State of Play: Queen Conch Fisheries and Trade in Saint Lucia

Regional stakeholder webinar on Blue BioTrade and BioTrade Principles and Criteria including CITES requirements March 22 – 23, 2021

Presented by:
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SAINT LUCIA

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Overview of the Conch Fishery

Fleet size, Production, Harvest methods, fishing locations, ecology and stock information, and main markets
Fleet size

• Open fibreglass pirogues
  • Number: 10 vessels
  • length: 7.02 – 8.45 m
  • Outboard engine: 115 – 250 hp
  • Day trips

• No. of Fishers
  • Approx. 40 fishers
  • (Boat owner, Diver, Captain, Crew)
  • Male only
Production

Total est. landings: 1397.61mt (1993 to 2020)
Processed grade: “dirty” meat weight (Complete animal extracted from the shell)

Avg. 32.80mt
Avg. 41.21mt
Avg. 71.41mt

#Moving average trend line

COVID 19 Pandemic
Production Value

• On average the ex-vessel value represents 7% of the total ex-vessel value of the total marine capture landings

• Ex-vessel est. value ranged over XCD$600,00991 (2000) to XCD$3.2 million (2017)
Location of stock

- General Conch area (2008):
  - Preliminary - North (est. 4700ha) and South (est. 3200ha)
    - Suitable habitat type not considered
  - Some fishers report that conch is found island-wide at depths above 80ft (24m)
Harvest methods

• Main gear: SCUBA
• Gill nets and free diving in areas along the west and southwest coasts
• Majority of Conch meat extracted at sea on vessel, some landed whole (in shell)
  • allows transporting higher volumes of conch meat per fishing trip at greater speed.
• Meat extraction: cutting a small hole in the spire and severing the columnar muscle attached
• Shell typically disposed in the sea
Main Fishing communities

• GROS ISLET and LABORIE
Ecological and stock information

• Stock abundance
  • CPUE (1996 – 2007) shows decline in stock; (effort – No. of tanks)
  • Preliminary - Conch average density – 242in./ha (2008)

• Majority of fishers reported no change in abundance or more

• Stock assessment:
  • Total allowable catch (harvest quota), up to 30 tonnes per year (2009)
  • Concern with data reliability; Est. of areas of fishing grounds and conch density.

• Morphological differences between stock from North and South west suggesting possible two populations - challenges for application of management measures.
# Main markets

<table>
<thead>
<tr>
<th>By-Product</th>
<th>LOCAL MARKET</th>
<th>EXPORT</th>
<th>IMPORT</th>
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<tbody>
<tr>
<td>SHELL</td>
<td>Low value. Used as decoration items by local population, also as backfilling. Ex-vessel value: Free – XCD1.00;</td>
<td>Retail value: USD 1.00 – USD 5.00 (mainly international tourist)</td>
<td>NONE</td>
</tr>
<tr>
<td>MEAT</td>
<td>Dirty meat sold; fishers remove shell. Ex-vessel value: XCD10.00 – 16.00 lb; avg. XCD14.00. Sold to supermarkets; vendors. Retail processors: up to XCD 22.00 lb. Community Fish frys and restaurants: primarily grilled approx. 1 cup XCD25.00</td>
<td>Limited; Full extent of unregulated exports unknown. Visitors from neighbouring island purchase when visiting Saint Lucia bringing in significant foreign exchange.</td>
<td>Mainly from Saint Vincent and the Grenadines both regulated and unregulated by fishers directly and distributors</td>
</tr>
<tr>
<td>PEARL</td>
<td>Unknown</td>
<td>Pearls are retailed by fishers to intermediary purchasers who sell to jewelry stores overseas based on CITES permit. E.g. USA, Canada; price varies (negotiated)</td>
<td>TBD</td>
</tr>
<tr>
<td>OTHER</td>
<td>Unknown</td>
<td>Unknown</td>
<td>TBD</td>
</tr>
</tbody>
</table>
Governance
Policy and Legislation
Main Policy Environment

• Fisheries Policy (draft) 2020
• Plan to management of the Fisheries of Saint Lucia (draft) 2006-2011
  • Outlines a conch Management Plan
• Sectoral Adaptation Strategic Action Plan
• Ocean Policy and SAP
Main Legislation

• Fisheries Act Cap. 7.15 of the Revised Laws of Saint Lucia
• All local fishing vessels must be licensed and special conditions are applied.
  • E.g. Permission to use various gear types such as SCUBA
Main legislation

- Regulation 35 of the Fisheries Act, Cap 7.15 of the Revised Laws of Saint Lucia
  - Closed Season is not applied.

- Regulation 27 (f) of the Fisheries Act
  - Sportfishing rules

  35. **PROHIBITION AGAINST THE SALE OF OR TAKING POSSESSION OF CONCH**

  (1) A person shall not—
  
  (a) take from the fishery waters, sell, purchase, or at any time have in his or her possession any immature conch; or
  
  (b) take from the fishery waters, expose for sale, purchase or at any time have in his or her possession any conch during the closed season for conch as specified by the Minister by notice published in the Gazette and in a newspaper which is printed or circulated in the State.

  (2) In this regulation—
  
  (a) “conch” includes the whole or any part of any conch;
  
  (b) “immature conch” means a conch with—
  
  (i) a total weight of less than one kilogramme,
  
  (ii) meat weight of less than 280 grammes after removal of the digestive gland,
  
  (iii) a shell which is smaller than 18 centimetres in length, or
  
  (iv) a shell which does not have a flared lip.

  (f) a vessel shall not have on board more than 10 conch or 6 lobsters per person at any time;
<table>
<thead>
<tr>
<th>Government Institution</th>
<th>Role</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Fisheries</td>
<td>Resource Management Fishery and Associated Ecosystem</td>
<td></td>
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<tr>
<td>Department of Environmental Health</td>
<td>Food safety</td>
<td></td>
</tr>
<tr>
<td></td>
<td>involved in fishery (all both primary and secondary, SPS, health, veterinary trade etc)</td>
<td></td>
</tr>
<tr>
<td>Veterinary and Livestock Services Division</td>
<td>Animal Health</td>
<td></td>
</tr>
<tr>
<td>Customs and Excise Department</td>
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<tr>
<td>Royal Saint Lucia Police Force</td>
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<tr>
<td>Department of Sustainable Development</td>
<td>Prevention of Land Based sources of pollution</td>
<td>Lavina Alexander</td>
</tr>
<tr>
<td></td>
<td>Coastal zone Management</td>
<td></td>
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<tr>
<td>Commerce</td>
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CITES focal point

• Scientific Authority
  • Fisheries Department (Chief Fisheries Officer)
    Department of Agriculture, Fisheries, Natural Resources and Co-operatives

• Management Authority
  • Department of Agriculture, Fisheries, Natural Resources and Co-operatives
    (Permanent Secretary)
    Ministry of Agriculture, Food Production, Fisheries and Rural Development
Main Challenges
Socio-economic, Environmental, Administrative
Socio-Economic Challenges

• The depth at which the conch is being fished possesses threats to fishers’ health and is a limiting factor on the number of dives that are being conducted.

• Decompression sickness is the main reason fishers leave the fishery.

• Conch Divers report that they would not encourage close relative to enter fishery due to high risk.

• Conch Divers do not have medical insurance coverage to support treatment for decompression sickness.

• Access to EU markets (e.g. Martinique)

• Limited capacity to monitor value chain
Environmental Challenges

• Morphological differences among various conch populations in Saint Lucia have implications for management measures.

• Information on stocks is still scarce, especially information on density, abundance and distribution. Scarcity of this information limits the reliability of current stock assessments.

• Data and information limitations:
  • Habitat maps for both fished and non fished areas.
  • Sustainable catch and effort data with depth estimates.
  • Depth and Conch behaviour limits ability to fine tune conduct conch assessments previously done.

• Land based sources of pollution impact on health and availability of suitable habitat; particularly issues of siltation of seafloor and loss of seagrass.

• The topography of the sea floor within Saint Lucia’s Exclusive Economic Zone is a limiting factor to conduct surveys and presents a challenge in determining the true status of the stock.
Administrative Challenges

• Although biological data have been collected in the past for this species, the collection of such data has not been sustained after the termination of externally funded projects.
• Conch obtained from fishers in neighbouring islands between borders – business partnerships
• Value of fishery may be less than investments to enhance monitoring.
• Limited capacity to sustain effective monitoring and evaluation
Opportunities
Opportunities

- Technology
  - Tenderising
  - Mapping (using participatory GIS) of habitats, resource distribution and other features

- Monitoring, enforcement and traceability
  - NPOA - IUU
  - Enhance reporting between agencies (Customs, Police, Fisheries)

- Harvest and Safety
  - Conditions of licence
    - Oxygen kits as part of safety gear
    - SCUBA certification
  - Enhance KAP and infrastructure for cold chain management

- Markets – Market Access, marketing etc
  - Meat export for foreign exchange (e.g. Martinique, France)
  - Higher value for pearls
  - Alternative use for shells and other parts of animal discarded (viscera, claw, operculum, tips of proboscis, eye stalk, verge)

- Closed areas for conch fishing through Co-management approaches and enhance management of seagrass habitats

- Strengthen tourism expenditure

- Support gender mainstreaming through the value chain of the fishery

- *Reduce input costs
Thank you
Sources of Information

• Fisheries Department, Saint Lucia
• King-Joseph, A et al. 2008. Conch Resource Assessment Study