal.

Examples of community sold waste collection facilities in Lucy Vale
Note open garbage which is a health hazard and stray dog feeding on garbage

Examples of community sold waste collection facilities
Upper Top Hill and Settlement Village Windward Main Road
Note open garbage bin which is a health and safety hazard garbage is next to drainage
course which spill can create blockage and health hazard

Examples of community sold waste collection facilities
Lower Top Hill
Note open garbage bin which is a health and safety hazard

Examples of community sold waste roadside pile
Speyside bay north, near the Speyside Waterwheel area
Note open garbage which is a health and safety hazard.
This garbage showed signs of previous burning which is a fire hazard

Second garbage pile located near Government settlement Scheme area
Note open garbage bin which is a health and safety hazard.

Examples of beach sea shore garbage along Spayside beach near Doctor River mouth
Note the high numbers of plastic bottles a health hazard to se turtles

Health

Health Services

Community health centre and access to medical services
There is only one Community health (out reach) centre (Not a full Health Centre), which was opened in 1981. 1 nurse and 2 nursing assistant with 1 doctor visiting once a week. The main health center with 1 Ambulance is located in Charlotteville. This facility is being upgrade to a community hospital. Charlotteville Ambulance service is available from 8 am/4pm. The only major medical facility-hospital is located in Scarborough.

There is need for an 24 emergency ambulance and medical service in the community especially during after normal hours.
The community expressed need for community first aid training.
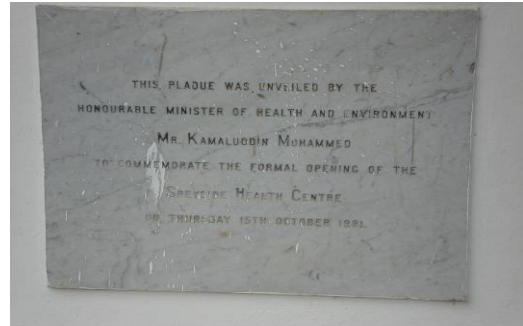
Speyside Community health out reach centre

Sexual lifestyle risk.
Tobago has been reported to have a high degree of sexual transmitted diseases risk in the local community. The risk of HIV/AIDS is prevalent due to un protected six. Evidence of condom use was observed from spent condom seen disposed off in public at a private Speyside community park. Proper disposal education used should be done in the community.

Recreational site and example of disposed condom and wrapper as an indication of awareness and use of condoms in the community.

Animal welfare / health

A number of domestic animals were seen along road ways. Animal welfare and health care was observed to be needed for one stray dog in the community. Community did not show much care for stray animals.

It is recommend that a programme for animal welfare and health care for the community be developed .

Stray Dog along the Speyside Windward Main road
Note animal in critical need for welfare care.

Safety and Security

Police

There is no police post in the community. The community has to rely on the Charlotteville police station for any response.

It is recommend that greater community outreach and patrols with faster response capacity for the community be development. The police service should be seen as a community asset to the community.

A low level of crime is reported from the community. Pretrial larceny is reported by framers.

Port of entry Immigration and customs post

There is no immigration and customs post in the community. The community has to rely on the Charlotteville as the closest official sea port of entry.

It is recommend at signage informing sea uses be placed at the landing jetty of the immigration and customs services are located in Charlotteville.

Disaster management and response

The community has a equipped and staffed emergency response centre team CERT/ NEMA office, but community members reported not knowing of a community emergency disaster response plan or having a active relationship with the local CERT/ NEMA team. The community is willing for training to respond to local community disaster risks.

It is recommend that greater community hazard awareness, training, assessment, drills and sustainable interface should be developed with all community stakeholders and the CERT programme.

Speyside CERT/ NEMA Centre

THA Works Administrative and Depot Centre

The THA has a main works and infrastructure office in Speyside., which forms an important infrastructure resource base.

The risk of the diesel tank should be removed. The works programme for the community is recommended to be made public and a community works development land use plan should be done and made public.

THA Works Administrative centre.

THA Works Depot centre.

THA Works Depot centre.
Note the high hazard risk of a large diesel tank on the Windward main road verge

Fire fighting systems
The closet fire station is located in Roxborough. The community has some fire hydrants but not in every community.
Fire extinguishers were observed in hotels and restaurants. Hotels interviewed did not indicate that they have a fire emergency plan except Blue Waters Inn. No Hotel interviewed show a written emergency plan.
A house hold and community fire emergency plan is needed for the community. Fire fighting training and a risk assessment are need for all communities.

Transport

Land
Public bus service is provided to the village 2 to 3 times a during the week days less on weekends. There is a need for bust sheds through out the village.
There is no regular/reliable road side public taxi service.
Lack of regular and cost effective public transport is a risk to development and communications.

Example of local Public Buses
Parked at late afternoon in Charlottesville for return trip.

Some villagers have there own private cars.

Transport services is a critical need in this community and there is need to improve transport services.

Sea
1. 1 Coastal landing Jetty
2. The community has a number of local fishing boats
3. Glass bottom boats

The community needs to improve its sea transport and services via developing health and safety seamanship and safe boat storage and maintenance facilities. There is the need for a boat engine repair services and training in this skill area.

Communications systems

The following is a profile of the Speyside community communications systems**:**
News papers
No daily news papers is available in the community 5 months ago.
The community needs a regular daily supply to public news papers to provide communication and community literacy and development.

Telephone
Telecommunication land lines poles present
2 digital cell phone providers present with cell towers located within the community and surrounding ridges
1 main landline phone line
There is a need for public pay phones through out the community.

TSTT Phone communications hub system

Radio
Mainly only 1 Public Radio station reception signal is received within the village.
The community need greater access to public radio, a community radio station for the area is recommended a critical communications tool especially for community development and emergency awareness and communications.

TV

There is no easy access to public TV stations as reception signals are not received within the village.
The community relies on the following means for TV communications
1 Direct TV
1 Cable TV
DVD videos

Demographics/ Age

The population profile of Speyside village from the Central Statistical Office., giving population and housing census for 1990 and unofficial 2000 census figures are as follows:

Table 1.Table showing population profile of Speyside village

Village	Number. of households	Average size of Household	Number of Males	Number of females	Total population 1990	Total population 2000
Speyside	254	4.2	569	495	1064	960

Source: Central Statistical Office. Population and housing census 1990 (Unofficial 2000 census figures)

Education

The education services available to the community are 1 Pre School, 1 primary school and 1 secondary school (350 students). Government post secondary continuing training programmes YIEPP and MUST programme are also available.

Formal education system
The Speyside village has the following schools present:

- 1 Pre school
- 2 Primary school
- 1 Secondary school

Special programmes
MUST and YIEPP programme
There is no day care facilities in the community.
It is recommended that a review and linking of education programmes be done to support the community special needs.

Speyside Pre School

Anglican Primary School

Speyside High School location

Informal education training
- Family life and life skills education at done at home
- Agricultural and fishing training from work experience
- Hotel, guest house and restaurant staff training from local in house training

Churches

Total number of churches in the Speyside community is 5 which all are of Christian denomination.
Number of churches and denominations:
- 1 Baptist
- 1 Gospel Hall
- 1 Adventist
- 1 Pentecostal
- 1 Anglican

It is recommend that greater community denomination communication be maintained to develop dialogue.

Speyside Gospel Hall Church

Cultural/Festive Activities

The main Cultural/Festival:
- Village Harvest
- Fisher man fete
- Public Holidays
- Tobago Heritage festival
- Seasonal Sports events
- Seasonal community events weddings, birthday parties etc

Historical festivals (not done again)
- Village Carnival

The community has a number of musicians and there is a small steel pan side in the community.

It is recommended that cultural events and activities be promoted and advertised. There is the need for training and event management development.

Sports

Types of community and organized sports reported:
- Football
- Net ball
- Basket ball
- Cricket
- Boxing
- Dancing

It is recommended that greater community integrated sports programmes be developed to benefit all in the community. The development of traditional and

non traditional sporting programees should be also seen as a community development tool.

<u>Agricultural production</u>

Agricultural production is at a non intensive commercial limited only to a few farmers within the village there is some home level back yard Kitchen gardens.

Non Commercial Agricultural production
Kitchen gardens

Main livestock reported to be reared in the Speyside/Lucy Vale/Top Hill/Government Settlement villages proper:

- Rabbits
- Goats
- Sheep
- Cows
- Chickens

It is recommend that agricultural revitalization, via targeting market demand production, organic gardening as well as specialized crop and livestock (wildlife farming e.g.) production, farmer skills training and resources development, farming health and safety, agricultural land access, agricultural land use and tenure rationalization with market aces support and development for local and external markets in the village.

Traditional processing of corn stems and leaves for livestock silage for animal fodder. This is an important agricultural skill that can be encouraged for other farmers to use to supplemental feeding material, especially during the dry season. Can be used for no graze livestock farms for goats and sheep.

Example of livestock - Flock of sheep within the Top Hill village

Land tenure

Information non land tenure and land use management is limited for the project area. The North East Tobago Management Plan study reports that the project area has mostly land holdings of (estates and small plots) that privately owned with a smaller percentage being state and forest reserve lands. In recent years THA has purchased land from estates mainly to provide land for public housing (Speyside settlement project) and also for agricultural production.

Land ownership is a major issue in the project area, as most lands are owned as large estates but mainly due to the need to regularize land titles of ownership.

It is recommended at that land tenure rationalization be conducted for the region.

Building forms

Most building in the project area is made of concrete and block some are made of wood. Recently built and old building do not have hurricane roofing retro fitting or those on slopes have hazardous pillories infrastructure in the event of earthquakes. Most if not all homes are at risk of land slippage as the majority of the community is on or in close proximately to hill slopes.

It is recommended at that building codes and safety awareness, training and incentives for health, safety and hurricane building retro fitting be conducted in the community. Specific critical assessment and mitigation of buildings and settlements at hazard risk should be done in the short term.

Examples of building forms in Speyside village highlighting construction and location hazards
Note non hurricane roofing and building on steep slopes with suspended pillories (Top Hill village)

Examples of building forms in Speyside village highlighting construction and location hazards
Note older wooden building on steep slopes with suspended pillories. Note no guttering and possible hazardous electrical connections. (Lucy Vale Village)

Example of the village conditions during a rain storm
Note the basic housing condition of some villagers (Government Housing Settlement Scheme)

Example of the village conditions during a rain storm
Note the full capacity of the drainage (Government Housing Settlement Scheme)

Examples of building forms in Speyside village highlighting construction and location hazards protection.
Note hurricane straps on roofing to hold roof down. The second picture shows the roof guttering system around the house. This house has a hurricane bunker and storage supplies of water. (Lucy Vale Top hill)

SPEYSIDE COMMUNITY MAP
&
Transect Walk

SPEYSIDE COMMUNITY CAPACITY RESOURCE MAP

SPEYSIDE

HAZARD MAPS

10. RISK ASSESSMENT IN THE SPEYSIDE COMMUNITY

What makes the people and community of Speyside Vulnerable?

Particularization of categories and factors for Speyside Vulnerability Assessment that were identified by the group community members are listed below.

Physical / material vulnerability	Social / organizational vulnerability	Motivational / attitudinal vulnerability
- Seaside location of community - Insecure sources of livelihood - Risky sources of livelihood - Lack of incentives and development over means of production (land, farm inputs, animals, capital, etc.) - Inadequate economic fall-back mechanisms - Outside dependency on food can lead to the occurrence of acute or chronic food shortage - Literacy and Lack of adequate relevant skills and educational background - Lack of basic services: sewerage treatment, community disaster planning, communication. - Overexploited natural resources - Exposed to violence (domestic, community conflicts,)	- Weak family / kinship structures - Inadequate leadership, initiative, structure to solve problems or conflicts - Ineffective decision-making, people / groups are left out - Unequal participation in community affairs - Rumors, divisions, conflicts: age, gender, ideology, etc. - Absence or weak community organizations: youth, cooperative - Isolated - Lack of coordination with the local CERT Team. - Absence of information sharing - Skills training that are funded are not relevant - Drug/Alcohol Abuse by young people	- Negative attitude towards change - Passivity, fatalism, hopelessness, dependent - Lack of initiative, no 'fighting spirit' - Lack of unity, cooperation, solidarity - Negative beliefs / ideologies - Unawareness about hazards and consequences - Dependence on external support / dole-out mentality

There were five (5) Hazards identified in the Speyside Community. These were:
Hazard 1: Environmental Degradation
Hazard 2: High Wind/   Rain/   Hurricane
Hazard 3: Social and Health Issues
Hazard 4: Unemployment/ Livelihood
Hazard 5: Youth Issues

The first step was identifying for each Hazard the Potential Risks to the community; the areas of vulnerability and capacity that exists within the community.

The second step was identifying for each Hazard Actions that could be undertaken to transform vulnerabilities identified into capacities.

The third step.
Once the groups carried out the vulnerability analysis and identified the actions to transform them into capacities, these activities were then identified as:
Prevention actions: action which tries to avoid the possibility of creating a risk in the community of Speyside

Mitigation actions : action that attempts to protect, strengthen, rehabilitate or reconstruct

Preparation actions: action that aims to strengthen the capacity of the community of Speyside to respond in an effective and efficient   manner

The fourth step involves a CIA Analysis

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

Now, the Speyside community participants considered each and every action to transform vulnerability into a capacity and decide whether it can manage this change itself. In order to do this, it was decided 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***.*

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 and the THA for future developmental planning.

Hazard 1: Environmental Degradation

Hazard	Potential Risk	Vulnerability	Capacity
Environmental Hazard Climate Change Sea level rise	More Severe Weather Loss of coastline Lost and degradation of coastal resources beaches etc Damage and lost of property Impact and lost of coastal infrastructure, Roads, buildings, water mains, electrical and telephone poles etc Low lying coastal areas of human settlement, infrastructure and natural ecosystems at risk to being denudated and impacted. Coastal ecosystem processes disrupted or changed such as for coastal processes and habits for species such as marine sea turtles nesting sites. Disruption and lost of economic lively hoods and lifestyles Impact to ecosystems and ecosystems processes such as impact to coral reefs and coastlines and forest systems Environmental damage Increased changes to ecosystems and plant and animal life processes Coral reef impacts Vegetation impacts Human health impacts TOURISM DECLINE	Low lying coastal community Coastal public and private sector activities, businesses, fishing landing areas, beach bathing, tourism activities etc Coastal ecosystems and processes, coastal trees, coastal habitats sea turtle nesting beaches Lost of lifestyles Insufficient and inadequate training Impacted hillside ad coastal communities Non hurricane designed or retro fitted buildings Inadequate infrastructure and capacity such as drainage systems Lack of a community response plan Human exposure health risk impacts to skin etc Lack of ecosystem and environmental monitoring Absence of Ecosystems and habitats recovery and restoration response and location changes Inadequate Prevention and response training	Willingness of community for information and education awareness training Prevention and response training Lively hoods and economic response and location changes CERT and NEMA Tobago active Community groups present Limited community shelters Health services and CERT present to participate in process within the community

Hazard	Potential Risk	Vulnerability	Capacity
Environmental Hazard **Pollution**	Health and safety risk to human , natural resources environmental and community and to ecosystems land and marine	Vulnerability to health and safety risk to human , natural resources environmental and community and to ecosystems land and marine Human settlements and economic activity health and safety risk Ecosystems within the land and marine environments Pollution of ecosystems Exposure to health hazards Ignorance to pollution risk Ignorance to pollution sources, prevention and responses Impact to economic activities such as tourism and fisheries if for example the coral reefs become polluted	Willingness of community for information and education awareness training Prevention and response training To address pollution via Health services and CERT present to participate in process within the community

Hazard 2: High Wind/   Rain/   Hurricane

Hazard	Potential Risk	Vulnerability	Capacity
High Wind/ Rain/ Hurricane	Loss of life, injury, , psycho-social trauma loss property, agricultural loss, natural resource degradation, economic downturn, destruction of infrastructure, Erosion, landslide, fire & electrocution, damage and loss of utilities, displaced persons, food shortage Environmental damage.	Seaside community made up of low lying and hillside areas, Lack of community togetherness, poor construction, high vegetation, large trees close to homes, poor infrastructure, poor drainage, poor sanitation cesspit tanks, insufficient training, lack of disaster plan, evacuation plan community site plan, leaning electrical poles, Transportation, Health Services, Communication.	Educational, training, history, skilled persons, nurse, Health Center, Schools, Churches, Shelters, food from shops/ S market, two evacuation routes by land and possible evacuation by sea, young vibrant persons, Village Council, CERT, Ministry of Works. Willingness of community for information and education awareness training, prevention and response training and

Hazard 3: Social and Health Issues

Hazard	Potential Risk	Vulnerability	Capacity
Health Issues Diabetes Hypertension Access to 24 hour Heath Services HIV/Aids Drug abuse **Social Issues** Domestic Violence Single Parents	Poverty, reduction in the work force, increase health care cost, illness, death Child Delinquency	no trained health persons resident in community. Ignorance, lifestyle, economics, drug users, cultural discrimination and stigma, peer pressure, l lack of acceptance by community, no police presence community togetherness, Lack of counseling services	Willingness of teachers and healthcare professionals, ability to change, doctor, nurse and 2 nursing assistants, health Center

Hazard 4: Unemployment/ Livelihood

Hazard	Potential Risk	Vulnerability	Capacity
HAZARD: Unemployment/ Livelihood	Poverty Family Breakdown Health Issues Crime Drug/Alcohol related Issues Economics in the community Youth at Risk Higher incidences of emergencies Poor Diet Depression Unfaithfulness Threat to personal relationship communication Personal/Community Safety Pressure on businesses	Lack of education/ Illiteracy Lack of relevant Training Programs/Skills Training appropriate facilities youth adults lack of Counseling services lack of Social Organisations such as Clubs lack of Communication avenues – availability of Jobs and/or training Police/security access or mobilization Threat to the Tourism industry	Awareness of Drug/Alcohol related Issues Economics in the community Willingness of Individuals to be gainfully employed Church Groups Health Centre

Hazard 5: Youth Issues

Hazard	Potential Risk	Vulnerability	Capacity
HAZARD: Youth Issues 1. Unprotected Sex	- Teenage Pregnancy -Abortion - STD's - HIV/AIDS	No enough youth friendly counseling on sexual & reproductive health/ Not enough positive activities/ Not enough support for parents Peer Pressure Lack of knowledge/low literacy Communication problems	- Love/Committed people - Health Center - Sport facilities - A vibrant youth population - Primary and secondary schools - A local Radio Program
2. Drug Abuse: alcohol, marihuana, cocaine, crack	- Health problems: - Violence/ Abuse - - Unprotected Sex - Reckless driving Death Reduction in working population	Media influence/ music/ movies Not enough programs/ positive activities/ Limited access to job opportunities No enough support for parents Peer pressure Lack of knowledge/low literacy No enough counseling Communication problems Accessible drugs	Committed people Health Center Information available Sport facilities Primary and secondary schools A vibrant youth A local Radio Program Lets Dance group - UNICEF, Red Cross, THA, Village Council and TTASPE Alliance

| 3. Violence/Abuse: Crime, domestic violence, corporal punishment | - Injures and deaths
- Prison
- Mental problems
- Unstructured families
-Unemployment
- Less Tourism
- Fear, lack of community cohesion | Culture of violence/Media influence/music/movies

Low Professional Skills/Poor access to small business

No enough youth spaces in the community

Limit participation of youth in common issues

Not enough support for young parents

Peer pressure

Drug Abuse

Not enough programs/positive activities/low self seem

Lack of knowledge/Low literacy

Not enough counseling

Communication problems | A strong Caribbean culture/identity of being from Speyside

A professional development program

Religious groups,

A Community Center

UNICEF, Red Cross, THA, Village Council and TTASPE Partnership

Committed people

Sport facilities

A vibrant youth

Primary and secondary schools

A local Radio Program

Lets Dance group |

Transforming vulnerabilities into capacities

HAZARD -	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
HAZARD: Climate Change Sea level rise	Lack of education and awareness	1. Community information and education awareness training 2. Prevention and response training 3. Health, safety and environmental training 4. Public awareness meetings and community awareness communications campaign
	Lack of planning	1. Risk ad hazard identification, mapping an assessment 2. Development of a community response plan
	Lack of infrastructure prevention and response planning	1. Assessment of Infrastructure response and location changes 2. Settlement and development response and location changes 3. Upgrade and retrofitting of buildings and infrastructure to address storms and sea level rise
	Lack of lively hoods and economic response	1. Lively hoods and economic response and location changes
	Ecosystems and habitat management response needed	1. Ecosystems and habitat management recovery and restoration response to changes 2. Increased protection an conservation of the environment

HAZARD -	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
HAZARD – Pollution	Vulnerability to health and safety risk to human , natural resources environmental and community and to ecosystems land and marine Human settlements and economic activity health and safety risk Ecosystems within the land and marine environments Pollution of ecosystems Exposure to health hazards Ignorance to pollution risk Ignorance to pollution sources, prevention and responses Pollution is impacting to economic activities such as tourism and fisheries if for example the coral reefs become polluted	1. Pollution assessment and mitigation 2. Community stakeholders village council and villagers to develop a pollution management plan 3. Community stakeholders village council and villagers to realistic pollution programme.

HAZARD -	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
High Wind/ Rain/ Hurricane	ridged community and low lying costal community	1. Install early warning system 2. Build drain containment walls, , planting of trees, banking flood diversion drains
	Poor construction	1. Analyzing buildings to assess 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.
	large trees with exposed roots close to homes	Identify potential risks to homeowners
	poor infrastructure	Advocate to Government by Village Council for proper maintenance and upgrade of drainage systems and leaning electrical poles
	poor drainage	1. clean and maintain drains,
	high vegetation, litter problem	1. Monthly cleanup programme with school and youth group; 2. Awareness Programme 1. Set up of Environmental Group
	Poverty	1. Strengthening the roofing structures , retrofitting of homes, skill training programme 2. needs assessment (skills training, self-employment, income-generation-alternative sources
	Lack of Education	1. Public awareness programmes (accessibility to and availability of information, identify agencies which can provide resources for education,
	Inadequate public awareness	1. Community meetings 2. Information dissemination (flyers, radio, newspaper, TV, schools and other public institutions
	No trained health persons resident in community	1. First Aid Training for Community residents

	Lack of proper planning	1. Site plans develop 2. Develop early warning system 3. Develop community based plan 4. Conduct regular practices ensuring entire community participation 5. Conduct house to house visits and exercises/simulation 6. Work with community based organizations (eg. Faith based, young people, fishermen) 7. Inform residents with radio programme and flyers 8. Conduct community and school drills 9. Coordination between CERT and Community.

HAZARD	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
Health Issues Diabetes Hypertension HIV/Aids Teenage Pregnancy Access to 24 hour Heath Services S̲ocial Issues Drug abuse Domestic Violence Single Parents Access to 24 hour Heath Services	Lack of knowledge/Education	1. Community Health Aids provide ongoing education on targeted health topics. 2. Provides life skills education for school children. 3. A radio talk show programme to provide a space for students not in school and citizens in the community to discuss topical issues and host professional speakers
	Lifestyles	1. Invited social development groups deliver talks on healthy life styles 2. Initiate Red Cross Project Life in conjunction with THA.
	Unemployment	1. With the addition of work force skill training (mason, block making, etc.) persons are empowered to find and keep jobs in the community and town.
	Discrimination and stigma,	1. Red Cross uses the TWC Programme and the Fundamental Principles and Humanitarian Values as the basis for providing an environment that reduces discrimination and stigma starting with the high school children.
	Limited Social Support Services	1. Sport provide alternatives and reduce the impact of peer pressure. 2. Youth leadership program assures continuity of youth groups 3. Re-activated youth group as part of Village Council. 4. Improved coordination and collaboration with social youth groups
	Support for families	1. Parenting skill classes especially for single parent and teenage parents 2. Day Care facility for the single parents and the elderly – to provide respite care and stimulating activities 3. Counseling Services
	no trained health persons resident in community Access to 24 hour Heath Services	1.Red Cross First Aid Training for Community residents

HAZARD -	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
HAZARD: **Unemployment/** **Livelihood**	1. Lack of Education/ Knowledge	1. Conduct a community needs analysis for employment opportunities 2. Communication of new/existing programs by different means 3. introduce literacy programmes 4. - Introduction of relevant programs, classes, training opportunities that meet community needs
	2. Youth At Risk	1. Sports and cultural programs, introduction of more specific clubs and activities (eg. Let's Dance) 2. targeting youth interests and skill development supported by on the job training 3. Support for small Business Development 4. Guidance Councilor available
	3. Health related issues eg. Poor diet, depression	1. Invite Health specialists to train locals and implement specific programs eg. Counseling services, Soup Kitchen, Nutrition seminars
	4. Support for Families	1. Identify Existing support services for Families eg. Church groups, community groups 2. Enhance existing services, introduce new specific services (eg. marriage counseling)
	5. Personal/Community Safety	1. Increase police/security presence

HAZARD -	Vulnerabilities identified	Actions to transform vulnerabilities into capacities
HAZARD: Youth Issues	• No enough youth friendly counseling on sexual & reproductive health/ • No enough positive activities/ • No enough support for parents • Peer Pressure • Drug Abuse • Violence/abuse • Lack of knowledge/low literacy • Communication problems	1. Parenting skill classes 2. More awareness on the risks and vulnerabilities associated to unprotected sex 3. Peer 2 peer Education on sexual & reproductive health /counseling 4. More positive activities: sports and creative expressions 5. Dialogue between girls and boys 6. Use of media and communication tools 7. More self esteem
	• Media influence/music/movies • No enough programs/positive activities/ • No enough support for parents • Peer pressure • Lack of knowledge/low literacy • No enough counseling • Communication problems • Accessible drugs	1. More awareness on the risks and vulnerabilities associated to drug abuse 2. More positive activities: sports and creative expressions 3. Use of media and communication tools 4. Peer 2 peer Education and counseling 5. Life skills, self esteem
	a. Culture of violence/ Media influence /music /movies b. Low Professional Skills/Poor access to small business c. No enough youth spaces in the community d. Limit participation of youth in common issues e. No enough support for parents i. Peer pressure ii. Drug Abuse iii. No enough programs/positive activities/low self seem iv. Lack of knowledge/Low literacy v. No enough counseling f. - Communication problems	1. More role models 2. Youth leaders in the community 3. Peer to Peer mentoring 4. Youth led initiatives 5. Professional guidance, counseling 6. Parenting Skills 7. Appreciation for local cultural identity 8. The Community Center and other spaces available for youth meetings 9. More positive activities and creative programs

Identifying prevention, preparation and mitigation activities

Once the groups carried out the vulnerability analysis and identified the actions to transform them into capacities, these activities were then identified as:

Prevention actions: action which tries to avoid the possibility of creating a risk in the community of Speyside

Mitigation actions : action that attempts to protect, strengthen, rehabilitate or reconstruct

Preparation actions: action that aims to strengthen the capacity of the community of Speyside to respond in an effective and efficient manner

HAZARD: Climate Change

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
HAZARD: Climate Change			
1. Community information and education awareness training 2. Prevention and response training 3. Health, safety and environmental training 4. Public awareness meetings and community awareness communications campaign	1, 4	2, 3	
1. Risk ad hazard identification, mapping an assessment 2. Development of a community response plan	1	2	
1. Assessment of Infrastructure response and location changes 2. Settlement and development response and location changes 3. Upgrade and retrofitting of buildings and infrastructure to address storms and sea level rise	1	2	2, 3
1. Lively hoods and economic response and location changes			1
1. Ecosystems and habitat management recovery and restoration response to changes 2. Increased protection and conservation of the environment	2		1

HAZARD: POLLUTION

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
1. Community for information and education awareness training 2. Prevention and response training 3. Health, safety and environmental training 4. Public awareness meetings and community awareness communications campaign	1, 4	2, 3	
1. Risk ad hazard identification, mapping an assessment 2. Development of a community response plan	1	2	
1. Upgrade of community solid waste bins 2. Development of new system of disposal of solid and liquid waste 3. Development of a programme to address existing systems for pollution prevention and control measures such as 4. Replace 5. Reuse 6. Recycle	2	3, 4,	1, 5, 6

HAZARD: HIGH WIND / RAIN/ HURRICANE

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
1. Install early warning system 2. Build drain containment walls, , planting of trees, banking flood diversion drains	1		2
1. Analysing buildings to assess 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.	1, 4	2, 3, 5	
1. Identify potential risks to homeowners	1		
1. Advocate to Government by community groups for proper maintenance and upgrade of drainage systems and leaning electrical poles	1		
1. clean and maintain drains,	1		
1. Monthly cleanup programme with school and youth groups; 2. Awareness Programme 3.Set up of Environmental Group	1	2, 3	
1.Strengthening the roofing structures , retrofitting of homes, skill training programme 2.needs assessment (skills training, self-employment, income-generation-alternative sources		2	1
1.Public awareness programmes (accessibility to and availability of information, identify agencies which can provide resources for education, agro reforestation programme)		1	
1. Community meetings 2. Information dissemination (flyers, radio, newspaper, TV, schools and other public institutions	2	1	
1. Neighbourhood plans develop 2. Develop early warning system 3. Develop community based plan 4. Create closer ties between CERT Team and the Community 5. Conduct regular practices ensuring entire community participation 6. Conduct house to house visits and exercises/simulation 7. Work with community based organizations (eg. Faith based, youth, fishermen) 8. Inform residents with radio programme and flyers 9. Conduct school drills	2, 7, 9	1, 3, 5, 6, 8,	4

HAZARD: HEALTH ISSUES

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
1. Pprovide ongoing education on targeted health topics. 2. Provide life skills education for school children. 3. A radio talk show programme to provide a space for students not in school and citizens in the community to discuss topical issues and host professional speakers	1 2 3		
1. Invited social development groups deliver talks on healthy life styles 2. Initiate Red Cross Project Life in conjunction with THA	1 2		
1. With the addition of work force skill training (mason, block making, etc.) persons are empowered to find and keep jobs in the community.		1	
1. Red Cross uses the TWC Programme and the Fundamental Principles and Humanitarian Values as the basis for providing an environment that reduces discrimination and stigma starting with the high school children.	1		
1. Sport, music, computer classes etc. provide alternatives and reduce the impact of peer pressure. 2. Youth leadership program assures continuity of youth groups 3. Re-activated youth group as part of the Village Council. 4. Improved coordination and collaboration among social youth groups	1 3	2 4	
1. Parenting skill classes especially for single parent and teenage parents 2. Daycare facility for the elderly – to provide respite care and stimulating activities 3. Provide Councelling Services 4. initiate UNICEF Hotline for family abuse	1 2	4	3
1. Red Cross First Aid training for community residence			1

HAZARD: UNEMPLOYMENT/LIVELIHOOD

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
1. Conduct a community needs analysis for employment opportunities 2. Advertise new/existing programs 3. - Introduction of relevant programs, classes, training opportunities that meet community needs	3	1	2
1. Sports and cultural programs, introduction of more specific clubs and activities (eg. Let's Dance) targeting youth interests and skill development		1	
1. Invite Health specialists to train locals and implement specific programs eg. Counseling services, Soup Kitchen, Nutrition seminars			1
1. Identify Existing support services for Families eg. Church groups, community groups 2. Enhance existing services, introduce new specific services (eg. marriage counseling)	1		2
1. Increase police/security presence	1		
2. Develop internship/volunteer program win/win for individuals (training/experience) and businesses (labour)			2

HAZARD: YOUTH ISSUES

Actions to transform vulnerabilities to capacities	Prevention	Preparation	Mitigation
1. Parenting skill classes 2. More awareness on the risks and vulnerabilities associated to unprotected sex 3. Peer 2 peer Education on sexual & reproductive health /counseling 4. More positive activities: sports and creative expressions 5. Dialogue between girls and boys 6. Use of media and communication tools 7. More self esteem	2,	1, 5, 7	3, 4, 6,

1. More awareness on the risks and vulnerabilities associated to drug abuse
   a. More positive activities: sports and creative expressions
   b. Use of media and communication tools
   c. Peer 2 peer Education and counseling
   d. Life skills, self esteem
			1

1. More role models 2. Youth leaders in the community 3. Peer to Peer mentoring 4. Youth led initiatives 5. Professional guidance, counseling 6. Parenting Skills 7. Appreciation for local cultural identity 8. The Community Center and other spaces available for youth meetings 9. More positive activities and creative programs	3, 9	2, 4, 6, 8,	1, 5, 7,

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

Now, the community needs to consider each and every action to transform vulnerability into a capacity and decide whether it can manage this change itself. In order to do this, it was decided 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**.*

These tables demonstrates to the community of Speyside 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.

HAZARD: Climate Change

Actions to transform vulnerabilities into capacities	Prevention	C I A	Preparatio n	C I A	Mitigation	C I A
Climate Change						
1. Community for information and education awareness training 2. Prevention and response training 3. Health, safety and environmental training 1. Public awareness meetings and community awareness communications campaign	1, 4	C C	2, 3	I I		
1. Risk ad hazard identification, mapping an assessment 2. Development of a community response plan	1	I C	2	I		
1. Assessment of Infrastructure response and location changes 2. Settlement and development response and location changes 3. Upgrade and retrofitting of buildings and infrastructure to address storms and sea level rise	1	I	2	A	3	C
1. Lively hoods and economic response and location changes	1	A			1	A
1. Ecosystems and habitat management recovery and restoration response to changes 2. Increased protection and conservation of the environment	2	I			1	I

Actions to transform vulnerabilities into capacities	Prevention	C I A	Preparation	C I A	Mitigation	C I A
Pollution						
1. Community for information and education awareness training 2. Prevention and response training 3. Health, safety and environmental training 4. **Public awareness meetings and community awareness communications campaign**	1, 4	C I	2, 3	C I		
1. Risk and hazard identification, mapping and assessment 2. Development of a community response plan	1	C I	2	C I		
1. Upgrade of community solid waste bins 2. Development of new system of disposal of solid and liquid waste 3. Development of a programme to address existing systems for pollution prevention and control measures such as 4. Replace 5. Reuse 6. Recycle	2	C I	3, 4,	I C	1, 5, 6	C

HAZARD:HIGH WIND / RAIN

Actions to transform vulnerabilities into capacities	Prevention	C I A	Preparation	C I A	Mitigation	C I A
1. Install early warning system 2. Build drain containment walls, , planting of trees, banking flood diversion drains	1	I			2	C
1. Analysing buildings to assess 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.	1 4	I C	2, 3, 5	C C C		
1. Identify potential risks to homeowners	1	I				
1. Advocate to Government by community groups for proper maintenance and upgrade of drainage systems and leaning electrical poles	1	I				
1. clean and maintain drains,	1	C				
1. Monthly cleanup programme with school and youth groups; 2. Awareness Programme 3.Set up of Environmental Group	1	C	2, 3	C C		
1.Strengthening the roofing structures , retrofitting of homes, skill training programme 2.needs assessment (skills training, self-employment, income-generation-alternative sources			2	I	1	C
1.Public awareness programmes (accessibility to and availability of information, identify agencies which can provide resources for education, agro reforestation programme)			1	C		
1. Community meetings 2. Information dissemination (flyers, radio, newspaper, TV, schools and other public institutions	2	C	1	C		
1. Neighbourhood plans develop 2. Develop early warning system 3. Develop community based plan 4. Create closer ties between CERT Team and the Community 5. Conduct regular practices ensuring entire community participation 6. Conduct house to house visits and exercises/simulation 7. Work with community based organizations (eg. Faith based, youth, fishermen) 8. Inform residents with radio programme and flyers 9. Conduct school drills	2 7 9	I I I	1, 3, 5, 6, 8,	C C C C C	4	I

HAZARD: HEALTH ISSUES

Actions to transform vulnerabilities into capacities	Prevention	C I A	Preparation	C I A	Mitigation	C I A
1. Pprovide ongoing education on targeted health topics. 2. Provide life skills education for school children. 3. A radio talk show programme to provide a space for students not in school and citizens in the community to discuss topical issues and host professional speakers	1 2 3	C I C				
1. Invited social development groups deliver talks on healthy life styles 2. Initiate Red Cross Project Life in conjunction with THA	1 2	I C				
1. With the addition of work force skill training (mason, block making, etc.) persons are empowered to find and keep jobs in the community.			1	C		
1. Red Cross uses the TWC Programme and the Fundamental Principles and Humanitarian Values as the basis for providing an environment that reduces discrimination and stigma starting with the high school children.	1	C				
1. Sport, music, computer classes etc. provide alternatives and reduce the impact of peer pressure. 2. Youth leadership program assures continuity of youth groups 3. Re-activated youth group as part of the Village Council. 4. Improved coordination and collaboration among social youth groups	1 3	C C	2 4	C I		
1. Parenting skill classes especially for single parent and teenage parents 2. Daycare facility for the elderly – to provide respite care and stimulating activities 3. Provide Councelling Services 4. initiate UNICEF Hotline for family abuse	1 2	I I	4	I	3	I
1. Red Cross First Aid training for community residence					1	

HAZARD: UNEMPLOYMENT/ LIVELIHOOD

Actions to transform vulnerabilities to capacities	Prevention	C I A	Preparation	C I A	Mitigation	C I A
1. Conduct a community needs analysis for employment opportunities 2. Advertise new/existing programs 3. - Introduction of relevant programs, classes, training opportunities that meet community needs	3	I	1	I	2	C
1. Sports and cultural programs, introduction of more specific clubs and activities (eg. Let's Dance) targeting youth interests and skill development			1	I		
1. Invite Health specialists to train locals and implement specific programs eg. Counseling services, Soup Kitchen, Nutrition seminars					1	I
1. Identify Existing support services for Families eg. Church groups, community groups 2. Enhance existing services, introduce new specific services (eg. marriage counseling)	1	C			2	I
1. Increase police/security presence	1	I				
2. Develop internship/volunteer program win/win for individuals (training/experience) and businesses (labour)					2	I

HAZARD: YOUTH ISSUES

Actions to transform vulnerabilities into capacities	Prevention	C I A	Preparation	C I A	Mitigation	C I A
1. Parenting skill classes 2. More awareness on the risks and vulnerabilities associated to unprotected sex 3. Peer 2 peer Education on sexual & reproductive health /counseling 4. More positive activities: sports and creative expressions 5. Dialogue between girls and boys 6. Use of media and communication tools 7. More self esteem	2,	I	1, 5, 7	I C I	3, 4, 6,	C I I

1. More awareness on the risks and vulnerabilities associated to drug abuse
    e. More positive activities: sports and creative expressions
    f. Use of media and communication tools
    g. Peer 2 peer Education and counseling
    h. Life skills, self esteem
					1	I

i. More role models ii. Youth leaders in the community iii. Peer to Peer mentoring iv. Youth led initiatives v. Professional guidance, counseling vi. Parenting Skills vii. Appreciation for local cultural identity viii. The Community Center and other spaces available for youth meetings ix. More positive activities and creative programs	3, 9	C I	2, 4, 6, 8,	C C C C C	1, 5, 7,	I I C

10.   Plan of Action

SPEYSIDE PLAN OF ACTION

Concept	Activities	Time Frame	Indicators Achievements	Assumptions	Remarks
Disaster Management	Community meeting ~ Invite CERT to attend community meeting and inform the public of the potential risk ~ Mitigation Reintroduce the disaster committee ~ Develop early warning systems ~ Prepare a Community disaster plan ~ Install signs throughout community Conduct First Aid Training for Community members Conduct **Climate Change** Awareness for Community members and in schools Conduct Disaster Awareness for Community members and in schools		Disaster Committee formed inclusive of representatives of NEMA, CERT and Community Representatives. Loud Speakers installed in three points within the community Speyside Plan developed and residents are aware Drills conducted within community Signage installed and community is aware Red Cross conduct First Aid Training in community Awareness programme developed and implemented Residents ~ will secure home, trim trees, assist in building drains on their property	NEMA Tobago supports through CERT Team Division of Infrastructure provides support Financial Resources Human Resources	There needs to be closer relationship between the residents and the agency involved in disaster management. Community has indicated that they are not consulted or engaged by CERT Team.

PLAN OF ACTION
SPEYSIDE

Concept	Activities	Time Frame	Indicators Acheivements	Assumptions	Remarks
Health	1. First Aid and Community First Aid Training		# of certificates issued in the community	Persons show interest and attend seasons Financial Resources Human Resources	
	2. Introduction of the Red Cross TWC program		# of sessions conducted # of PE and ITs certified # of activity kits issued	The School would allow this program Parents are willing to send their children Human and Financial Resources	
	3. Train community volunteers in health education		# of volunteers trained # of volunteers conducting health talks	That the community members want to be trained as health educator TTASPE, UNICEF, THA, TTRC, Village Council provides support	
	4. Initiate a wellness programme		Residents participate Sport activities developed and participated in.	That the community has persons who have ability and desire to become fit	
	5. Introduce a First Aid/HIV Aids Segment on the radio		# of radio spots	The radio station is willing to have the segment introduced on the radio Able organize radio spots, presenters and guest speakers	
	6. Community Mobilization Events/Activities		# of community mobilization events/activities	Financial and Human Resources Materials Youth are interested in community mobilization activities/events	

PLAN OF ACTION

SPEYSIDE

Concept	Activities	Time Frame	Indicators Acheivements	Assumptions	Remarks
Social Support	1. Support for Families, single parents		. Work with community (eg Youth group, Village Council and church groups to enhance existing services that support families Introduce new specific services (eg. marriage counseling).	TTASPE, UNICEF, THA, Village Council provides support Persons show interest and attend seasons Financial Resources Human Resources	
	2. Health related issues eg. Poor diet, depression 3. Drug and Alcohol Awareness 4.Domestic Violence programme		Invite Health specialists and workers (nurse, guidance counselor) from within the community to educate community members and work to address needs Identify ways to upgrade qualifications of existing health care workers in the community for specific needs. Offer specific courses (ie possible training new community members as certified counselors)	TTASPE, UNICEF, THA, Village Council provides support The School would allow this program Parents are willing to send their children Human and Financial Resources Persons show interest and attend seasons	Provide more positive activities as an alternative to drugs especially among youth.

PLAN OF ACTION

SPEYSIDE

Concept	Activities	Time Frame	Indicators Acheivements	Assumptions	Remarks
Environmental Degradation	1. Plan clean up Programme		foster civic and social responsibility and a pride in their community	Persons show interest and attend seasons Financial Resources Human Resources	
	2. Signage and Historical Sites development		Establish Speyside as a "Turtle Village" Signage installed Historical Sites identified and developed	Support from THA and the Business Community. programme supported by the community Turtle Village Trust provides support Human and Financial Resources	
	3. Upgrade of fishing facility – jetty etc		Jetty repaired Ice cooler installed Facility provided for fishermen	Support from THA and the Business Community Financial Resources Human Resources	

PLAN OF ACTION
SPEYSIDE

Concept	Activities	Time Frame	Indicators Acheivements	Assumptions	Remarks
Environment	1. Develop Beach sports: Tourism/Revenue potential		# of certificates issued in the community	TTASPE, UNICEF, THA, Village Council provides support Persons show interest and attend Financial Resources Human Resources	
	2 Turtle Conservation Awareness and Education		Establish Speyside as a "Turtle Village" Reduction in slaughter of sea turtles and degradation of reef	Support from THA and the Business Community. programme supported by the community Turtle Village Trust provides support Human and Financial Resources	
	3 Environment Conservation Awareness and Education		Residents environment conscious Environment Club established in schools	Support from THA and the Business Community. programme supported by the community Turtle Village Trust provides support Human and Financial Resources	

PLAN OF ACTION
SPEYSIDE

Concept	Activities	Time Frame	Indicators Acheivements	Assumptions	Remarks
Youth Issues	1. parenting training and parental guidance Training		# of certificates issued in the community	TTASPE, UNICEF, THA, Village Council provides support Persons show interest and attend seasons Financial Resources Human Resources	Fosters creative expression and Builds self-esteem Peer to peer monitoring.
	2. Holistic programme to address social risk be addresses at the individual, family and community levels. Special attention be addresses to health, lifestyles and life skills development		Adult Literacy, academic courses, dance, and life skills developed and initiated. Need for more sporting programes and more activities for community	Support from THA and the Business Community. programme supported by the community TTASPE, UNICEF, THA, Village Council provides support Human and Financial Resources	Develop Leadership and teamwork among youths. Bring community together both young and old. Foster social interaction Establish a core group of young people which provides a focal point for other intervention programmes.
	3. Establish a core group of young people which provides a focal point for other intervention programmes.		VCA conducted Youth Club established Youth Arm of Village Council established	TTASPE, UNICEF, THA, Village Council provides support	
	4. Community Mobilization sport programmes, youth clubs, dancing, and other Events/Activities		# of community mobilization events/activities	TTASPE, UNICEF, THA, Village Council provides support Financial and Human Resources Materials Youth are interested in community mobilization activities/events	

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PLAN OF ACTION

SPEYSIDE

Concept	Activities	Time Frame	Indicators Acheivements	Assumptions	Remarks
Youth Issues	1. . Pressure on Local Businesses		Develop internship/ volunteer program for individuals (training/ experience) and businesses (labour) Stipend for living expenses	TTASPE, UNICEF, THA, Village Council provides support Support from the Business Community Financial Resources Human Resources	Fosters creative expression and Builds self-esteem Peer to peer monitoring.
	2. Skills Development programmes		Skills training needs identifies, developed and initiated. Engine Repair Tour Guiding Livestock rearing Media training	Support from THA and the Business Community. programme supported by the community TTASPE, UNICEF, THA, Village Council provides support in conjucction with youth group Human and Financial Resources	Develop Leadership and teamwork among youths. Bring community together both young and old. Foster social interaction Establish a core group of young people which provides a focal point for other intervention programmes.
	3. Business Development start up initiatives.		Equiptment, tools and start up capital provided. Cooperative Developed	TTASPE, UNICEF, THA, Village Council provides support in conjucction with youth group	
	4. Community Mobilization Events/Activities		# of community mobilization events/activities	Financial and Human Resources Materials Youth are interested in community mobilization activities/events	

Other needs and Issues Identified.

Training/programs/activities	Infrastructure	Other Issues and Needs Identified
Need more e.g. Adult Literacy, Academic courses, dance, skills Need for more sporting programs More activities for community members Computer Literacy in primary schools Activities for children during vacation periods Address the rising instance of obesity Need administrative help First Aid Programme Unemployment among youths. Youths need skills programme that can lead to employment: Engine repair Training More farming specifically livestock	Upgrade of fishing facility – jetty etc. Need for supermarket Street lights Low voltage Retaining wall in some places Day Care Centre Place to care for elderly Public Phones Library Communication services Help with equipment and building materials Market Library Day-care centre Radio Station for the area	Police response is too slow Need a fire service unit in the area Need to have supplies and for the facility to handle more emergencies (Ambulance) Youth Group: Need to function more efficiently, stay away from politics Village Council: Could function more efficiently/effectively Transportation in and out of the community Ambulance cannot access hillside areas. To long to arrive. No doctor or nurse within the community. . Guidance Councillor to work with young people to help them identify skill needs. Support for young parents and single parents. Parent training. .

11. Lessons learnt from the Field

Working with a community such as Speyside or any community can be at times challenging and at times frustrating but in the end it is a rewarding experience. The dynamics that must exist and co exist creates numerous challenges to the residence of the Speyside community.

At the start of the program participates sat close to friends and neighbors from their area of the community because this was their comfort zone. In the creation of team participants were mixed up and this created some level of dissatisfaction. When conducting field exercises, the objective was identified, and I was asked by a "Group leader" to explain and provide a structure and assign responsibility and provide questioners in conducting the field work. My responses again caused some dissatisfaction.

For the groups the task at hand was clear, how they were to achieve it effectively, however was not and this posed its own challenges and frustrations especially to team leaders.

Lessons learnt
- Responsibility for those in your team is critical.
- Dialog and community is critical to overcoming diversity and make up of the group and had to be developed in order to overcome problems.
- Learning is through trial and error and experience.
- Team members were forced to interact with each other and during the exercise with members of the community who they had never spoken to.
- There was a dependency of each other that developed.

The lessons learnt formed the basis for understanding the fundamental essentials for sustainable community development, that is:
- Respecting each other
- Appreciating the strength in diversity
- Dialog/connection
- Listening
- Working together to find solutions
- Supporting each other
- Appreciating the value of differences of opinion.

Assessment of Field Visits

The following was the major issues identified by the teams from their Field Visits:

- **Interesting Interviews with members of the community.**
- **A lot of information.**
- **Community members were polite and cooperative.**
- **Young people in the group were fearful initially but participated effectively once supported and given opportunity.**
- **Young people were given lead in initial introduction.**
- **Young people in the groups were full of energy and felt a part of the process.**
- **Group coordination and leadership had to evolve.**
- **Team members were not aware of a lot of the issues facing the community and opinions of residents.**
- **Stakeholders need to involved more in community activities.**
- **Communication among residents was seen as a problem. Divided the community. Notice Boards around community.**
- **No radio, newspapers and television signal. Outside information lacking**
- **Issue with sustainability of programmes and community groups.**

1. Be well **prepared**. Walk with water, proper attire.
2. **Communication** on the field is important.
3. **LISTEN** to the instructions given prior to the field visit
4. **Plan** the Field Visit process properly. Meet as a Group and strategise. Recognize the importance of
   a. **Pre-visit work**. Literature reviews and other research are important.
   b. **When** do we do the interviews? – the day of the week we choose is important. Consider levels of employment, religious holy days, etc . The time of day for conducting interviews is important. It will determine **who** you interview - housewives, caregivers and the unemployed, or working parents and persons.
   c. **Delegation of responsibility.**
   d. **What will we ask**? – Do we want to have standardized questionnaires, or do we just want general questions?
   e. Plan an **exit strategy** for the long winded interviewee.
5. Stick to the plan, but in a **flexible** way. You may not find what you expected, and may have to adjust in the field.
6. **Avoid repeat interviews** as these can be frustrating (as well as time consuming). Proper planning should eliminate the same person being interviewed twice.
7. **Split the teams**. The interviewees get intimidated/scared if the team (of five or six persons) all go to them at once.

8. Assistance of a **community resource person is invaluable**.
9. **Respect** the community. They may not want to participate/be photographed or named. Try to get them to change their mind. If you are unsuccessful, move on.
10. **Introduce yourself** to potential interviewees. Be brief, but give full information to interviewees.
11. Recognize the differences between and usefulness of **open ended** as against **closed** questions.
12. **Team Leaders** must identify central meeting point.
13. **Know where members of your team are.**
14. Return with **all** your team.
15. **On returning** from the Field compile the data and assign responsibility for different parts of the presentation.

12.   Summary

The community of Speyside is very unique in its natural beauty, potential and social structures. The VCA programme conducted identified issues that need to be considered for programme development.

Summary of findings

A summary of the assessment indicate there were five (5) Hazards identified in the Speyside Community. These were:
Hazard 1: Environmental Degradation
Hazard 2: High Wind/ Rain/ Hurricane
Hazard 3: Social and Health Issues
Hazard 4: Unemployment/ Livelihood
Hazard 5: Youth Issues

Community Dynamics

There exists three (3) parts to the Community. The first area spans the Government Housing Scheme Settlement along the sea coast and encompasses the Hotels, Guest Houses, Restaurants, Dive Shops, the business community and Tourist areas. The second area is Tophill/Carpoe Village and the third is on the Southern Side, encompassing the Lucyville Village.
There exists little interaction among the residents in the three areas and with the business community apart from those employed there and their businesses. Concerns were expressed as to the development of community by the businesses which all owned by non-residents and their contribution to the community's development.

- Relationship between Community/Village Council/CERT/Division of works (THA)
- Communication: contrast notice board in two sites.
- PA system: advise on events/Early morning for disasters.

Tourism Potential

Existence of last thriving reef in Trinidad and Tobago which can boast of having the largest Brain Coral in the Western Hemisphere. There also exists a rich diversity of flora and fauna. It is home to two species of sea turtles, green and hawksbill as well as the bird, Man of War. There is huge potential for the development of nature trails, tours, and Historical Site development, Craft development that can provide employment and alternative income to the residents. This can also bridge the communication void that exists between business Hotels and Guest Houses and the residents. The community would welcome the involvement of the Turtle Village Trust and SOS Tobago to provide environmental awareness and support.
Owing to the main revenue generation by the community being tourism, It is recommended that a Speyside community museum and historical and

environmental conservation programme be developed and supported by the community

<u>**Youth risk**</u>

Adults in the community report some degree of youth delinquency. Youths refer to not having a voice in the community development process. A high of parenting training and parental guidance was reported as being needed in the village.

An issue of representation at the level of the Village Council was a major point of contention. It was proposed that a Youth Arm be joined by the Village Council and representation from the group be given the opportunity to serve on the Village Council. There are a number of benefits;
- Better relations between the Youths and the Adults.
- Issues facing Youths can be identified and addressed.
- Youth programmes can be identified and implemented through a consultative process and are therefore relevant.
- Youths are given responsibility and this facilitates personal development.
- Decision making is more effective and inclusive.

There also exists a high level of illiteracy among young people. It is suggested that a library be established which can support literacy classes. It should be noted that the issue of pride among young people is a major hindrance to such a program and consideration needs to be given relative to engagement.
Drug Abuse is another issue. It creates a barrier to young people getting jobs especially in the MUST program due to mandatory drug testing. Marijuana smoking is highly prevalent and most young people do not consider it as an illegal substance but compare it to cigarettes. The issue of Drug Abuse is a major hindrance to the development of these young people. It is suggested that the establishment of alternative activities such as sport can provide major benefits. Also a Drug Awareness program should be encouraged.

Another issue relative to young people is their ambition. Most are unaware of what they would like to do or be. Career guidance is needed especially at the school level.

Skills training were another sore point. The Village Council contends that a number of programmes were conducted in the community but were poorly attended. In response the young people contend that they were not engaged to identify the relevance to them but these were improved. Tour Guiding, Engine repairs were identified as being of interest. It was also identified that there is a need for support to assist in the development of business where the skills can be applied e.g. Purchase of tools and equipment.

Teamwork and leadership issues also exist where sport development can assist.
Owing to the high incidence of diabetes and hypertension in the community, there is a huge need for activities which can mitigate these Health Risks.

Education risk

Adults and youths in the community report the need for remedial education and support technical and vocational after formal secondary school training. The community expressed the need for more e.g. Adult Literacy, academic courses, dance, and life skills. Need for more sporting programes, more activities for community members at all ages, computer Literacy from primary school upwards, activities for children during vacation periods, more farmer training, health awareness training especially to address the rising instance of obesity and the need for state/ civic administrative understanding help to address and access public services and documents.

It is recommended at a holistic programme to address social risk be addresses at the individual, family and community levels. Special attention be addresses to health, lifestyles and life skills development especially parenting and communications skills.

Environmental risk/ High Wind/ Rain/ Hurricane

The community is at risk to natural and human environmental impacts. The impacts of global warming, of sea level rises and stomas, and the effects of landslides, as well as human pollution impacts of solid and liquid waster pollution all impact on the community.

Social / Health Risk

Physical abuse risk
Child and spousal physical abuse has been reported from the village to some extent.

Life style diseases risk
Diabetes and hypertension is reported through out the village as dietary and hereditary disease.

Sexual lifestyle risk.
Tobago has been reported to have a high degree of sexual transmitted diseases risk in the local community. The risk of HIV/AIDS is prevalent due to un protected six. Evidence of condom use was observed from spent condom seen disposed off in public at a private Speyside community park. Proper disposal education used should be done in the community.

Recreational site and example of disposed condom and wrapper as an indication of awareness and use of condoms in the community.

Transport

Land

Public bus service is provided to the village 2 to 3 times a during the week days less on weekends. There is a need for bus sheds through out the village.

There is no regular/reliable road side public taxi service.

Lack of regular and cost effective public transport is a risk to development and communications.

Conclusion

In conclusion the community has endorsed the need for development of sport within the community. Residents have identified benefits such as:

- Beach sports: Tourism/Revenue potential
- Develop Leadership and teamwork among youths.
- Bring community together both young and old.
- Tool for the promotion of healthy lifestyles.
- Foster social interaction
- Provide more positive activities as an alternative to drugs especially among youth.
- Establish a core group of young people which provides a focal point for other intervention programmes.
- Fosters creative expression
- Builds self-esteem
- Peer to peer monitoring.

The level of success of such a program will depend on the strategy for implementation and engagement. If this program is done right it can have a major impact on the development of the Speyside Community.

There exists a level of ignorance or in some cases disregard to a number of social issues. Education and Awareness programmes should be conducted in consultation with relevant stakeholders. The following programs were identified:

- Parenting skills
- HIV/AIDS Awareness
- Turtle Conservation
- Domestic Violence
- Drug and Alcohol Awareness
- Disaster Preparedness
- Climate Change
- Signage and Historical Sites

Young people especially from the schools should engage in clean up programs to foster civic and social responsibility and a pride in their community.

How does the community of Speyside view its ability to create change?

All the community residents viewed that change must come from with the community itself but support is needed from external partners. They indicated that all should come together **,** address Motivational/Attitudinal issues to create this change. This can be done by;

- Everyone having a voice/expressing views
- Togetherness/understanding
- Bring people together more often
- Positive changes can be made quickly if everyone comes togethere
- Need more organization
- Improve communication
- Make decisions together
- Include all groups
- More agreed programs/activities

Capacity building to support change must address:

- Providing social activities to involve all, including seniors
- Programmes should be provided for the development of all.
- Literacy / Skill training
- Health programmes
- Additional sporting programmes
- Library service
- Gym

- Youth based activities (team building, general socialization skills workshops on self esteem).

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13.Resource Personnel and meetings

Focus Group Meeting – Date

The training period was from 20th to 24th August 2007
Venue: Speyside Community Centre
Trainers: Trinidad & Tobago Red Cross Society

Resource Personnel

VCA Trainers -
- Lead trainer: Dr. Allan Bachan
- Logistics: Mr. Anthony Tidd
- Technical support: Jalaludin Khan

Community resource personnel
- Members of the Village council
- Community health centre nurse
- Hotel Staff
- Fishermen
- Business Persons
- CERT

Community Assessment team leaders
1. Jalaludin Khan
2. Andre Collins
3. Shauna Thomas
4. Cesar Villar

OUTSIDE COMMUNITY

Tobago House of Assembly
Trinidad and Tobago Alliance for Sport and Physical Education
Trinidad and Tobago Red Cross
UNICEF

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Annex 1
List of VCA training participants

Name	Occupation	Address	Sex
1. Shauna Thomas	TTASPE	20 Victoria St, Siparia, Trinidad	F
2. Charian Duke		Top Hill, Speyside	F
3. Quane Frank		Main Road, Speyside	M
4. Nadea Shanghie	Scarborough RC	Pump Hill Trace, Speyside	F
5. Quasi Frank	Belle Garden	Main Road Speyside,Tobago	F
6. Keydell Kerr	Speyside High	Top Hill Street, Speyside	M
7. Idi Bacchs	Speyside High	Main Road, Speyside	M
8. Quacvann Gray	Speyside High	Top Hill Street, Speyside	F
9. Jalaludin Khan	TTRCS	Trinidad	M
10. Andre Collins	TTASPE	Trinidad	M
11. Beckie Gordon		21A Top Hill Street, Speyside	F
12. Cesar Villar	TTASPE	Trinidad	M
13. Michelle Lewis	CEPEP	Housing Scheme, Speyside	F
14. Kester Jack	CEPEP	Lucy Vale, Speyside	M
15. Keleon Coker		Top Hill Street, Speyside	M
16. Meshell Trotman	Village Council	#12 Housing Scheme, Speyside	F
17. Daylon Gray	Student	#99 Main Road, Speyside	M
18. Keda Trotman		#12 Housing Scheme, Speyside	F
19. Pavel Warrick	Village Council	#7 Lucy Vale, Speyside	M
20. Sabrea Skeete	Student	Gaval Head, Speyside	F
21. Philmon Spencer-Gray	Village Council	Housing Scheme, Speyside	F
22. Veona Cislyn Taylor	THA Youth Department	George Street, Plymouth	F
23. Kevon Beckles	THA Youth Department	#5 Britton Hill, Roxborough	M
24. Rupert McKenna	Village Council	Main Road, Speyside	M
25. Andy Grant		Lambeau Milford Road	M
26. Kerry Baptiste	Reforest	#34 Housing Scheme, Speyside	M
27. Lynelle Gray	R.C School	Top Hill Street, Speyside	F
28. Toney Mehalle	N.R.W.R.P	Speyside	M
29. Kirk Legerton	N.R.W.R.P	Speyside Main Road	M
30. Shatoya Denoon	S.H.S	Speyside Top Hill	F
31. Carol Fraser Davidson	THA Youth Department	#30 Lucy Vale Speyside	F
32. Treulyn Robley		Top Hill Street, Speyside	F
33. Dino Trotman		12 Housing Scheme, Speyside Tobago	M
34. Nhese O'Neil	Let's Dance Pro.	Housing Scheme, Speyside	M
35. Dravid Thomas	Belle Garden R.C	Top Hill Street, Speyside	M
36. Felix Bergmeister	Unicef	Vienna Austria, Europe	M
37. Esmeralda Clarke	Youth Department	Scarborough, Tobago	F
38. Alison Horsford-King	Youth Department	#5M Cypress Ave, Milford Court	F
39. Kecale Anderson	Youth Department	Betsy's Hope, Tobago	M
40. Tashia Burris	Youth Department	Sou Sou Lands, Tobago	F
41. Kamane Eider	Roxborough Anglican	#16 Crapaud Village, Speyside	M
42. Kwesi Campbell	Speyside High School	Speyside Main Road	M
43. Von Duncan		Speyside	M
44. Cassilda Spencer	UWI	#12 Housing Scheme Speyside	M
Total number of participants		**44**	

ANNEX 2

TRAINING PICTURES