



# THE FORCE PROJECT

## FUTURE OF REEFS IN A CHANGING ENVIRONMENT

### NEWTOWN, BASSETERRE, COMMUNITY MEETING

March 29th, 2012

#### OVERVIEW OF THE PROJECT

The FORCE project, a five-year initiative funded by the European Union, commenced in 2010 and brings together a team of researchers from 20 organisations based in 10 countries within the Caribbean, Europe, the US and Australia.

Caribbean people rely heavily on coral reefs, which contribute billions of dollars each year through tourism, fisheries and coastal protection. Coral reefs are being damaged by activities such as unsustainable fishing and pollution, and face an uncertain future with global climate change.

The FORCE project will address important questions about how changes will affect coastal communities and livelihoods such as fisheries and tourism. Recommendations will be disseminated to stakeholders through-out the Caribbean on how to protect the reefs.

The FORCE social science team will be conducting work in a total of four countries: Barbados, Honduras, St. Kitts and Nevis, and Belize.

#### COMMUNITY MEETING

FORCE fieldwork started in St. Kitts and Nevis during February 2012. The FORCE team visited Dieppe Bay and Newtown in St. Kitts, and Jessups in Nevis. A meeting was held in Newtown to:

- Explore recent changes in tourism, fishing, and the community of Newtown.
- Talk about changes in people's use of the sea and coral reefs.
- Discuss the groups and organisations involved in coral reef use and management.

People were asked to help build a timeline about changes in Newtown and discuss who is involved in looking after the reefs. This leaflet presents the results of this meeting and some early results from the project.

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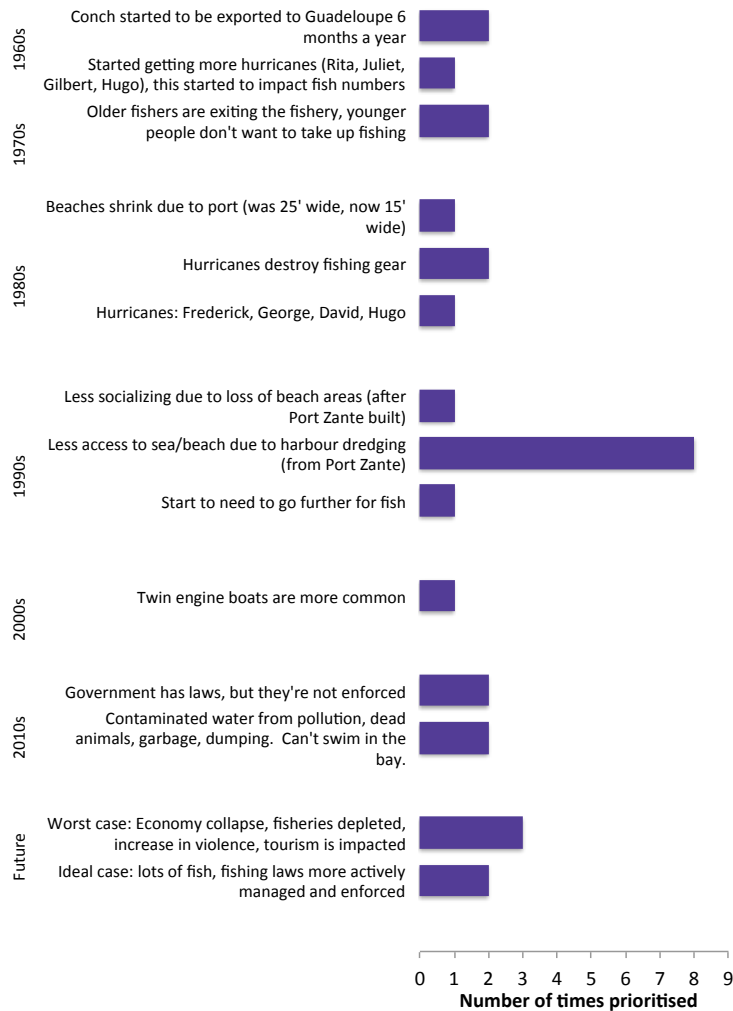
# HISTORICAL TIMELINE

The purpose of the timeline was to learn more about the history of the community and the changes that have been important to local people. The timeline shows events and changes in Newtown identified by people at the meeting.



## KEY EVENTS

People at the meeting identified the most important changes that have affected how people use the reefs.



## "WHO SHOULD BE AT A MEETING ABOUT...?"

The FORCE team wanted to find out people's opinions on who should be involved in taking care of the reefs. People identified the following stakeholders that should be invited if a meeting was held about fishing, tourism, or their community.

### 1) "... FISHING ON THE REEF?"

- Fishermen
- Fisheries Department (Dept. of Marine Resources)
- Coast Guard
- Environmental Department (Dept. of Physical Planning and Environment)
- Ministry of Agriculture
- Radio and TV broadcaster

### 2) "...TOURISM ON THE SEA?"

- Tourism Department
- Maritime Department (Dept. of Maritime Affairs)
- Fisheries Department (Dept. of Marine Resources)
- Fishermen
- Coast Guard
- Taxi Association
- Tour guides
- Vendors
- Everybody/community members
- Minister of Tourism
- Hotel managers
- Restaurants
- Hotel and Tourism Association (HTA)

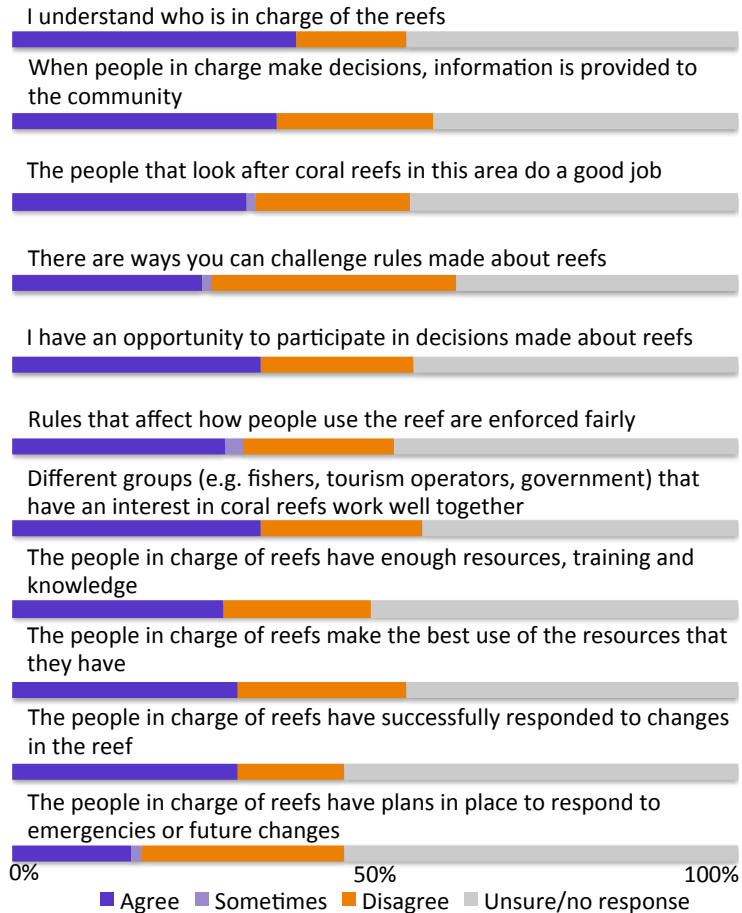


### 3) "...THE FUTURE OF THE COMMUNITY?"

- Fishermen
- Social workers
- Law enforcement
- Everybody/community members
- Teachers
- School children/youths
- Doctors
- Minister of Newtown (MP)
- Representative for Fire Department

## OPINIONS ON REEF MANAGEMENT

We are interested to get people's opinions about how the reefs are being looked after. People we interviewed were given a series of statements and asked whether they agreed or disagreed. The following shows the community's feelings about the management of the reefs.



## KEY ISSUES

### REEF HEALTH

Fishers and tourism workers who use the reef generally thought that there has been a decline in the numbers of fish and conch. Fishers also said that they are catching smaller conch and certain species of reef fish have disappeared. The reefs have been affected by many impacts including: dredging for Port Zante which covered the conch beds with silt and sand; pollution from waste water and runoff; hurricane damage; and the invasive lionfish.

### LIVELIHOODS

Fishing is important in Newtown, as pot fish and conch are popular foods in the community. Many fishers live and work in Newtown, selling most of their pot fish and conch to the Basseterre Fisheries Complex and to locals. Conch is also exported to Guadeloupe from September to February.

The closure of the sugar cane industry in 2005 initiated a major switch in employment from the sugar industry to tourism. Tourism has since provided many people in Newtown with alternative sources of employment, particularly in construction, hotels, tours and taxis. Port Zante boosted tourism by bringing thousands of cruise ship passengers to the island. However, it also impacted the coastline and marine environment of Newtown, damaging conch beds and fishing grounds, and reducing the size of the beach previously used for recreation. Many people believe that marine tourism is a good career for young people. However, they believe it is harder to make a living from fishing now as the fish catch is declining and the island is more dependent on tourism.

### MANAGEMENT OF THE REEF

Many community members said that there needs to be better laws governing the marine environment, and more restrictions on fishing areas. People said that the current fishing laws are not enforced by the Fisheries Department due to a lack of manpower, and instead the Coast Guard enforces these laws. Many felt that there needs to be more education to teach community members and reef resource users about the importance of looking after the reef and the environment in general. Community members stated that in the Newtown area, the coastline and marine environment has been negatively impacted by development, and that the government allowed this development to happen without taking into consideration the effect it would have on local fishing and recreational activities.



## DIVING

Every year thousands of tourists from around the world travel to St. Kitts and Nevis to have the chance to experience beautiful coral reefs and abundant fish life during a snorkel or a dive trip. As a result, the dive industry plays a very important role in the economy of the Federation. Interviews were carried out at all the dive shops in St. Kitts and Nevis to get an understanding of the economic value of the industry. More than 160 SCUBA divers were also interviewed to identify how changes in reef fish could affect the dive industry, and to gather information on the types of divers who visit.

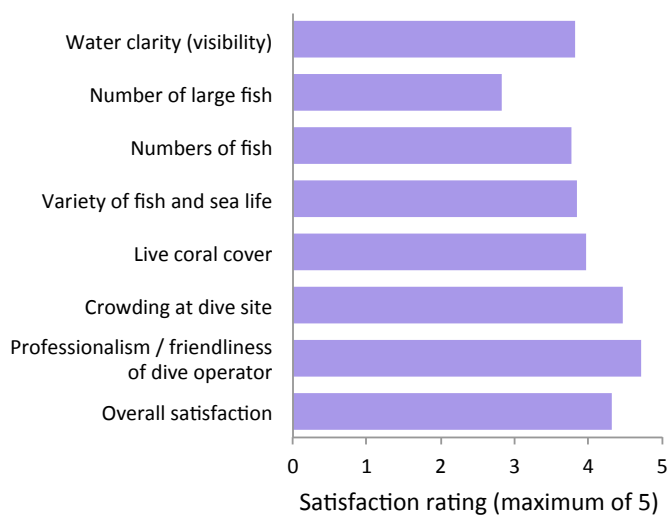
Over 80% of the divers that were interviewed in St. Kitts and Nevis were first time divers in the Federation, and many had taken the opportunity to dive on a day visit from a cruise ship. Seventy-seven percent of the divers were from the USA followed by 9% from the UK and 8% from Canada. More than half of the divers who visit St. Kitts and Nevis are certified as Advanced Open Water or higher. Local universities are also another source of divers for the industry and are an important market for the industry. Some of the issues and changes that the dive operators said were affecting their business included the recent appearance of lionfish, the global downturn in the tourism industry, overfishing, a lack of protected areas and climate change.



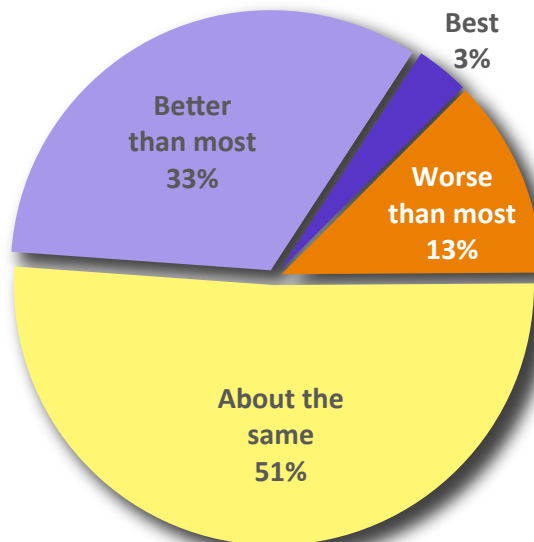
## DIVER SATISFACTION

Most of the divers were reasonably satisfied with their recent dives in St. Kitts and Nevis. Approximately 30% said that St. Kitts and Nevis was better than most of the places they had dived before and 3% stated that it was the best. Almost all of the divers were very satisfied with their experience of diving in St. Kitts and Nevis. Divers were most satisfied with the professionalism and friendliness of the dive operators and the lack of crowding on the dive. Divers were least satisfied with the number of fish and the number of large fish at the dive sites.

### DIVER'S LEVEL OF SATISFACTION FROM THEIR MOST RECENT DIVE



### HOW WOULD YOU RATE ST. KITTS AND NEVIS COMPARED TO OTHER PLACES WHERE YOU HAVE DIVED?



## FISHING

Over 80 fishers were interviewed from the Federation of St. Kitts and Nevis including people who fish for food, for recreation and to earn a living. Fishing plays an important role in the lives of many in St. Kitts and Nevis especially in terms of food security. Most of the commercial fishers in Newtown fish in wooden or fibreglassed pirogue boats around the south coast of St. Kitts and the south coast of Nevis. Conch, lobster and pot fish are the main fisheries in Newtown and therefore SCUBA diving and pot fishing are the most popular types of fishing. Spear fishers and conch divers spend 4-5 hours at sea and are on average 38 years old. When asked how their fishing has changed over the years, more than half of the fishers said that they were fishing less than they did ten years ago and around 78% said that they expect to be fishing the same amount in 5 years from now.

Some of the issues and changes that the fishers said are affecting their fishing activities include: dredging and silt affecting the conch grounds, rising fishing costs, travelling further and diving deeper for catch, the construction of the sea wall (affecting net fishing), hurricane damage and the lionfish.



## USING THIS INFORMATION

This report shows some of the information we collected from people in Newtown. This information will be used to help to describe people's opinions on how coral reefs are used for fishing and tourism, and how the reefs are being looked after.

The information people shared with us will help to develop an understanding about how people depend on reefs and how they will respond to changes in the future.

While this project is not involved in making decisions, we will share this information with people and organisations involved in reef management and decision-making at local and national levels. None of the information collected during this project will be linked to anyone's name, but we hope that the project will provide an opportunity to share the interesting stories that we have collected.

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## THANK YOU!

Many thanks to all that attended this meeting or took the time to contribute information to our research.

After St. Kitts and Nevis, the FORCE team will be conducting further fieldwork in Belize.