



Assessing climate change vulnerability in Dieppe Bay's fisheries using value chain analysis

The Caribbean Natural Resources Institute (CANARI) and the Department of Marine Resources (DMR) in Saint Kitts and Nevis engaged fisherfolk and their organisations in Dieppe Bay in value chain analysis to systematically assess how climate change impacts on fisheries-related enterprises, from harvesting to processing to marketing and sales, and identify actions to reduce these impacts and add value to their fish products. This analysis was conducted in 2020 under the **Climate Change Adaptation in the Eastern Caribbean Fisheries Sector Project (CC4FISH)**. Two value chains were identified as relevant for Dieppe Bay - lobster (e.g. Caribbean spiny lobster) and pelagic fish (e.g. dolphinfish, marlin, tuna).

Key climate impacts on the fisheries value chain in Dieppe Bay



Hurricanes, storms and rough seas affect safety at sea, reduce fishing days and cause direct damage/loss to fisheries assets



Storm surges contribute to coastal erosion, and flooding affecting fisheries and other coastal infrastructure



Sargassum influx clogs landing sites and causes damage to boat engines and gear



Changes in ocean conditions e.g., strong ocean currents, warmer waters and pollution from land lead to reduction in catch and degradation of coral reefs



Extreme weather conditions including intense rainfall and droughts/dry spells cause power and water supply disruptions which affect fish processing and marketing



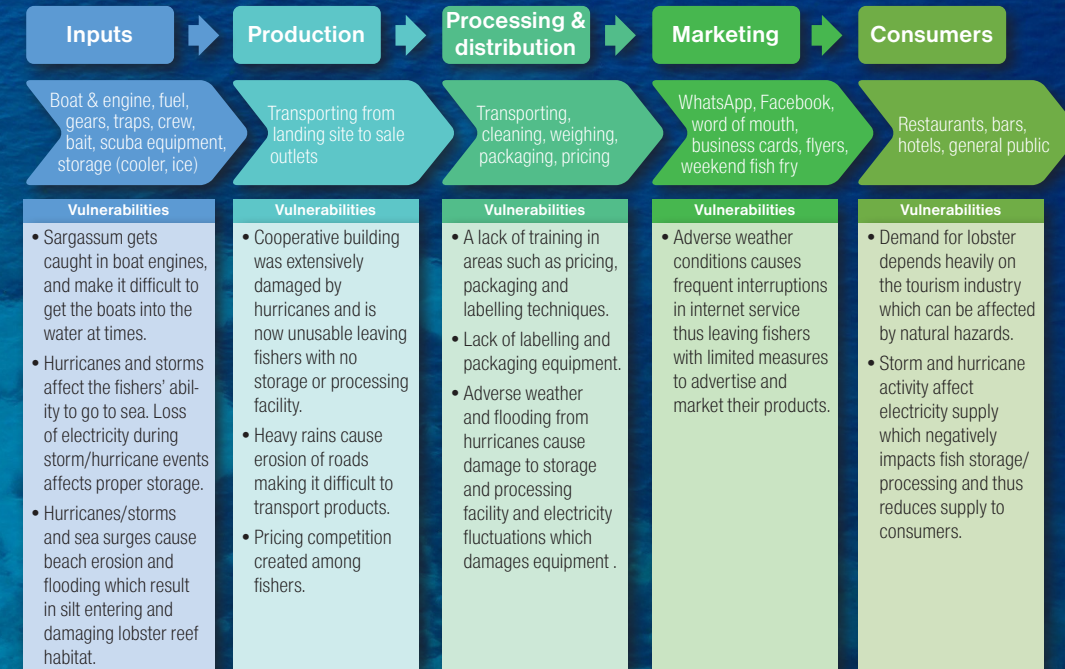
Other challenges

Lack of storage and processing facility (as cooperative building damaged) | Lack of access to affordable financing | Limited training and equipment for fish processing | Heavy dependence on tourist season to fetch a good price and unfair price competition as not all fishers willing to sell at the same price | Inability to meet the demand for local fish due to previous factors

Priorities for adaptation and enhancing fisheries value chains

1. restoring and proper outfitting of the fishing cooperative building with facilities to support fishing enterprises, and for hurricane preparedness;
2. encouraging fisherfolk to join the fishing cooperative to grow the organisation and reap collective benefits;
3. training opportunities for fisherfolk and community members in small business development and areas such as smoking, salting and filleting so that they can add value to fisheries products; and
4. active marketing of fisheries products via engagement in activities such as fish or lobster festivals (at least once per month).

Dieppe Bay lobster value chain



Dieppe Bay pelagic fish value chain

