

# **Technical Report: Socio-Economic Survey of Fishing Communities\_ St Kitts and Nevis**

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Data Source: **Socio-Economic Survey database.xlsx**

Reference Year: 2025

## 1. Executive Summary

This report analyses 22 records extracted from the socio-economic survey database. The data captures detailed information regarding fishing activities, vessel specifications, economic costs, and demographic profiles of fishers. The survey focused on small-scale and semi-commercial fisheries, primarily utilising open pirogues and wooden dinghies. Key findings indicate a high reliance on outboard engines, diverse fishing gear usage (including handlines and traps), and significant operational costs driven by fuel. The demographic data identify a male-dominated industry with an ageing workforce, though some younger participants are present.

## 2. Dataset Overview

The dataset consists of 22 distinct entries (Rows 2–25) with a complex schema involving over 200 variables.

- **Geographic Scope:** The data indicates operations around St. Kitts and Nevis (locations include Basseterre East, Basseterre West, BFC, Conaree, Charlestown Nevis, Dieppe Bay, Old Road).
- **Temporal Scope:** Interviews were conducted in January and February 2026, with data referencing the year 2025.
- **Structure:** The data is organized into sections: Administrative Information, Demographics, Vessel Specifications, Fishing Activity, Catch Data, Operational Costs, Banking and Insurance, and Perceptions.

### 2.1 Data Collection Methodology

The data collection process involved conducting structured questionnaires with fishers across selected communities, with each interview typically taking about 40 - 90 minutes, depending on how available and how open the respondent was. In general, the fishers were cooperative and responded positively, with many showing genuine interest in the purpose of the survey and willingly sharing information about their fishing activities and the challenges they face. Some participants were particularly engaged and offered detailed insights beyond the questions, especially on issues like rising fuel costs and declining fish stocks.

There were, however, a few challenges during the process. Some fishers were reluctant to share sensitive financial details such as income, expenses, or debt, which resulted in some gaps in the data. Scheduling interviews was also difficult, as availability often depended on fishing schedules and weather conditions. Despite these challenges, the data collection was largely successful.

### 3. Demographic Analysis

#### 3.1 Age and Gender

- Gender: All 22 respondents identified as Male. There is no female representation in the provided sample.
- Age Distribution: The workforce is skewed towards older age groups.
  - Oldest: Born 1952 (Age: 73-74).
  - Youngest: Born 1998 (Age: 27-28).
  - Average Birth Year: Approximately 1979, suggesting an average fisher age of roughly 49 years.

#### 3.2 Employment Status

Fishing plays a varied role in the livelihood of the respondents:

- Primary Job: 50% (11 respondents) identify fishing as their main job.
- Secondary Job: 50% (11 respondents) treat fishing as a secondary activity.
- Other Sectors: Respondents listed additional employment in construction, agriculture, electrical technician, and other sectors.

### 4. Vessel and Gear Characteristics

#### 4.1 Vessel Specifications

- Vessel Types: The fleet is dominated by small-scale vessels.
  - Open Pirogue: Most common type.
  - Wooden Dinghies: Second most common.
  - Materials: Predominantly Fibreglass (FRP) and Wood.
  - Deck Status: A mix of decked and undecked vessels.
- Engine Power:
  - Most vessels use Outboard Engines.
  - Engine power ranges significantly from 40 HP (small dinghies) to 610 HP (larger commercial vessels like "Moolah").

- The majority fall in the 115 HP to 225 HP range.

## 4.2 Fishing Gear and Methods

- Primary Gear: Hand Lines are the most prevalent gear, used by most fishers.
- Secondary Gear: Traps (pots), Trolling, and spear guns are frequently used alongside hand lines.
- Operation: Most trips are "Day Trips" (typically 8 hours or less), though some longer multi-day trips occur (e.g., Row 16: "Muilt-trips").

## 5. Economic Analysis

### 5.1 Catch Composition

- Key Species:
  - Finfish: Snappers (Yellowtail, Red), Hind, Wahoo, Parrotfish, Mackerel, and Doctor fish.
  - Shellfish: Conch and Lobster are significant high-value targets.
- Disposition:
  - Most catch is sold (Locally or regionally).
  - Self-consumption varies, with some fishers consuming 0% and others up to 100% of specific catches.
  - Marketing channels primarily involve Private Customers and Local Markets/Processing Plants.

### 5.2 Operational Costs

- Fuel: This is the highest operational cost.
  - Costs range from \$21 (small outboard) to \$1,300 (large inboard diesel).
  - Example: Row 4 (Moolah) reports \$1,300 in fuel costs for a trip.
- Maintenance: Significant expenditure on engine maintenance and vessel repairs (fibreglass/woodwork).
  - Engine repairs range from \$1,000 to \$6,000.
- Bait and Ice: These are recurring costs for almost all active fishers, typically ranging between \$20 and \$100 per trip.

### 5.3 Capital and Debt

- Vessel Value: Purchase prices recorded range from \$8,500 (older vessels) to \$110,000 (newer/larger vessels).

- Financing: A mix of Self-financing and Bank Loans.
  - Some respondents (e.g., Row 13, Row 8) cited "High interest rates" as a barrier to obtaining loans.
- Insurance: Insurance penetration is low. Many vessels are uninsured, with respondents citing "High cost of Insurance Premium" or "Lack of available insurance options" as reasons.

## 6. Challenges and Perceptions

### 6.1 Resource Threats

Respondents identified several threats to coastal resources:

- Biological: "Shark eating fish" (Depredation) is a frequently mentioned issue.
- Environmental: "Climate change," "Pollution," and "Overfishing."
- Management: "Young people unwilling" (succession issues) and lack of enforcement.

### 6.2 Compliance and Enforcement

- Compliance levels vary significantly on a scale of 1–5.
- Some respondents (e.g., Row 2, Row 7) rated compliance high (5), while others rated it lower (1 or 3), suggesting a disparity in adherence to regulations across different fishing zones or communities.

## 7. Data Quality Observations

- Missing Data: The dataset contains significant missing values denoted by \* or blank cells, particularly in the "Crew Details" and "Subsidies" sections. This was due to respondents' reluctance to disclose financial details or non-applicability of the questions.
- Anomalies:
  - Row 11 lists fuel costs as "200" and "15" but lacks distinct crew payment details.

## 8. Conclusion

The data present a snapshot of a small-scale fishery characterised by high operational costs (fuel) and an ageing workforce. While fishing remains a primary income source for many, a significant portion relies on it as supplementary income, potentially buffering against economic shocks in the fishery.

Recommendations:

1. Data Collection: Improve the collection of economic data regarding subsidies and loans to better understand the financial resilience of the sector.

2. Cost Management: Investigate mechanisms to reduce fuel dependency or costs, given it is the primary expenditure.
3. Succession Planning: Address the demographic skew by engaging younger demographics in fisheries management and alternative livelihood programs, and female fishers