

# Overview of Blue BioTrade Queen Conch Country Case Study St. Vincent and the Grenadines

JENNIFER CRUICKSHANK HOWARD

CHIEF FISHERIES OFFICER

Regional workshop and validation of the OECS Blue BioTrade Action Plan  
for the queen conch value chain in the Eastern Caribbean

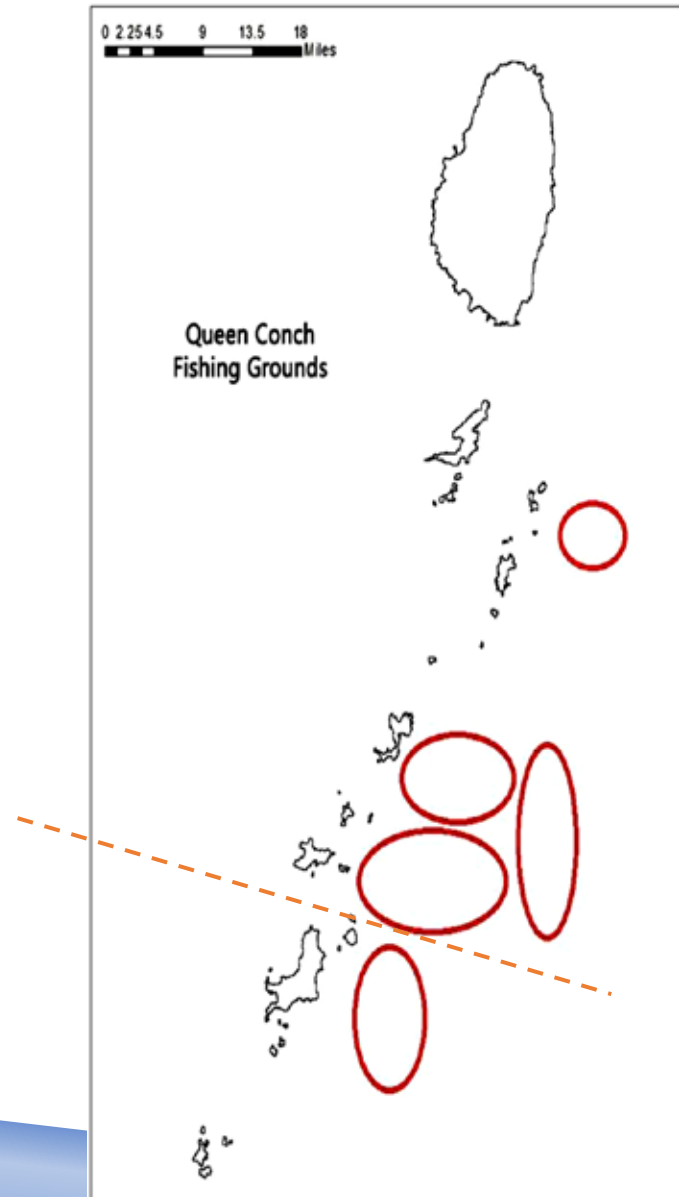
May 26<sup>th</sup> -27<sup>th</sup> Kingstown, Saint Vincent and the Grenadines

- SVG is a multi-island state comprising of mainland St. Vincent and seven inhabited islands with an Exclusive Economic Zone 79 times larger than its land area.
- In 2021, the Queen conch fishery accounted for 31.1% (853,390 lbs) of total fish landings (EC\$5.2 million) and the product is the main species of export representing 52.1% of the weight and 43.9% of all the fish and fish products exported



# QUEEN CONCH FISHERY

- „ The conch fishery is very important to the people of SVG and is generally fished in the Grenadines along the Grenada bank, which is a shallow platform (about 3000 km<sup>2</sup>) extending from Bequia to Grenada.
- „ The Queen Conch (*Strombus gigas*) is the most common conch in SVG, and is also called Lambi by many people



- There are approximately 130 fishers who operate in the conch fishery
- In the past, most fishers display a preference for fishing of conch extensively during the months between May – August (coincides with the closed season for lobsters), recently it has become an all year round fishing activity



# Economic Value

- The Queen conch is the main species of seafood and seafood product exports, accounting for 62.7% of total Fisheries exports in 2020, bringing in over **\$8,988,932** EC Dollars

Year	Landings (lbs)	Exports (lbs)
2016	96,986	51,205
2017	470,056	275,575
2018	684,060	612,545
2019	911,670	722,893
2020	917,849	768,889
2021	852,390	605,324

Table 1: showing SVG conch landings and exports in pounds

The main countries to which the conch and its products are exported to are: St. Lucia, Dominica, and BVI with the majority going to the USA (47% in 2020)

# Environmental Findings

- ⊔ **Degradation** of shallow water nursery habitats from sedimentation, coastal development and water pollution.
- ⊔ More frequent and extreme weather events SUCH AS STORMS AND HURRICANES due to **climate change** can cause disruptions to the conch grounds, damages to fishing communities and processing facilities.
- ⊔ **Fresh Water Availability** in the Grenadines of Bequia and Union Is: Due to the processing of high volumes of harvested conch the availability of water is necessary and is provided by rainwater catchment and storage tanks.
- ⊔ **Ocean acidification** and rise in ocean temperatures also due to **climate change** affects the growth and construction of the Queen conch's shell, and has also been shown to affect larval dispersal in the species.
- ⊔ **Conch Stockpiles** due to recent increases in production that is an eyesore on land and has the potential of reducing conch grounds densities
- ⊔ **Decreasing Conch Stock** as anecdotal evidence suggests that queen conch stocks are decreasing as the shallow water stocks have reduced significantly over the years, resulting in fishers having to go deeper depths.



# Social Findings



- **Increasing incidence of diving-related injuries:** Diving with scuba gear at deeper depths has increased the frequency with which conch divers in the Grenadines experience decompression sickness or get the 'bends', especially since divers are rarely formally trained or certified.
- **Absence of strong fisherfolk organisations in the Grenadines:** The majority of active fisherfolk organisations in Saint Vincent and the Grenadines are based on the mainland of Saint Vincent.
- **Socio-economic data for the fishery is not collected:** information on the total number of people involved in post-harvest activities (e.g. processing) are not readily available. Additionally, information on earnings of people (including on gender) in the harvest and post-harvest stages is not collected

# Social Findings cont'd



- **Unreliable air cargo services** : Conch is exported to the United States via cargo Airlines from the Argyle International Airport. However, flight schedules are unreliable with short notice cancellation of flights resulting in exporters incurring additional costs for refrigerated ground transport and storage of products when shipments have to be returned to their facilities.
- **Limited processing and value addition to queen conch trimmings**: While best practice examples of the collection and sale of queen conch trimmings exists in Saint Vincent and the Grenadines, further value could be extracted from this product through its integration into local value addition channels.



# Main Economic Findings

- This once abundant species is facing the very real threats of **over-exploitation and unsustainable harvesting, illegal trade, habitat degradation and climate change**
- Due to its high global demand, the conch fishery is particularly vulnerable to **poaching** and **illegal trade**
- With a small range (Tropical Atlantic), slow growth rate, and over three years to mature the fishery is highly susceptible to **unsustainable harvesting**
- Loss of market access:
  - European Union trade ban of 2001



## Economic Findings

- Queen conch trimmings are protein rich but have traditionally been discarded or sold at meagre prices. By processing these trimmings into a more commercially viable product, such as burgers, conch chowder, and soups there is scope for positive development in the fish processing sector of the fishing industry.
- Conch shell powder is being used in the cosmetic industry for skin treatments
- The once thriving Caribbean tourism industry has also seen a steady demand for shell craft and jewellery. Even though tourist arrivals may be curtailed for the near future, possibility exists for exports



# Regulatory and Institutional Findings



- **Limited management measures for a growing industry:** Current evidence of overexploitation and the expected intensification of fishing effort due to increased international export market will likely require additional management measures.
  - A national management plan for the conch fishery was drafted in October 2008, based on the United Nations Food and Agriculture Organization's (FAO) *Revised Manual for the Monitoring and Management of Queen Conch*, however it was never formally approved or implemented.
- **Ineffective monitoring of harvest of undersized (immature) conch:** Catch data for conch is collected by the Fisheries Division at the various landing sites in the Grenadines. However, because of the pooling of catches before they are landed and the landing of the conch without the shell, it is difficult to monitor the harvest of immature conch.

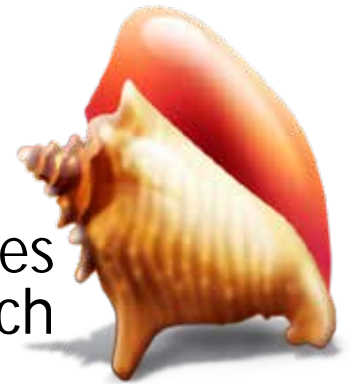
# Regulatory and Institutional Findings cont'd



- **Inadequate biophysical monitoring** : limited capacity to conduct routine monitoring due to inadequate staff and financial resources
- **Inadequate capacity for laboratory testing of fishery products**: Saint Vincent and the Grenadines Fisheries (Fish and Fish Products) Regulations (2006) require fish processing establishments to conduct regular laboratory testing of their fish products. However, accredited laboratories for fish processing establishments to conduct this testing do not exist nationally
  - In the past, efforts to utilise regional laboratories were explored but the high cost associated with this approach was a constraining factor. This poses limitations for the licensing of these establishments as well as accessing the European Union export market which also requires regular laboratory testing of fish products.
- **Fisheries Division is collaborating with the Bureau of Standard to address some of the testing**

# Priorities for Action

- Enhance the population of queen conch resources through seeding and aquaculture approaches (conch nursery facility )
- Improve the sustainable use of current harvest through value addition and maximisation (e.g. Queen Conch “by-products” such as operculum, and shells )
- Additional training and licensing requirements for divers participating in the conch industry, combined with social insurance schemes
- Introduce mechanisms to prevent unsustainable harvest levels



# Priorities for Action Cont'd

- Stock assessments and mapping of critical habitats for conch to refine estimates of potential yield
- More rigorous enforcement of existing regulations and continue education of fishers on size limits due to entry of young divers to value chain

