



Food and Agriculture
Organization of the
United Nations



Report of the Vulnerability and Capacity Assessment Training Workshop in Trinidad and Tobago

under the
Regional Implementation of the Vulnerability and Capacity Assessment for the Climate
Change Adaptation in the Eastern Caribbean Fisheries Sector Project (CC4FISH)



December 4-5, 2019
Waterloo Community Centre, Carapichaima, Trinidad

1. Introduction

The *Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project (CC4FISH)* is being implemented by the Food and Agriculture Organization of the United Nations (FAO)/Western Central Atlantic Fishery Commission (WECAFC) and the national fisheries authorities from the seven project countries, Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines and Trinidad and Tobago (T&T), from 2017-2020. It aims to increase resilience and reduce vulnerability to climate change impacts in the Eastern Caribbean fisheries sector through introduction of adaptation measures in fisheries management and capacity building of fisherfolk and aquaculturists. It is funded by the Global Environment Facility.

The Caribbean Natural Resources Institute (CANARI) has been contracted by FAO to undertake the regional implementation of a Vulnerability and Capacity Assessment (VCA) in coastal and fishing communities under CC4FISH. This work involves implementation of VCAs in 14 coastal and fishing communities across four target countries, Grenada, St. Kitts and Nevis, St. Vincent and the Grenadines and T&T, from October 2019 to November 2020. It directly contributes to Component 1 of CC4FISH, which aims to increase understanding and awareness of the climate change impacts and vulnerabilities for effective adaptation and resilience building in the Eastern Caribbean fisheries sector.

As a key first step, CANARI is supporting the establishment of local field teams and providing training on planning and implementing VCAs in each of the four target countries. In T&T, this training will support VCAs in six coastal and fishing communities, including Blanchisseuse, Icacos, Matelot and Moruga in Trinidad and Roxborough and Speyside in Tobago. This training builds on CANARI's previous work to develop a regional VCA framework and toolkit under phase 1 activities from September 2017 to September 2018 under CC4FISH¹.

This report provides an overview of the VCA training for the local field team in T&T, with a focus on specific VCA tools selected for the six target communities under the project. CANARI facilitated the workshop, which was held at Waterloo Community Centre, Carapichaima, Trinidad on December 4-5, 2019. This report provides an overview of objectives and methodology and presents the main findings and recommendations of the training workshop to guide the implementation of VCAs in coastal and fishing communities in T&T.

2. Participants

The target participants for the workshop included CC4FISH project personnel and the local field team for conducting VCAs in the six target communities. Key government, civil society and private sector organisations involved in fisheries, climate change adaptation and disaster risk management in the country that can support future VCAs were also targeted for capacity building, including:

- the national fisheries authorities;

¹ To guide the regional implementation of the VCA, a regional framework and toolkit have been drafted to enable a harmonised approach to data collection at the community level and inform adaptation measures for the fisheries sector. The approach and tools are outlined in the regional framework and toolkit. For more information on phase 1, see: <https://www.canari.org/vca-for-cc4fish>

- key government agencies involved in adaptation, disaster risk management and natural resource management such as the Office of Disaster Preparedness and Management and the Tobago Emergency Management Agency; and
- civil society organisations including fisherfolk organisations based in the six target communities and the Red Cross.

A total of 22 participants attended along with three members from the CANARI team. See Appendix 1 for the list of participants.

3. Workshop goal and objectives

The goal of the workshop was to conduct in-country training with the field team in T&T to support the design and implementation of VCAs in the six target coastal and fishing communities - Blanchisseuse, Icacos, Matelot and Moruga in Trinidad and Roxborough and Speyside in Tobago - under CC4FISH.

The specific objectives of the workshop were to build capacity and support participants to:

- understand vulnerability and the role of VCAs in informing climate change adaptation;
- understand the VCA process, including how to effectively evaluate and select the appropriate VCA tools from the toolkit for conducting field assessments; and
- apply selected VCA tools to capture local knowledge and perspectives on climate change impacts, vulnerabilities and priorities for adaptation at the community level, focused on areas critical to the fisheries sector.

See Appendix 2 for the detailed workshop agenda and objectives.

4. Methodology

The workshop was designed to be interactive and enable capacity building of key stakeholders to conduct local-level VCAs in T&T, including from government, civil society and the private sector working on climate change, disaster risk management and fisheries governance and management. The workshop included short facilitator presentations/overviews of key topics, small and large group scenario exercises and plenary discussions. The workshop also included a field trip to Carli Bay in Central Trinidad, which included a fish landing site, for knowledge sharing and active learning by participants on applying the selected VCA tools.

5. Discussion and findings

An overview of the CC4FISH project was shared by the national fisheries project focal point, Mr. Ricardo Mieux, and national project coordinator, Mr. Kerton Jobe. CANARI provided a brief overview of the project component '*Regional implementation of a VCA in coastal and fishing communities*' under CC4FISH, to give context for further stakeholder discussion and input, along with overview of the workshop objectives and agenda.



Figures 1 and 2: Workshop facilitators give introductory presentations to participants on the CCAFISH project and the VCA component

5.1 Introduction to vulnerability and VCA concepts

CANARI provided an overview on the key concepts related to climate change impacts and vulnerability as well as the VCA process including the approach as a framework for analysis. Key definitions and concepts included:

- vulnerability and its components – exposure, sensitivity and adaptive capacity (see Figure 3)
- VCA as an established approach to assessing, analysing and addressing the major risks affecting communities using a participatory process that allows stakeholders to identify their own vulnerabilities, priorities and what they can do to address these issues.

<p>Vulnerability is determined by the potential impacts due to exposure to climatic changes and sensitivity of the system to these changes, as well as the adaptive capacity to address the potential impacts of climatic changes.</p>	<p>Exposure - the nature and degree to which system is exposed to significant climatic changes.</p>
	<p>Sensitivity - the degree to which the system is affected negatively or positively by climatic changes.</p>
	<p>Adaptive capacity – the ability of the system to adjust to climatic changes to moderate damage, take advantage of opportunities or cope with the consequences</p>

Figure 3: Defining climate vulnerability and key components: exposure, sensitivity and adaptive capacity.

5.2 Overview of VCA process and toolkit

Participants were introduced to the process for designing and implementing local-level VCAs. This included an overview of the three main phases: the planning phase, the implementation phase and the monitoring and evaluation phase (see Box 1).

In terms of the process, a key area discussed by participants was the planning stage, especially the importance of identification and engagement of key stakeholders within the target communities as they are critical in facilitating introductions within the community and ensuring

community members are open and willing to participate in discussions and exercises. This community engagement is critical to the VCA process and its success.

Box 1: What does a VCA typically involve?

Planning phase

1. Define the need and main objective(s) for the VCA (guided by fisheries and aquaculture plans and policies)
2. Conduct scoping to understand the context and drivers of vulnerability
3. Identify and engage the key stakeholders to be involved in VCA
4. Select a framework of analysis for the VCA
5. Identify required information and methods for VCA

Implementation phase

6. Field testing and training of team in VCA methods and tools
7. Conduct the VCA
8. Analyse information from the VCA within the selected framework of analysis
9. Report and communicate VCA findings to support adaptation planning and actions

Monitoring, evaluation and review phase

10. Ongoing monitoring and review of VCA process and findings

(Source: adapted from IFRC 2014 and FAO 2013)

CANARI then provided an overview of the VCA toolkit, which was developed in Phase 1 of the CC4FISH VCA work. The VCA toolkit provides a practical step-by-step guide for conducting VCAs in coastal and fishing communities and includes a recommended process, key steps and a suite of tools at rapid, intermediate and in-depth levels of complexity. The toolkit builds on existing and established tools and toolkits such as the International Federation of Red Cross and Red Crescent Societies VCA tools and guidelines, Global Coral Reef Monitoring Network Biophysical Guidelines² and SocMon Manual³, and CANARI's 2017 Implementing Climate Change Action Toolkit⁴ that is targeted at Caribbean CSOs.

The toolkit includes a suite of 15 tools (see Figure 4). These range from simple tools that can be used for rapid assessments that are low cost and require minimal time and expertise to plan and implement (e.g. community hazard mapping or historical timeline of hazards) to more complex tools for in-depth assessments that require significant time, funding and specialised training and facilitation skills (e.g. participatory three-dimensional modelling or value chain analysis).

² GCRMN-Caribbean Guidelines For Coral Reef Biophysical Monitoring http://www.car-spaw-rac.org/IMG/pdf/gcrmn-caribbean_guidelines.unep_depi_car_wg38.inf17-en.pdf

³Socioeconomic monitoring guidelines for coastal managers in the Caribbean: Socmon Caribbean. Bunce, L. and B. Pomeroy, 2003. World Commission on Protected Areas and Australian Institute of Marine Science, Australia. <http://www.socmon.org/regions.aspx?region=Caribbean¢erpoint=17.5,-72.0&zoomlevel=5>

⁴ Implementing Climate Change Action: A Toolkit for Caribbean Civil Society Organisations <http://www.canari.org/wpdm-package/climate-act-toolkit>

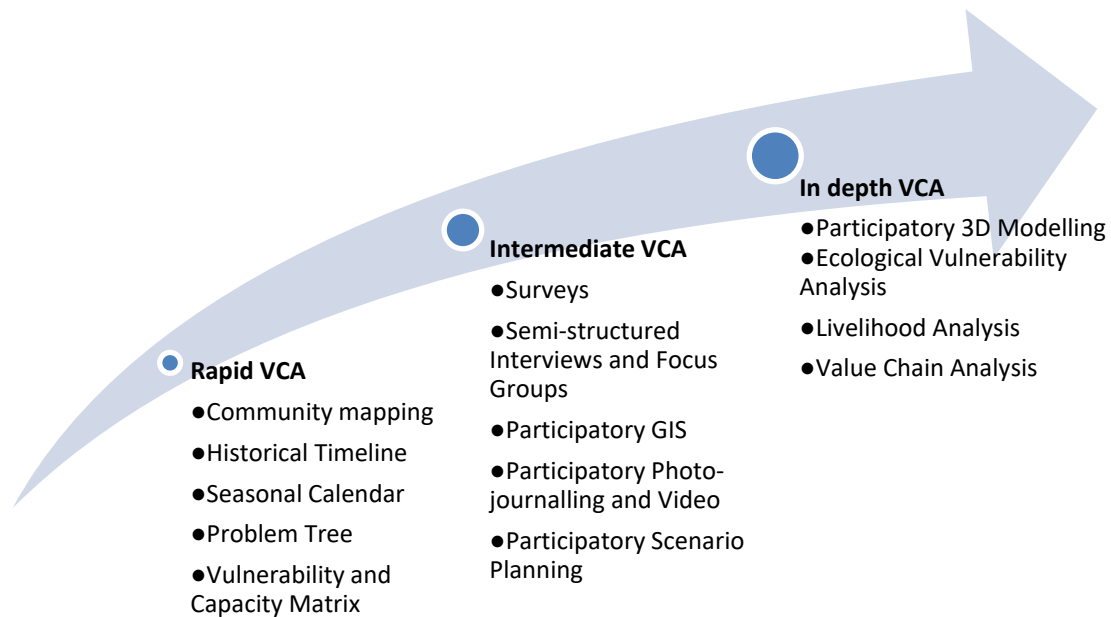


Figure 4: The range and types of VCA tools

5.3 Understanding and selecting VCA tools

Participants were engaged in reviewing the range of tools in the toolkit and applying them to various community scenarios to enable more in-depth thinking and analysis of the VCA tools and how each may be applied in different contexts depending on the goal and available resources (e.g. time, finances, capacity). This scenario exercise sought to build understanding of the process for selection of appropriate VCA tools using the criteria in Box 2.

Box 2: Criteria for assessing VCA tools:

- **Appropriateness** – is tool appropriate for the local fisheries context?
- **Coverage** – does tool capture information on different aspects of vulnerability (biophysical, socioeconomic, institutional) at community level?
- **Feasibility** – is tool feasible to implement given time, funding and other resources available for VCA?
- **Flexibility** – can tool be tailored to different situations or combined with other VCA tools?
- **Community participation** – does tool allow for engagement of various community stakeholders including marginalised groups in the VCA?
- **Policy relevance** – can tool feed into fisheries management plans, policies or related assessments to inform adaptation in the fisheries sector?

Generally, participants felt the exercise helped them to better understand how the tools were useful for conducting assessments in various coastal and fishing communities and found the selection criteria assisted in determining the most appropriate VCA tools based on available

time, resources and scenario conditions. Participants made the following recommendations based on the exercise:

- The proper scoping of communities is a very crucial planning phase activity prior to VCA tool selection.
- All tools should have outputs that can be shared on information and communications technology (ICT) platforms.
- There is a need to be realistic with regards to the level of community participation, and as far as is possible factor this into tool selection based on information obtained during the initial scoping.

See Appendix 4 for various scenarios and results for each small group in selecting VCA tools, and the slides in Appendix 3.



Figures 5 and 6: Participants engaged in group discussions for review and selection of VCA tools using application of criteria on community scenarios

5.4 Applying selected VCA Tools in T&T Communities

It was noted that the scenario exercise provided insight into the methodology CANARI employed when determining the VCA tools for the six target T&T communities. This process included a scoping analysis for each of the six target communities in T&T in order to provide a detailed understanding of the local context and fisheries sector activities to guide the selection of three tools for the VCAs. These selected VCA tools included:

- participatory geographic information systems (P-GIS)
- structured interviews/surveys
- vulnerability and capacity matrix

Table 1 gives a brief synopsis of each of the selected tools. Detailed presentations on tools can be found in Appendix 3.

Table 1: Selected tools for VCAs in T&T

Participatory GIS
<p>A Participatory Geographic Information System (P-GIS) is a tool that combines community mapping with GIS technology to put people's spatial knowledge into digital maps that could be incorporated with other information, including other maps, modelling outputs and datasets, to support decision making.</p> <p>A presentation was shared on what P-GIS is and how the application of this tool can provide a more detailed understanding of vulnerabilities and how they vary spatially. Participants were briefed on varying methods of Various approaches to P-GIS include paper-based maps, sketch mapping, digital mapping and participatory three-dimensional modelling.</p>
Structured Interviews/Surveys
<p>Surveys can provide insights into people's level of awareness of climate change and its impacts, the types of strategies for addressing impacts, and the various resources available in a community or its fishery sector.</p> <p>A presentation was shared on surveys detailing different types of interviews that can be used when conducting surveys including structured, semi-structured and unstructured/informal, as well as factors to consider when selecting the type of interview format to use. Plenary discussions were conducted surrounding the characteristics that make a good interviewer, and what were good practises for conducting interviews. Generally, participants were familiar with the characteristics of a good interviewer and some were able to share from previous experiences in their working environments, including the following:</p> <ul style="list-style-type: none"> • Being prepared • Identifying key people • Being friendly/sociable • Building rapport and relating to the audience • Being credible – have a clear introduction and state your business • Active listening • Dressing appropriate to your audience and knowing your environment • Reframing questions to ensure people can understand if needed • Being flexible • Being observant (non-verbal communication)
Vulnerability and Capacity Matrix
<p>A vulnerability and capacity matrix is a useful participatory tool to highlight differences in the level of vulnerability and capacity to adapt to climatic and other hazards across different sectors and/or social groups in a coastal or fishing community. It aims to determine the hazards that have the most serious impact on the community; determine which groups within the community, sectors, resources or livelihoods are most vulnerable; and identify coping strategies to address hazards. This information is then useful to identify and prioritise possible adaptation options.</p> <p>Participants were briefed on the process of creating and preparing a vulnerability and capacity matrix using a hypothetical exercise focused on the capital of T&T - Port of Spain, including the following steps:</p> <ol style="list-style-type: none"> 1. Identifying hazards of interest to the community 2. Identifying what will be assessed in terms of vulnerability to hazards 3. Determining a scoring or ranking system.

5.5 Practical application of VCA tools

On the second day of the workshop, participants were engaged in field activities to enable “learning by doing” and build their practical experience in using the VCA tools.

Surveys

A field trip was facilitated by CANARI and the Fisheries Division to the Carli Bay area on the west coast of Trinidad to allow participants in-field experience in conducting surveys as part of a VCA. The field trip also allowed the participants to better understand and gain insights into the local context of the Carli Bay area, and to conduct field observations to feed into the other two selected VCA tools, P-GIS and vulnerability and capacity matrix. The field trip included a site visit to the fish landing site at Carli Bay, along with the beach and immediate neighbourhood.



Figures 7 and 8: Participants in the field conducting surveys and posing for a group picture following execution of field observations during the field trip to Carli Bay, Trinidad

Following the field trip, a debrief session was done on surveys as a VCA tool. This debrief covered their experience conducting the surveys and the results they were able to record. This debrief revealed the following from participants:

Survey Experience:

- Being opportunistic to get as many participants as possible
- Restructuring the questions to ensure participants could understand
- Issue of trust and importance of contacting and getting buy-in of key community leaders
- Paying attention to timing, venue and level of comfort in conducting surveys
- Importance of building rapport and maintaining conversation
- Active listening and observing
- Being genuine and empathetic to others
- People are happy to talk, but need to guide them to get needed information
- Being respectful of people’s time
- Having a clear strategy to go forward and next steps so participants don’t feel you have wasted their time

Key points and recommendations:

- Modification of survey question to insert age ranges that can be selected vs. asking for interviewee's specific age.
- Removing survey question on employment.
- Distinguish between the terminology of recovery and response within survey questions.
- Restructuring of the survey questions to ensure participants understand what is being asked. Participants emphasized that in practice, it may be beneficial to reword and/or restructure survey questions based on the communication occurring with the interviewee at the time to ensure clarity. Using simpler language to ask questions vs. terms that require more technical familiarity.
- Ensure active listening and observation to pick up on aspects such as non-verbal communication between interviewees as well as towards the interviewer(s).
- Be mindful of the issue of trust towards interviewer(s) by interviewee(s) in a community setting and determine whether contacting key community leaders ahead of survey execution is beneficial to the survey process (i.e., some interviewees may be hesitant to be surveyed unless a trusted community member were to prior endorse the exercise to be conducted, or participate in the exercise themselves).
- Guiding conversations with interviewees respectfully to gather topic-specific information needed. This point also brought out from participants that the approach of allowing an interviewee the space to communicate freely and listen, may offer within that conversation answers to questions further down in the survey which the interviewer can note.

Participatory GIS

Practical application of P-GIS was undertaken, with the participants creating a legend and mapping key identified aspects such as the fish landing site, recreational facilities, religious monument, agricultural areas, mangrove and areas with observed coastal erosion and flooding in Carli Bay. The aim was to understand the layout of the community, key coastal or fisheries related features, resources and how these may be affected by climate hazards. Participants drew on their field observations during the field trip to map Carli Bay for the P-GIS. Through this exercise, participants were provided with practical experience in using the P-GIS tool.



Figures 9 and 10: Participants map key features and vulnerabilities observed in Carli Bay, Trinidad using Google Earth imagery as part of Participatory GIS exercise

Table 2 summarises the findings, including key hazards and assets/capacities, identified by the participants based on the surveys, field observations and PGIS exercise for Carli Bay.

Table 2: Key hazards, assets and capacities identified from surveys, field observations and P-GIS at Carli Bay, Trinidad

Key Hazards	Key Assets/Capacities
<ul style="list-style-type: none"> - Coastal erosion - Flooding & poor drainage - Mosquito borne diseases - Pollution (garbage along beach/landing area, river pollutants, plastics, sediments, air pollution, ships dumping solid & sewage waste, oil spills) - Declining fish stocks - Sargassum influx - Piracy - Health and safety hazards - Loss of wetlands - Damage to ocean bed due to trawling - Conflicts with trawlers 	<ul style="list-style-type: none"> - Active fisherfolk organisation - Local knowledge (e.g. boat building/repairs to fishing nets) - Reliable access roads - Access to fishing facility (with water, proper lighting) - Mix of livelihood activities (fishing, agriculture, industrial activity [Point Lisas], government jobs) - Insurance (but only for those who own land and houses or rent legally) - Planting to cater for floods - Mobility (can shift key assets/valuables elsewhere) - Coastal protection, replanting led by individuals and community

Vulnerability and capacity matrix

The final tool to be applied was the vulnerability and capacity matrix (See Appendix 5 for vulnerability and capacity matrix template). Focusing on the Carli Bay area, participants worked in groups to identify specific climate related hazards and vulnerabilities affecting different resources within the area based on their experience conducting surveys and field observations. Each group focused on one of the following resource types: physical infrastructure, natural resources, socio-economic resources and livelihood activities. A ranking system for the hazards was developed from 1 being the lowest to 3 being the highest impact. Each group then identified potential coping and adaptation strategies for addressing the highest impact risks affecting the various resources in Carli Bay. See Appendix 5 for examples of matrices developed by the groups.

5.6 Communicating the results of the VCAs and action planning

This session highlighted key steps to consider once VCAs were completed. Firstly, results will need to be collated and organised in order to facilitate proper analysis and provide an overall picture of vulnerability within each target community. Secondly, communication products and pathways will need to be identified for sharing the results of the VCAs and effectively using these results for action planning. In identifying communication products, the following questions need to be considered:

- Who are the target audience and end users for the VCA findings and outputs?
- What are the key findings and messages from the VCA?
- How and in what formats should the findings of the VCA be communicated for adaptation planning and actions at the community level?
- How can the VCA findings feed into and influence decisions and policies at sectoral, national and regional levels? What are the appropriate communication and engagement strategies and pathways?

Potential communication products that could be developed to share results were discussed in plenary and included summary reports, maps, posters and other ICT products for the target communities. A critical point was the benefit in relating the range of communication and other outputs to stakeholder decision-making, public awareness and further assessments.

Action planning was then discussed, highlighting how results should be linked to the development of local adaptation plans and actions to reduce vulnerabilities and build resilience in each target community. Findings of the VCAs can be used to prioritise actions based on the main climate related hazards affecting a community and the areas or groups most vulnerable. These priorities can inform the specific actions taken to reduce vulnerability and adapt to climate change, and help identify and justify where to invest limited resources. The VCA may also highlight opportunities and challenges for adaptation within the local context and allow adaptation actions to be tailored to suit the context.

See slides in Appendix 3.

6. Workshop evaluation and next steps

In closing, the facilitator reviewed the workshop objectives and what had been accomplished in the workshop over the two days. An outline of the next steps for the project and VCA work was shared. This included producing the workshop report, refining the survey questions and developing a workplan and schedule for conducting VCA fieldwork in the six target communities in Trinidad and Tobago, based on stakeholder inputs at the training workshop.

A written workshop evaluation was then undertaken. Participants highlighted the following in their evaluations:

Aspects they enjoyed or found useful

- The practical aspects that allowed us to actually put the theory into practice
- The interactive, informative engagement
- It makes (you) meet people from different areas and share ideas and work together
- Interactive, relaxing environment – willing to listen and learn
- Using the VCA toolkit
- The hands on, actually being able to conduct the survey and PGIS
- Tool Kit exploration and use of matrix and PGIS
- All (Something very new to me)

Areas for improvement

- More examples or case studies of how the P-GIS tool can be applied
- More time to discuss the different VCA techniques

The full evaluation results can be found in Appendix 6.

Appendix 1: Participants List

Fisheries Division

Mohammed, Elizabeth
Senior Fisheries Officer
Fisheries Division
Ministry of Agriculture, Lands and Fisheries
Government of Trinidad and Tobago
35 Cipriani Boulevard
Newtown, Port-of-Spain, Trinidad
Tel: (868) 625-9358
E-mail: emohammed.2fdtt@gmail.com

Mieux, Recardo /National Focal Point
Fisheries Officer
Fisheries Division
Ministry of Agriculture, Lands and Fisheries
Government of Trinidad and Tobago
35 Cipriani Boulevard
Newtown, Port-of-Spain, Trinidad
Tel: (868) 623-6028/623-8525
Fax: (868) 623-8542
E-mail: rmieux@gov.tt

Bissessar, Anand
Fisheries Assistant
Fisheries Division
Ministry of Agriculture, Lands and Fisheries
Government of Trinidad and Tobago
35 Cipriani Boulevard
Newtown, Port-of-Spain, Trinidad
Mob:(868) 303-4325
E-mail : anandbissessar579@gmail.com

Gomez, Sherma
Fisheries Assistant
Fisheries Division
Ministry of Agriculture, Lands and Fisheries
Government of Trinidad and Tobago
35 Cipriani Boulevard
Newtown, Port-of-Spain, Trinidad
Tel:(868) 623-8525
E-mail: gomezsherma_15@yahoo.com

Koylass, David
Fisheries Assistant
Fisheries Division
Ministry of Agriculture, Lands and Fisheries
Government of Trinidad and Tobago
35 Cipriani Boulevard
Newtown, Port-of-Spain, Trinidad
Mob:(868) 773-1963
E-mail: d.koylass@yahoo.com

Franklin, Alicia
Fisheries Assistant
Fisheries Division
Ministry of Agriculture, Lands and Fisheries
Government of Trinidad and Tobago
35 Cipriani Boulevard
Newtown, Port-of-Spain, Trinidad
Mob:(868) 307-1529
E-mail: alifrank1973@gmail.com

Ankiah, Shandira
Fisheries Officer
Fisheries Division
Ministry of Agriculture, Lands and Fisheries
Government of Trinidad and Tobago
35 Cipriani Boulevard
Newtown, Port-of-Spain, Trinidad
Tel:(868) 727-5798
E-mail: shandira@gmail.com

**Department of Marine Resources (Fisheries),
(THA)**

Ottley, Garth
Ag. Director
Department of Marine Resources (Fisheries)
Food Production, Forestry and Fisheries
Tobago House of Assembly
Tam's Building, Glen Road
Scarborough, Tobago
Mob:(868) 471-1029
E-Mail: garthottley1@gmail.com

Dass, Shana
Fisheries Extension Officer
Department of Marine Resources (Fisheries)
Food Production, Forestry and Fisheries
Tobago House of Assembly
Tam's Building, Glen Road
Scarborough, Tobago
Mob:(868) 768-3835
E-Mail: shanadass1@gmail.com

Holmes, Terrence
Fisheries Extension Officer
Department of Marine Resources (Fisheries)
Food Production, Forestry and Fisheries
Tobago House of Assembly
Tam's Building, Glen Road
Scarborough, Tobago
Mob:(868) 789-9758
E-Mail: Tholmes_64@yahoo.com

Hoyte, Shemeika
Assistant Data Collector
Department of Marine Resources (Fisheries)
Food Production, Forestry and Fisheries
Tobago House of Assembly
Tam's Building, Glen Road
Scarborough, Tobago
Mob:(868) 334-3061
E-Mail: shemeika05@gmail.com

Environmental Policy and Planning Division

Leung Woo-Gabriel, Candice
Research Analyst
Environmental Policy and Planning Division
Ministry of Planning and Development
Level 7, Tower C
International Waterfront Complex,
1A Wrightson Road, Port of Spain, Trinidad
Tel: (868) 225-3386
Mob:(868) 396-5923
E-mail: Candice.leungwoo@planning.gov.tt

Lakhan, Javed
Environment Policy Officer
Environmental Policy and Planning Division
Ministry of Planning and Development
Level 7, Tower C
International Waterfront Complex,
1A Wrightson Road, Port of Spain, Trinidad
Tel: (868) 225-3390
E-mail: Javed.lakhan@planning.gov.tt

CC4FISH National Coordinator

Jobe, Kerton
National Project Coordinator CC4FISH
Climate Change Adaptation of the Eastern Caribbean
Fisheries Sector (CC4FISH)
Food and Agriculture Organization (United Nations)
Trinidad and Tobago
Mob:(868) 759-5855
E-mail: kerton.jobe@fao.org

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

Khan, Ahmad
Resilience Officer
International Federation of Red Cross and Red Crescent
Societies
#110 Picton Street
Port of Spain, Trinidad
Mob: (868) 288-2713
E-mail: ahmad.khan@ifrc.org

**Office of Disaster Preparedness and Management,
(ODPM)**

Pierre, Rhea
Hazard, Mitigation Specialist
Office of Disaster Preparedness and Management
4A Orange Grove Road,
Trincity,
Tacarigua, Trinidad
Tel: (868) 640-1285
E-mail: rpierre@mns.gov.tt

**Tobago House of Assembly
(THA)**

Robin, Howard
Climate Change Specialist
Coastal Zone Management Unit
Tobago House of Assembly
Old Licensing Building, Shaw Park,
Scarborough, Tobago
Mob:(868) 498-2192
E-mail: howardrobin@gmail.com

Tobago Emergency Management Agency

Thompson, Carisse
Operations Assistant
Tobago Emergency Management Agency
Office of the Chief Secretary, Bacolet Street,
Fairfield Complex,
Scarborough, Tobago.
Tel: (868) 490-6395
E-mail: carisse18@gmail.com

**Environmental Research Institute Charlotteville
(ERIC)**

Mohammed, Ryan Dr.
Secretary to Board of Directors
Environmental Research Institute Charlotteville
(ERIC)
Charlotteville, Tobago
Tel: (868) 370-5695
E-mail: ryansmohammed@gmail.com

Trinidad and Tobago Red Cross Society

Hutchinson, Derek
Programme Support Officer
Trinidad and Tobago Red Cross Society
7a Fitz Blackman Drive,
Wrightson Road Extension,
Port-of-Spain, Trinidad
Tel:(868) 374-6357 / 286-6141
E-mail: derek_kareem@hotmail.com

Grand Chemin Fishing Association

Toussaint, Lawrence
President
Grand Chemin Fishing Association
Grand Chemin, Trinidad
Tel: (868) 357-9395
E-Mail: -

Roxborough Fisherman Association

Wright, Trevor
President
Roxborough Fisherman Association
Roxborough, Tobago
Tel: (868) 297-2143
E-Mail: -

**Caribbean Natural Resources Institute
(CANARI)**

Granderson, Ainka Dr.
Senior Technical Officer
Caribbean Natural Resources Institute (CANARI)
105 Twelfth Street, Barataria
Trinidad and Tobago
Tel: (868) 638-6062 | (868) 674-1558
Fax: (868) 674-1788
E-mail: ainka@canari.org

**Caribbean Natural Resources Institute
(CANARI)**

Ramkissoon, Candice
Technical Officer
Climate Change & Disaster Risk Programme
Caribbean Natural Resources Institute (CANARI)
105 Twelfth Street, Barataria
Trinidad and Tobago
Tel: (868) 638-6062 | (868) 674-1558
Fax: (868) 674-1788
Email: candice@canari.org

Albert, Deanna
Technical Officer
Caribbean Natural Resources Institute (CANARI)
105 Twelfth Street, Barataria
Trinidad and Tobago
Tel: (868) 638-6062 | (868) 674-1558
Fax: (868) 674-1788
Email: deanna@canari.org

Appendix 2: Agenda



Food and Agriculture
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REGIONAL IMPLEMENTATION OF THE VULNERABILITY AND CAPACITY ASSESSMENT FOR THE CLIMATE CHANGE ADAPTATION IN THE EASTERN CARIBBEAN FISHERIES SECTOR PROJECT (CC4FISH)

Vulnerability and Capacity Assessment Training Workshop

December 4-5, 2019

Waterloo Community Centre, Carapichaima, Trinidad

Provisional Agenda

Workshop overview

The Caribbean Natural Resources Institute (CANARI) has been contracted by the Food and Agriculture Organization of the United Nations (FAO) to undertake the regional implementation of a Vulnerability and Capacity Assessment (VCA) in coastal and fishing communities under the ***Climate Change Adaptation in the Fisheries Sector of the Eastern Caribbean Project (CC4FISH)***. CC4FISH aims to increase resilience and reduce vulnerability to climate change impacts in the Eastern Caribbean fisheries sector through introduction of adaptation measures in fisheries management and capacity building of fisherfolk and aquaculture farmers. CC4FISH is being implemented from 2017-2020 by the FAO/ Western Central Atlantic Fishery Commission (WECAFC) and national fisheries authorities in seven project countries, Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, Saint Lucia, St. Vincent and the Grenadines and Trinidad and Tobago. CC4FISH is funded by the Global Environment Facility.

CANARI's work aims to improve understanding of climate change impacts and vulnerabilities for effective adaptation in the Eastern Caribbean fisheries sector through implementation of VCAs in 14 coastal and fishing communities across four target countries, Grenada, St. Kitts and Nevis, St. Vincent and the Grenadines and Trinidad and Tobago. This VCA work is being implemented from October 2019 to November 2020 in collaboration with FAO and national fisheries authorities in the target countries.

As a key first step, CANARI is supporting the establishment of local field teams and provide training on planning and implementing VCAs in each of the four target countries, Grenada, St. Kitts and Nevis, St. Vincent and the Grenadines and Trinidad and Tobago. This training builds on CANARI's previous work to develop a regional VCA framework and toolkit under phase 1 activities from September 2017 to September 2018 under CC4FISH.

Workshop goal and objectives

CANARI will conduct in-country training with the field team in Trinidad and Tobago on design and implementation of local level VCAs using the toolkit developed in Phase 1 of the VCA work.

This will support fieldwork to conduct VCAs in six target coastal and fishing communities – Roxborough and Speyside in Tobago and Blachisseuse, Matelot, Moruga and Iacos in Trinidad – and in the future.

The specific objectives of the workshop are to build capacity and support participants to:

- understand what is vulnerability and the role of VCAs in informing climate change adaptation;
- understand the VCA process, including how to effectively evaluate and select appropriate VCA tools for conducting field assessments; and
- apply select VCA tools to capture local knowledge and perspectives on climate change impacts, vulnerabilities and priorities for adaptation at the community level, focusing on areas critical to the fisheries sector.

Provisional Workshop Agenda

Wednesday 4 December, 2019	
8:30 am	Registration of participants
9:00 am	Opening remarks and welcome Overview of the project and workshop objectives Introductions and icebreaker
9:30am	Introduction to vulnerability and Vulnerability and Capacity Assessment (VCA) concepts Interactive exercise-Understanding vulnerability
10:30 am	Snack break
11:00 am	Overview of the VCA toolkit Review of VCA tools Interactive scenario exercise – VCA process and tools
12:30 pm	Lunch
1:30 pm	Applying VCA tools in Trinidad and Tobago
3:00 pm	Next steps - brief on Day 2 field work Wrap up
3:30 pm	End Day 1

Thursday 5 December, 2019	
8:30 am	Registration of participants
9:00 am	Recap of Day 1 activities Introduction to VCA fieldwork
9:30 am	Fieldwork - Applying VCA tool: Surveys
11:45 pm	Lunch
12:30 pm	Debrief of VCA fieldwork
1:00 pm	Applying VCA tool: Participatory GIS
2:00 pm	Applying VCA tool: Vulnerability and capacity matrix
3:00 pm	Communicating VCA results and action planning
3:25 pm	Workshop evaluation Wrap up and next steps
3:35pm	End Day 2

Appendix 3: Workshop Presentations and materials

1. [Overview: Introduction to vulnerability and VCA concepts](#)
2. [Overview of the VCA toolkit for VCA in coastal and fishing communities in the Eastern Caribbean](#)
3. [Applying VCA tools in Trinidad and Tobago \(including de-brief session slides\)](#)
4. [VCA communication of results and action planning](#)

**Appendix 4: Exercise results –
Scenario based assessment of VCA tools**

SCENARIO A	Tools chosen & selection process
<p>SCENARIO: Coastal community in remote northern location of the island, with two main natural resource-based livelihood activities – agriculture and fishing. The area is also a popular long stay holiday spot. There is a fairly active fishing cooperative, with majority of fishers being members. Main fishing type includes line, seine, trolling and a-la-vive artisanal fishing methods. Common species landed include kingfish, carite, cavalli and ancho. Fisherfolk have supplemental sources of income from Government Programmes The fish landing site is exposed to hurricanes, storms and related storm surges and has been affected by sargassum in recent times. Rough seas are frequently experienced. The community faces other multiple risks from riverine flooding and landslides which have been known to cut off road access. There is one major coastal road that traverses the community. There are no processing facilities and thus no wider offering of fish and fish products such as fish fillet, fish patties, fish burgers, available to consumers. Many lower income households depend on fishing and have no alternative income. Fish is sold mainly to the main market in the community, with a few fishers selling to small guesthouses and restaurants nearby. Village has been focus of multiple assessments and projects in past and fisherfolk generally fatigued and not interested in attending meetings etc.</p> <p>BUDGET: \$1,000 US</p> <p>TOOLS: Surveys, Vulnerability and Capacity Matrix, Participatory GIS, Photo-journaling (with community mapping) & Value chain analysis</p>	<ul style="list-style-type: none"> • Vulnerability and Capacity Matrix – short period of time, within budget, more options to voice issues and suggestions, can identify the core problems, tool as a precursor for future in-depth analysis • Photo-journaling – establish historical timeline of before and present, clear visual understanding of problems, applicable to modern information sharing (WhatsApp, Facebook, Instagram) • Surveys – establish “hands-on data” from stakeholders, data collected can be shared with different sectors of study <p>Recommendations</p> <ul style="list-style-type: none"> • All tools should have outputs that can be shared in ICT platforms
SCENARIO B	Tools chosen & selection process
<p>SCENARIO: A remote fishing village on a small island with high levels of poverty and unemployment, and a number of social issues including teenage pregnancy and youth delinquency. Fishing is the main livelihood in the community but some persons involved in small scale farming and other small businesses in the community. Beach tourism is very popular. The area includes important nesting sites for the globally threatened Leatherback Turtle – many people come for turtle watching during nesting season. It is one of several communities bordering a forest reserve and coastal zone protected area, which are utilised heavily for supporting livelihoods and recreation. A successful co-management model was developed with another nearby community and forest/protected area authorities. This main road is the</p>	<ul style="list-style-type: none"> • Surveys – insight and awareness, strategies for assessing the impacts, can provide quantitative data, fixed format for comparable data. • Vulnerability and Capacity Matrix – gauge people’s exposure and capacity to resist natural hazards, vital to disaster preparedness, contribute to community-

<p><i>only land access route to the village. It is therefore quite remote and access to urban centres, markets and various facilities is limited. Aging fishing population; many older fishers and only a few younger ones. A few women actively involved in fishing processing and vending. A fisherfolk cooperative exists but there is very limited participation Fishers use mainly traditional fishing boats and gear. There are concerns about unsustainable fishing practices including overfishing, as well as possible loss of fish stock as a result of seismic surveys and drilling conducted by the energy companies in the offshore oil and gas operations Area is prone to and frequently impacted by adverse weather conditions that can cause damage to infrastructure, fishing equipment, homes. Fisherfolk do not have access to insurance</i></p> <p>BUDGET: \$5,000 US</p> <p>TOOLS: Surveys, Vulnerability and Capacity Matrix, Participatory GIS, Participatory 3D modelling (P3DM), Seasonal Calendar</p>	<p>based programs, impact temporal can be assessed</p> <ul style="list-style-type: none"> Seasonal calendar – changes to seasonal calendar (monthly, tidal), analysis of livelihood practises <p>Recommendations</p>
<p>SCENARIO C</p>	<p>Tools chosen & selection process</p>
<p>SCENARIO: <i>A small coastal community located some distance away from main commercial centres; depends mainly on fishing with a small percentage of the residents working on the surrounding coconut estates. The area is known to suffer from significant erosion - the shoreline has receded about 150m in the last 100 years. There are also areas of extreme accretion where sand is deposited after being transported due to wave action and currents. The community is exposed and has been significantly affected in the past by storm activity, particularly high winds and flooding. Accessibility has been an issue in the past due to impact of these hazards. The waters are highly turbid due to run off from large nearby rivers; this influences the composition of fish and invertebrate communities. Common species landed include sierra mackerel, snapper, tarpon and cro-cro . Main fishing type includes a la vive, mono filament and banking fishing methods.Sale of fish does not involve value-added processes such as cleaning and packaging; freezing; drying, smoking or salting. All catch is sold fresh to middlemen who wholesale and retail in other population centres.Women are generally not involved/interested in fishing or other aspects of the industry (e.g. cleaning fish or vending). There a no. of known social issues including crime - reports of piracy and kidnappings at sea are fairly common and there are concerns over drugs and illegal immigrants in the area</i></p> <p>BUDGET: \$10,000 US</p> <p>TOOLS: Surveys, Vulnerability and Capacity Matrix, Participatory GIS, Participatory Scenario Analysis, Problem Tree</p>	<ul style="list-style-type: none"> Surveys Vulnerability and Capacity Matrix Participatory GIS <p>Selection Process: Ranked each tool out of 5, not 3 – and the highest scores were selected. However; 2 of the highest score tools selected were similar. To get better representation, team opted to choose the 4th ranked tool</p> <p>Recommendations</p> <ul style="list-style-type: none"> Proper scoping exercises to ensure the most information is gained from the tool Be realistic, community participation is not certain
<p>SCENARIO D</p>	<p>Tools chosen & selection process</p>
<p>SCENARIO: <i>This thriving coastal community falls within an area designated as a marine protected area and is a known local heritage site. It is located along a scenic access route to a number of tourism</i></p>	<ul style="list-style-type: none"> Surveys

<p><i>attractions including rivers and waterfall. Key recreational activities which also bring income to the community include diving and tour-guiding, sea sports and a popular seafood festival. Fishing is one of the primary economic activities - There is one main landing site & commercial and small-scale fisheries occur at the area. There is a relatively large fishing fleet which includes both registered and non registered vessels. There is a locally active fisherfolk organisation which consistently displays interest in food security, income generation and a sustainable source of fish catch. High exposure to hurricanes and storms which result in damage to and loss of equipment for fisherfolk. Rough seas have damaged boats and gear in the past. Flooding affects infrastructure in the area including access road. Some community members, dive/tour operators and environmentalists are concerned about overfishing and lobbied the government to develop sterner regulations. Fishers themselves have been noting changes in conditions and catch from when they first started fishing but have had limited opportunities to input into management planning.</i></p> <p>BUDGET: \$20,000 US</p> <p>TOOLS: Surveys, Vulnerability and Capacity Matrix, Participatory GIS, Photo-journaling (with community mapping), Participatory three-dimensional modelling (P3DM)</p>	<ul style="list-style-type: none"> • Vulnerability and Capacity Matrix • Photo-journaling <p>Selection Process: Ranked each tool using a table format on which criteria it could be applied to (appropriateness, coverage, feasibility, flexibility, community participation, policy relevance, cost effectiveness, human resource and time).</p> <p>Recommendations</p> <ul style="list-style-type: none"> • Proper scoping
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Appendix 5: Vulnerability and capacity matrix template example

**CLIMATE CHANGE ADAPTATION IN THE FISHERIES SECTOR OF THE EASTERN CARIBBEAN PROJECT
(CC4FISH)**

Vulnerability and Capacity Assessment Training Workshop - Trinidad and Tobago

**Vulnerability and Capacity Matrix
(Blank Template)**

.....	Hazards						
Current coping/adaptation strategies?							

Vulnerability and Capacity Matrix – Exercise Results

Resource Type: Natural Resources

Natural Resources	Hazards						
	Coastal Erosion	Flooding	Pollution	Sargassum	Piracy	Ocean bed damage	Mosquitoes
Rivers	1	3	3	0?	0	0	
Mangrove	3	3	3	2	0	0	
Beach	3	2	3	2	0	0	
Sea	2	1	3	3	0	3	
Coping/adaptation strategies?	Plant vegetation	Dredging Reduce waste	Waste management				

Resource Type: Livelihood Activities

Livelihood activity	Hazards							Industrial Development
	Flooding	Stormsurge	Coastal Erosion	Pollution	Health/Disease	Sargassum	Destruction of Mangrove	
Fishing	2	3	3	3	2	3	2	2
Farming	3	1	2	1	2	1	1	1
Construction	3	1	1	1	2	1	1	1
General Labour/Port	1	2						
Industrial (Point Lisas Complex)	2	1						

Net Repair	2	2						
Fish Vending	3	3						
Food Vending	3	1						
Coping/adaptation strategies?	Planting (agriculture) in small amounts so in the event of disaster there is small loss, water resistant crops, insurance							

Resource Type: Socio-Economic (Fisheries-related assets)

Fisheries Assets	Hazards						
	Coastal Erosion	Storm Surge/Flooding	Vector Borne Diseases	Pollution	Sargassum	Trawling	Piracy
Fishing boats	1	3	1	3	3	1	3
Fishing gear (nets)	1	3	1	3	3	1	3
Jetties	3	3	1	2	2	1	1
Fishing facility	3	3	1	1	1	1	1
Access to fishing	3	3	1	3	3	1	3
Ecosystems (nurseries)	3	3	3	3	3	3	1
Insurance	2	3	1	2	2	1	3

Coping/adaptation strategies?		Break water Boat storage		Proper solid waste management, Early warning (for oil spills)	Early warning Alternate routes Repurposing of sargassum (alternative use)		
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Resource Type Assessed: Infrastructure

Infrastructure	Hazards					
	Coastal Erosion	Flooding/Poor Drainage	Pollution	Health and Safety	Sea Level Rise	Storms
Fish landing site	3	3	1	1	3	3
Recreational sites	3	3	3	2	3	3
Drainage & roads	3	3	2	2	3	3
Industrial	1	3	2	2	2	2
Jetty	3	3	1	3	3	3
Housing	1	3	2	2	2	2
Religious facility	3	3	3	2	3	3
Coping/adaptation strategies?		-Sluice gates -Better designs of drains to accommodate future increase in rainfall -Housing design, build on stilts			-Ecosystem based strategies e.g. mangrove restoration, -Possible relocation	

Appendix 6: Workshop Evaluation Results



Food and Agriculture
Organization of the
United Nations



REGIONAL IMPLEMENTATION OF THE VULNERABILITY AND CAPACITY ASSESSMENT FOR THE CLIMATE CHANGE ADAPTATION IN THE EASTERN CARIBBEAN FISHERIES SECTOR PROJECT (CC4FISH)

Vulnerability and capacity assessment (VCA) Training Workshop

December 4-5, 2019

*Waterloo Community Centre, Corner Butler Village, Waterloo, Carapichaima,
Trinidad and Tobago*

Workshop evaluation form

1. Did the workshop meet its objectives?

[22] Yes [] No

If no, please let us know why below:

2. Did the workshop live up to your expectations?

[22] Yes [] No

If no, please let us know why below:

3. What did you like about this workshop?

- The interaction – 7
- Interactive and engaging
- High level of interaction
- It was practical - 2
- It makes me meet people from different areas and share ideas and work together
- It was informative
- It was very informative

- Informative / Interactive
- It was very informative and straight to the point
- In depth knowledge of the VCA tools
- Interactive, relaxing environment – willing to listen and learn
- The group assignment and field visit
- Practical sessions to apply what was learnt
- The practical aspects that allowed us to actually put the theory into practice.
- How hands on and interactive it was

4. What did you dislike about this workshop?

- N/A – 4
- Nil – 4
- Too long - 2
- Presentations & VCA toolkit should have been shared before the workshop
- The spicy food
- Catering
- Plastic bottles and waste generated
- Day 2 after lunch session was a lot after the field work

5. Please indicate which sessions you found particularly useful:

- All sessions. This was my first VCA training – 3
- Day two - 3
- PGIS – 4
- PGIS and Vulnerability and capacity matrix – 2
- Using the VCA toolkit
- Use of various tools
- The hands on, actually being able to conduct the survey and PGIS
- Mock survey questions (Field trip)
- Group work
- Toolkit exploration and use of matrix and PGIS
- Field visit
- Practical work
- Demonstration / participation

6. How could the workshop have been improved?

- Extended for another day/ been longer
- It was well orchestrated
- Time management
- The methods of delivery were excellent
- A longer time frame needed to carry out workshop itself (2 days not enough)
- End it a bit earlier

- 1 day and a half (instead of 2)
- Transparency for PGIS more examples of tools usage.
- More time to discuss the different VCA techniques
- Very Good
- Nil
- Better catering

7. Please describe one method, approach or tool that you will apply from the workshop when you return to your workplace or in your community.

- PGIS - mapping of the area - 4
- Vulnerability and capacity matrix - 5
- Surveys – easier, most cost – effective to implement - 5
- Photo journalling
- Capacity mix in developing field team for VCA
- Improve listening to stakeholders
- The collection of data according to how each sector may or can be affected
- Try to incorporate all tools
- All methods are relevant to my work

8. What might prevent you from applying the approaches or tools promoted in this workshop?

- Availability of funds -5
- Willingness of stakeholders to participate - 3
- Financial and human resources – 3
- Time/Flexibility in my work schedule - 3
- Nothing - 3

9. Please rate the following areas of the course structure and delivery:

	Very Good	Good	Fair	Poor
Clarity of objectives	13	7		
Workshop content	14	7		
Materials	10	10	1	
Facilitation	16	5	1	
Relevance to your needs	17	5		

Any additional comments on the above:

- Great job

10. Please give feedback on the logistical arrangements made for the workshop:

	Very Good	Good	Fair	Poor
Workshop venue (s)	8	8	2	
Lunches and breaks	8	5	3	
General logistical arrangements	7	10		

11. Any other comments

- Great training
- Very informative workshop
- Nil

Thank you!