

# Presentation on the Queen Conch Fishery In St. Vincent and the Grenadines

Seizing the Trade and Business Potential of Blue Bio Trade

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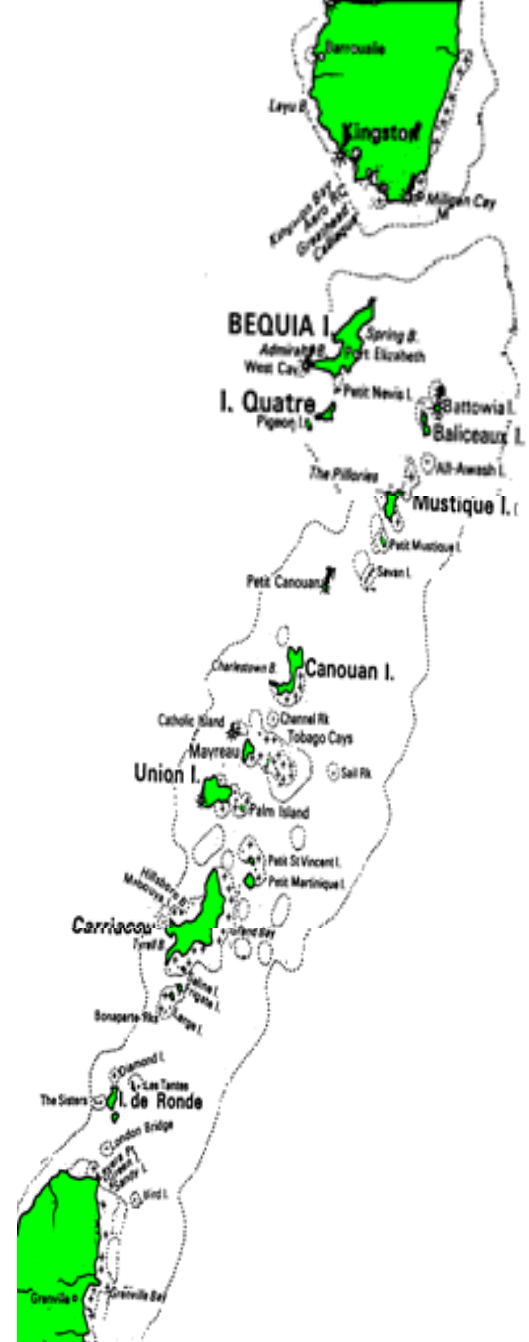
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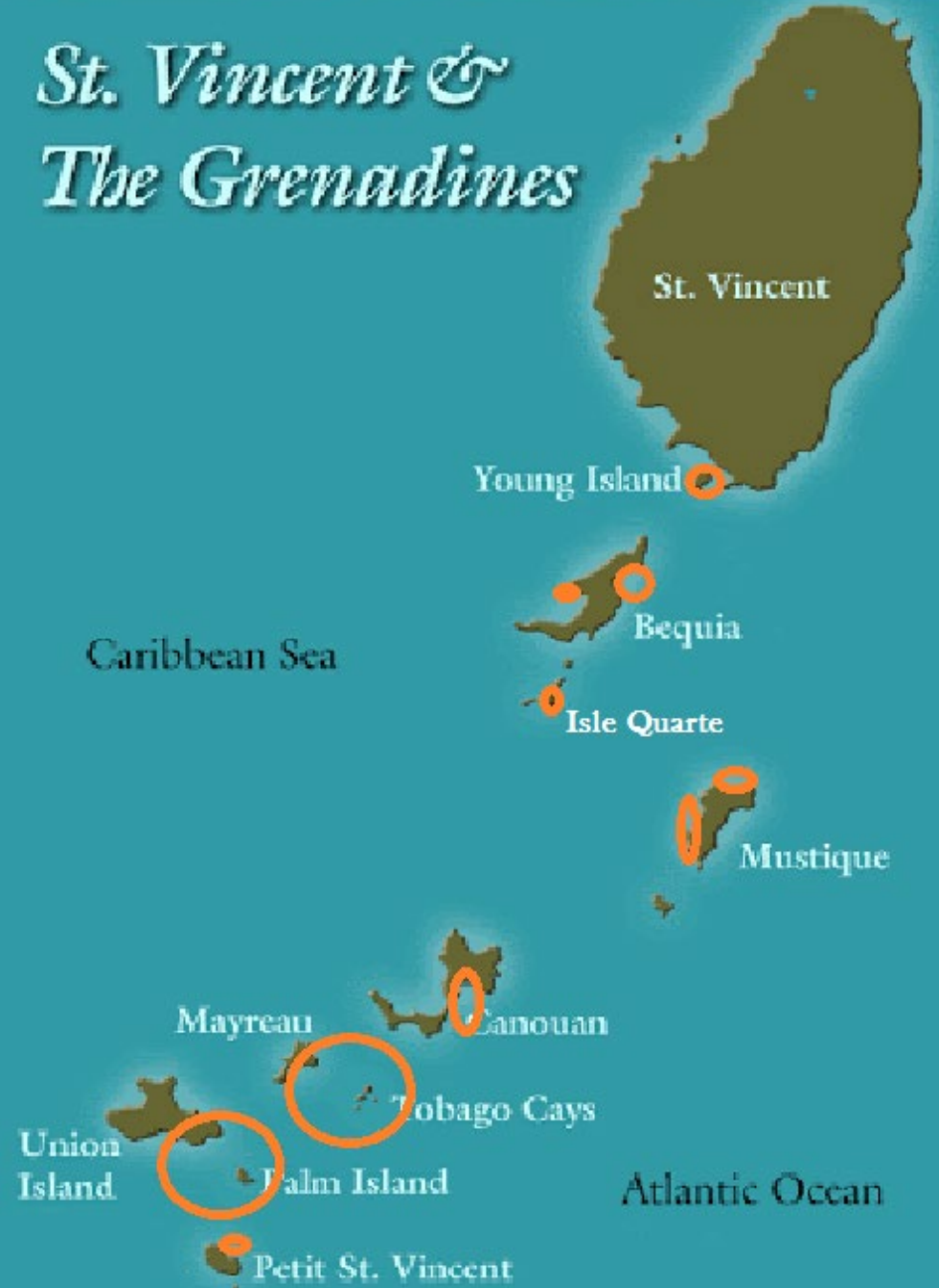
*Kingstown, St. Vincent and the Grenadines*

The conch fishery is very important to the people of Saint Vincent and the Grenadines, 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 that we see and eat here in SVG, and is also called Lambi by many people



# St. Vincent & The Grenadines



- ▶ SVG has 10 marine conservation areas, 9 of which are located in the Grenadines
- ▶ Since the majority of conch fishers is based in the Grenadines, this can sometimes lead to conflicts within the Industry



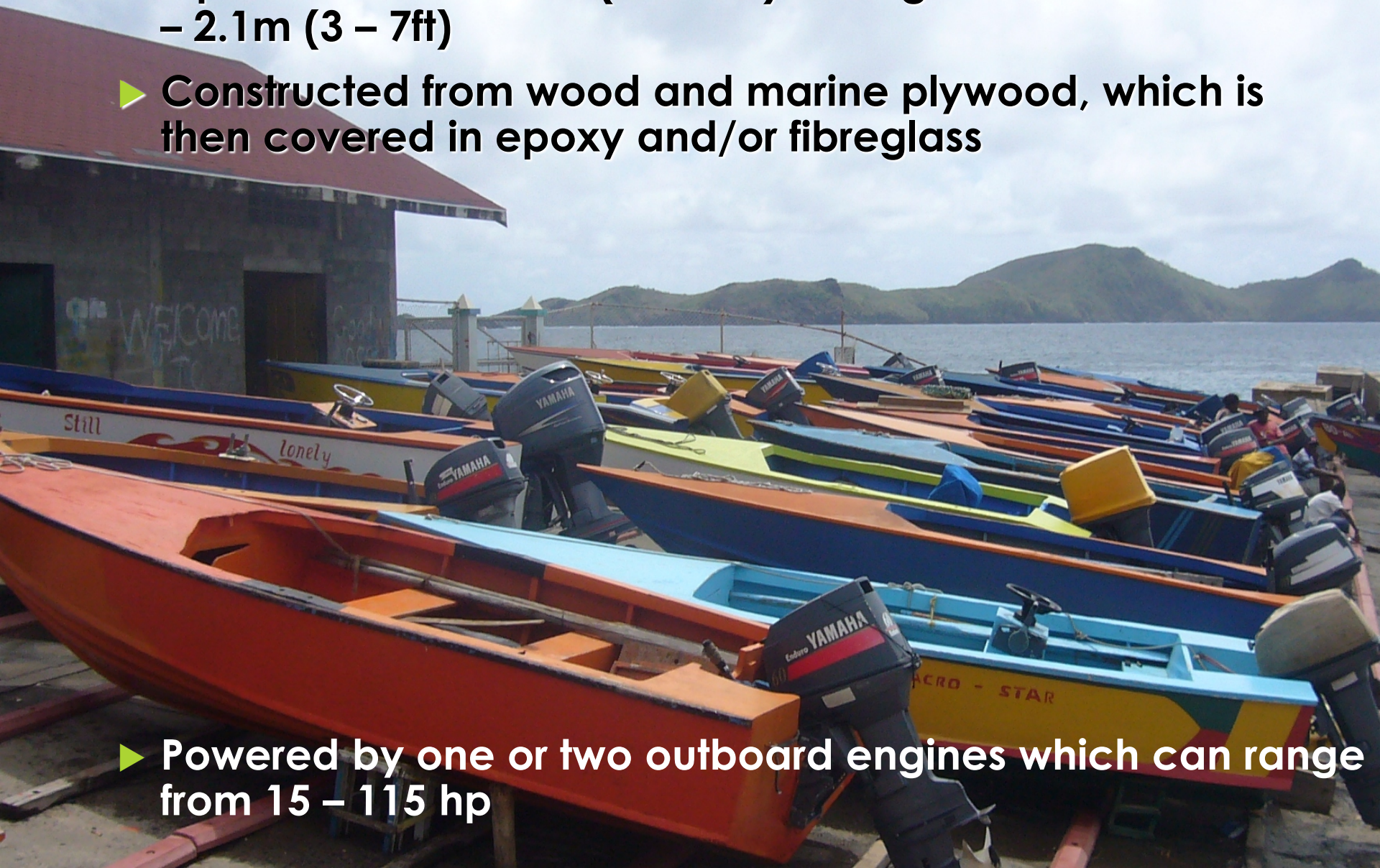


- ▶ There are approximately 45 fishers who operate in the conch fishery
- ▶ Most fishers display a preference for fishing of conch extensively during the months between May – August (coincides with the closed season for lobsters)





- ▶ **Fishers use a flat transom vessel called a “Dory”**
  - ▶ **Open vessels 3 – 6 m (11 -27ft) in length and a beam of 0.9 – 2.1m (3 – 7ft)**
  - ▶ **Constructed from wood and marine plywood, which is then covered in epoxy and/or fibreglass**



- ▶ **Powered by one or two outboard engines which can range from 15 – 115 hp**



- ▶ A typical crew consists of three (3) persons: a driver/basketman, a floater and a diver.
  - ▶ The diver (using SCUBA) is responsible for collecting the conch and loading them into a “basket” which is attached to a rope.
  - ▶ The driver/basketman on instruction from the floater would lift or lower the basket as the operation persists.
  - ▶ The floater is responsible for relaying information between the diver and the basketman.



DIVER



FLOATER



DRIVER/BASKETMAN

- ▶ A basket can be a mesh bag, a canvas bag or even mesh wire shaped in the form of a basket.
- ▶ One basket can hold about 10 - 15 conch
- ▶ On average, a fishing trip lasts between three and four hours in which two or three SCUBA tanks are used.
- ▶ Fishermen leave port at around 7 a.m. to travel to their fishing grounds.
- ▶ Conch fishers operate at depths ranging from 12 – 40m and can catch an average of 80 – 100 lbs of conch per trip
- ▶ An average conch being landed is 9oz



The name “conch” applies to over sixty (60) different species of marine molluscs, and is a well known emblem of the tropics – a symbol for the Caribbean Sea and its rich diversity

In SVG the fleshy meat is prepared in many different sumptuous dishes such as curry conch, conch fritters, stew conch, souse, etc.





# Ecological Importance

- ▶ Conch are very important grazers in tropical marine ecosystems, acting as cleaners for seagrass beds and preventing overgrowth
- ▶ Conch are also important food sources for other organisms such as Octopus, spiny lobster, rays, some shark species and trigger fish

# Economic Value

- ▶ The Queen conch is the main species of seafood and seafood product exports, accounting for 70% of total Fisheries exports in 2019, bringing in over \$6,700,752

Year	Landings	Exports
2015	74,637	38,668
2016	96,986	51,205
2017	470,056	275,575
2018	684,060	612,545
2019	911,670	722,893

Table 1: showing SVG conch landings and exports in pounds

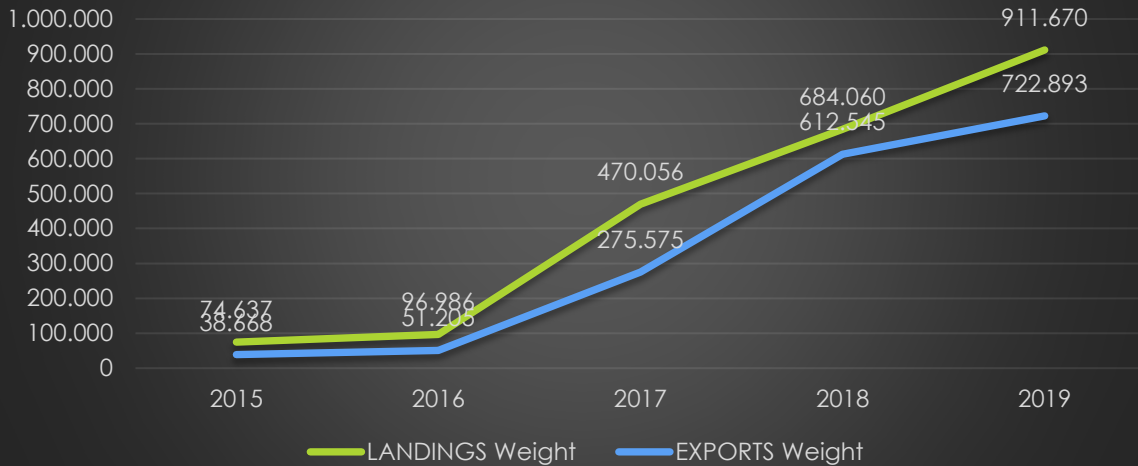
The main countries to which the conch and its products are exported to are: St. Lucia, Trinidad, Dominica, Curacao, USVI, BVI and St. Marteen, with the majority going to the USA



# Conch landings and exports

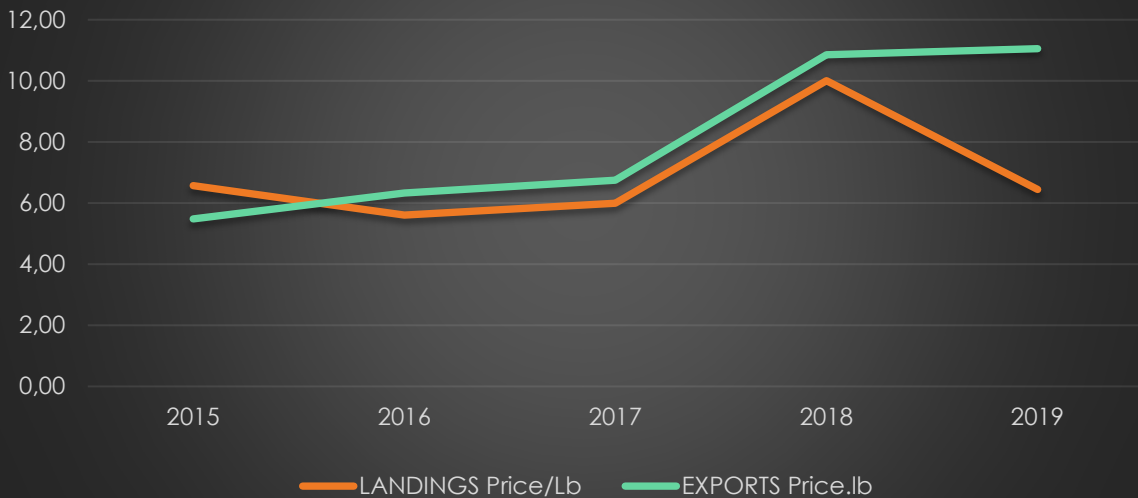


## Conch Landings vs Exports by Weight 2015-2019



Graph 1: showing conch landings and exports by pounds

## Conch Prices Landings & Exports 2015-2019



Graph 2: showing price of conch landings and exports in EC dollars

# Threats to conch populations

- ▶ 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



- ▶ Degradation of shallow water nursery habitats from sedimentation, coastal development and water pollution (specifically high concentrations of zinc and copper) reduces juvenile recruitment and causes reproductive failure in the species
- ▶ More frequent and extreme weather events due to climate change also cause disruptions to the conch grounds and hamper aggregations of the species necessary for reproduction to take place
- ▶ 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



# MITIGATION AND MANAGEMENT

- ▶ In accordance to the Convention on International Trade of Endangered Species (CITES), conch is listed as an “Appendix 2” specie which means that persons wishing to export conch must fill out an appropriate form at the Fisheries Division and have it signed by the CFO. A permit is issued when conch and conch products are exported



# Fisheries Regulations 1987

## Part VI Fishery Conservation Measures

### Conch

18. (1) No person shall take, sell or purchase or have in his possession any immature conch

(2) The Minister may by notice published in the Gazette declare any period as closed season for conch

(3) No person shall fish for conch during the closed season of conch

(4) In this regulation immature conch means:

(a) a conch shell of which is smaller than 7 inches / 18 cm in length

(b) a conch shell which does not have a “flared lip”

(c) a conch with a total meat weight of less than 8 oz / 225 g after removal of the digestive gland





# Management measures cont'd

- ▶ More rigorous enforcement of existing regulations
- ▶ Mapping of critical habitats for conch to refine estimates of potential yield
- ▶ Expansion of marine protected areas
- ▶ A draft management plan was completed in Oct 2008, based on FAO's "Revised Manual for the Monitoring and Management of Queen Conch"
- ▶ A desktop review assessing the Queen conch population throughout SVG is currently being executed by a consultancy team. This will provide SVG with information on the status of the resource

# Opportunities

- ▶ 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, 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





# Sargassum Invasion in SVG

- ▶ Influx started 2011 (May – Aug )
- ▶ Larger influxes in 2011, 2015 & 2018
- ▶ Affects felt throughout many sectors including Fisheries, Tourism, Health and the Environment





# Seamoss cultivation in SVG

- ▶ Seamoss production in SVG started in the early 90s and has been mainly focused in the Grenadines on the islands of Mayreau and Union Island
- ▶ In 2020 increased access to external markets has resulted in a rise in exports of the product as well as applications for new entrants into the sector
- ▶ Opportunities exist for the improvement of conditions under which the sea moss is being produced and processed, as well as management of potential user conflicts and sea space issues





A nighttime aerial photograph of a coastal city, likely Honolulu, Hawaii. The city is densely packed with lights, extending up a hillside. In the foreground, a harbor with several piers and a large ship is visible. The background features dark, silhouetted mountains under a deep blue twilight sky with a few clouds. The text "THANK YOU" is centered in the upper half of the image, and "Questions?" is positioned in the lower-left quadrant.

THANK YOU

Questions?