UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT

# Blue BioTrade in Saint Vincent and the Grenadines: Developing value for the sustainable trade and production of queen conch in the Eastern Caribbean COUNTRY CASE STUDY

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UNCTAD



UNCTAD-OECS Blue BioTrade Project in cooperation with CITES

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#### **Explanatory notes**

Reference to "dollar" and "\$" indicate United States dollars, unless otherwise stated.

Reference to "EC\$" indicates Eastern Caribbean dollars.

Use of a dash (–) between dates representing years, e.g., 2015–2018, signifies the full period involved, including the initial and final years.

Reference to metres is represented by "m", centimetres by "cm", and hectares by "ha".

Reference to kilograms is represented by "kg" and pounds by "lbs".

Reference to nautical miles is represented by "NM".

To reflect the closest estimate for data, decimals and percentages are rounded off. Numbers in money are rounded to the nearest dollar, unless otherwise stated.

Decimals and percentages in this document do not necessarily add to totals because of rounding.

## Acronyms and abbreviations

BioTrade P&C	BioTrade Principles and Criteria
CBD	Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
CPUE	catch per unit effort
CRFM	Caribbean Regional Fisheries Mechanism
EEZ	exclusive economic zone
FAO	Food and Agriculture Organization of the United Nations
HACCP	Hazard Analysis Critical Control Point
NBSAP	National Biodiversity Strategy and Action Plan
OECS	Organisation of Eastern Caribbean States
TCMP	Tobago Cays Marine Park
UNCTAD	United Nations Conference on Trade and Development
WECAFC	Western Central Atlantic Fishery Commission

#### **Executive summary**

Saint Vincent and the Grenadines is a multi-island state comprised of the mainland (Saint Vincent) and seven inhabited islands of the Grenadines: Bequia, Mustique, Union Island, Canouan, Petit Saint Vincent, Palm Island and Mayreau (figure 1). As an archipelagic state in the Caribbean, with an exclusive economic zone (EEZ) 79 times larger than its land area, the economy of Saint Vincent and the Grenadines has strong connections to and reliance on ocean products and industries. The queen conch fishery is currently one of the most important fisheries in the country, accounting for 62.7 per cent of total fisheries exports in 2020 and generating \$3,329,937 (EC\$8,990,832).<sup>1</sup>

In terms of production and investment in production capacity, the queen conch industry of Saint Vincent and the Grenadines has been the fastest growing of all the countries within the Eastern Caribbean over the past five years. In 2020, Saint Vincent and the Grenadines was the second largest producer of queen conch in the OECS region, after Antigua and Barbuda.

While the increase in queen conch production has had notable and positive socioeconomic impacts in Saint Vincent and the Grenadines, it raises potential challenges in the areas of stock sustainability, the equity of socioeconomic impacts, and opportunities in value addition and improving access to high-value export markets. Further, due to the geographic proximity of other queen conch producers, which face similar challenges and have unique comparative advantages, there are opportunities for improved collaboration between countries.

In response to these challenges and opportunities, UNCTAD and the OECS, with the support of the European Union and CITES, joined forces to design a pilot project to test the application of the revised UNCTAD BioTrade<sup>2</sup> Principles and Criteria (P&C)<sup>3</sup> in the marine environment, focusing on the queen conch value chain in the countries of Grenada, Saint Lucia and Saint Vincent and the Grenadines. The project was launched in October 2020.

This case study presents a value chain analysis of queen conch production in Saint Vincent and the Grenadines. It builds on a 2021 stakeholder map of the queen conch value chain of Grenada, Saint Lucia and Saint Vincent and the Grenadines.<sup>4</sup> It is the last of three country case studies to be produced under the Blue BioTrade Project. These case studies will contribute to the development of a regional Blue BioTrade Action Plan at a regional workshop to be held in mid-2022.

This report is divided into eight chapters. Chapter 1 provides an introduction and overview of the approach taken by the case study. Chapter 2 provides a product assessment, looking at the biology and location of the Saint Vincent and the Grenadines queen conch stock. Chapter 3 analyses the regulatory, management and institutional frameworks in Saint Vincent and the Grenadines as they relate to the queen conch fishery. Chapter 4 analyses the value chain, examining its economic features during the pre-harvest, harvest, and post-harvest stages. Chapter 5 presents an initial assessment of current market access and potential entry points to a number of potential markets for queen conch products. Chapter 6 outlines the main challenges faced by the value chain, and Chapter 7 outlines opportunities to sustainably address these challenges using the BioTrade P&C as a guideline. The report ends with recommendations and conclusions which are presented in Chapter 8.

<sup>&</sup>lt;sup>1</sup> Exchange rate US\$1 = EC\$2.70 – 19 April 2022.

<sup>&</sup>lt;sup>2</sup> UNCTAD BioTrade aims to contribute to the conservation and sustainable use of biodiversity through the promotion of trade and investment in BioTrade products and services. BioTrade is understood as activities related to the collection or production, transformation and commercialization of goods and services derived from biodiversity (genetic resources, species and ecosystems) under environmental, social and economic sustainability criteria called "BioTrade Principles and Criteria". See UNCTAD BioTrade P&C for terrestrial, marine and other aquatic biodiversity-based products and services, available at https://unctad.org/system/ files/official-document/ditcted2020d2\_en.pdf.

<sup>&</sup>lt;sup>3</sup> Since their inception in 2007, the BioTrade P&C have guided the implementation of the UNCTAD BioTrade Initiative, BioTrade programmes and other related activities. In 2020, the P&C were revised to complement the evolving legal and policy framework of BioTrade. See UNCTAD BioTrade P&C for terrestrial, marine and other aquatic biodiversity-based products and services, available at https://unctad.org/system/files/official-document/ditcted2020d2\_en.pdf.

<sup>&</sup>lt;sup>4</sup> Stakeholder maps of the conch value chains of Grenada, Saint Lucia and Saint Vincent and the Grenadines, available at https://unctad.org/system/files/official-document/ditctedinf2021d4\_en.pdf.

The main findings, opportunities, challenges and recommendations reflected in this report include the following:

#### (a) Main findings:

- (i) Overview: Queen conch is the main seafood product landed in Saint Vincent and the Grenadines by total value. The shellfish accounts for 25 per cent of the total value of all seafood landed in 2020 and 70 per cent of total fisheries exports in 2019. The queen conch fishery has expanded significantly in the past five years, creating some potential sustainability concerns that may be considered at the next meeting of the CITES Animals Committee under the Review of Significant Trade process.
- (ii) Trade. Queen conch is largely harvested for commercial export of its meat. Annual exports of queen conch meat averaged approximately 18,600 kg from 2010 to 2016 and increased since 2016 to a peak of 334,855 kg in 2019. According to CITES export certificates, the primary markets for queen conch from Saint Vincent and the Grenadines are the United States of America (47 per cent), Dominica (31 per cent) and Saint Lucia (18 per cent).
- (iii) Gender. Like many fisheries value chains in the Caribbean, men are predominantly involved in the preharvest and harvest stages of the queen conch value chain in Saint Vincent and the Grenadines. In the post-harvest stage, both men and women are involved in the processing of queen conch. Women are also involved in the sale of prepared queen conch, but this is not a major product in the value chain.
- (iv) CITES compliance. Saint Vincent and the Grenadines acceded to CITES on 30 November 1988. CITES annual reports were submitted by Saint Vincent and the Grenadines every year between 2010 and 2019. Export quotas for queen conch have never been published by Saint Vincent and the Grenadines.
- (vi) Stock assessments. Aware of the risks associated with increasing production, the Marine Foundation project, funded by the Saint Vincent and the Grenadines Environment Fund, in partnership with the Ministry of Agriculture and Fisheries, has begun a stock assessment exercise for the queen conch and lobster fisheries. This exercise, which began in February 2022, is to be used to inform management plans for these fisheries.
- (vi) Investment. Since the \$4.8 million Project for Improvement of Fishery Equipment and Machinery in Saint Vincent and the Grenadines,<sup>5</sup> and the subsequent improved access to external markets through the construction of the Argyle International Airport, the fishery has produced an additional \$8.3 million in production value compared to average pre-2017 levels of conch trade, demonstrating the potential returns to fisheries investment.
- (vii) Health certifications. Based on stakeholder interviews, individual capacity to operate healthy processing facilities using Hazard Analysis Critical Control Point (HACCP) principles and approaches is high. Unfortunately, while many facilities have HACCP-trained individuals, none of the approximately six processing facilities are currently HACCP certified.
- (b) Main opportunities

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