



The Blue BioTrade regional **PLAN OF ACTION** for the Eastern Caribbean queen conch value chain



UNITED NATIONS
UNCTAD



**Organisation of
Eastern Caribbean States**



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This document was produced by Alexander Girvan, (consultant and project coordinator) and Mauro Gongora (consultant and fisheries expert) of the Blue BioTrade Project, under the guidance of and with substantive inputs from David Vivas Eugui, Legal Officer, Claudia Contreras, Economic Affairs Officer and Maria Durleva, project management expert, all at the Trade, Environment, Climate Change and Sustainable Development Branch at UNCTAD; as well as from Karen Gaynor, Scientific Support Officer and Rachel Gaughan, Legal Officer, both at the CITES Secretariat. The authors would also like to thank Sustainable Grenadines for facilitating the above-mentioned workshop.



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Explanatory notes

References to “dollars” and “\$” indicate United States dollars, unless otherwise stated.

Acronyms and abbreviations

CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
HACCP	Hazard Analysis and Critical Control Point
OECS	Organisation of Eastern Caribbean States
UNCTAD	United Nations Conference on Trade and Development



Introduction

UNCTAD, in collaboration with the OECS and CITES, and with the financial support of the European Union through the RIGHT Programme, implemented the first phase of the regional project, “[Seizing the Trade and Business Potential of Blue BioTrade Products for Promoting Sustainable Livelihoods and Conservation of Marine Diversity in Selected OECS Countries \(Blue BioTrade project\)](#)” from October 2020 until the end of 2022. The objective of the Blue BioTrade project is to empower small-scale coastal producers from OECS Member States to produce and trade queen conch (*Strombus gigas*) products in domestic, regional and international markets under Blue BioTrade environmental, social and economic sustainability criteria, including CITES considerations. The OECS Blue BioTrade Regional Plan of Action for the Eastern Caribbean Queen Conch Value Chain is a key output of the project.





The Blue BioTrade Principles and Criteria

UNCTAD defines “BioTrade” as “...the activities of collection/production, transformation and commercialisation of goods and services derived from native biodiversity under criteria of environmental, social and economic sustainability”. Based on best practices, lessons learned and the successes of BioTrade’s 26 years of implementation in nearly 100 countries, and building on international mandates and agreements on the conservation and sustainable use of the ocean and its resources, the emerging concept of Blue BioTrade has considerable potential to promote sustainability and equity in the production of marine-based goods and services, subject to the following minimum eligibility requirements:

- focusing on material derived from coastal and marine biodiversity (e.g., living coastal and marine species)
- refraining from unsustainable mineral extraction of sands, metals, oil and gas, and from unsustainable energy generation
- neither using nor developing genetically modified organisms
- neither introducing nor encouraging the introduction of invasive species
- the activity does not harvest/catch, use, disrupt, or otherwise threaten endangered species, including those covered in CITES Appendix I and in national and regional endangered species lists
- neither causing nor encouraging the degradation or transformation of marine and coastal ecosystems, e.g., via the draining of wetlands
- Neither undertaking nor encouraging any form of illegal, unreported and unregulated (IUU) fishing or other illegal activities, per the Food and Agriculture Organization of the United Nation’s (FAO’s) International Plan of Action to Prevent, Deter and Eliminate IUU Fishing
- applying the precautionary approach, as described in the Rio Principles and in the United Nations Fish Stocks Agreement of 1995.

As a sustainable sourcing model applicable to both business-to-business and business-to-consumer transactions, Blue BioTrade aims to promote trade and investment in marine biological resources in line with social, economic and environmental sustainability criteria, known as the [BioTrade Principles and Criteria](#) (BT P&C). Integrating the guidance under the BT P&C into marine planning and governance can promote the sustainable use of scarce and vital oceanic living resources and lessen the negative impacts of human and economic activities on marine ecosystems. The seven BioTrade principles in which this regional plan of action is grounded are:



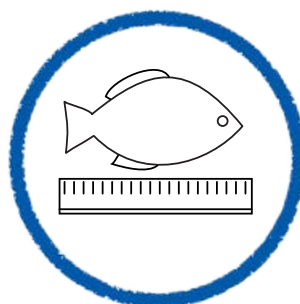
Principle 1: Conservation of biodiversity

Conservation of biodiversity is one of the three, interrelated objectives of the Convention on Biological Diversity (CBD), focused on preserving the wealth of species, ecosystem, and genetic diversity. Principle 1 requires BioTrade activities to be framed in the context of and in consideration of the species, habitats and ecosystems involved. It not only looks at protecting biodiversity, but also at restoring and enhancing it.



Principle 2: Sustainable use of biodiversity

Sustainable use of biodiversity is the second of the CBD objectives and is focused on the use of biodiversity in a way that maintains its potential to meet the needs and aspirations of future generations, in line with [Sustainable Development Goal 14: life below water](#). Principle 2 requires BioTrade activities to be based on adaptive management practices and measures to prevent or mitigate negative environmental impacts and not interfere with the delivery of ecosystem services.





Principle 3: Fair and equitable sharing of benefits derived from the use of biodiversity

In line with the third of the CBD objectives and the [Nagoya Protocol on Access and Benefit Sharing](#) – an international treaty that aims to promote the fair and equitable sharing of benefits derived from the utilization of genetic resources – Principle 3 addresses the social and economic aspects of biodiversity. It requires BioTrade activities to involve long-term partnerships along supply chains, fair prices and contributions to research and development and local sustainable development. It also requires compliance with rules and agreements on access and benefit-sharing in line with the Protocol and under the national legislation.



Principle 4: Socioeconomic sustainability (productive, financial and market management)

For BioTrade activities to deliver on their commitment to the conservation and sustainable use of biodiversity, as well as to fair and equitable sharing of benefits, they must be based on well-founded business policies, procedures and practices, economically sustainable and competitive over the long term and foster the engagement and participation of all the value chain actors. Principle 4 requires organizations involved in BioTrade activities to have the required business systems to function in line with industry and market requirements.





Principle 5: Compliance with national and international legislation

BioTrade practices do not replace, but rather build upon compliance with applicable rules under local, national and international legislation. Principle 5 requires that no BioTrade activity should directly or indirectly support, facilitate or encourage any form of illegal activity. It facilitates legal compliance by promoting an understanding of the main international agreements and relevant national and local laws.



Principle 6: Respect for the rights of actors involved in BioTrade activities

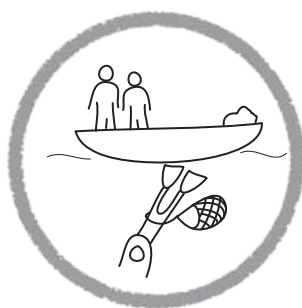
The generation of social capital is one of the pillars of sustainable development and is at the core of BioTrade activities. Principle 6 empowers BioTrade actors by ensuring that their rights are respected and protected. Such rights include, but are not limited to, their fundamental human rights, labour rights, intellectual property rights and their rights as part of vulnerable groups.





Principle 7: Clarity on the right to use and access natural resources

This principle seeks to ensure that BioTrade activities and operations respect land, coastal and marine tenure rights and associated traditional and community-based rights to use and access natural resources. In this regard, it is important to note that UNCTAD's BT P&C, and particularly Principle 7, not only consider the rights of actors involved in BioTrade activities, but also those of their communities.



Purpose

This regional plan of action is intended to support the sustainable development of the queen conch value chains of Grenada, Saint Lucia and Saint Vincent and the Grenadines, in line with the BT P&C, for improved environmental and social sustainability alongside tangible benefits (economic sustainability) for coastal people and those involved in the queen conch value chain. It proposes strategic actions that can serve as inspiration and be used as a model for the sustainable management and trade of other marine biodiversity-based value chains in the Caribbean and other countries or regions.

Timeframe

It is expected that the actions set out within this regional plan of action can be realistically undertaken within a five-year period once fully funded. After the five-year implementation period of the regional action plan, another five-year plan should be developed with the participation of key stakeholders, to build on its achievements.

Monitoring and evaluation

The implementation of this regional plan of action shall be monitored by the OECS in collaboration with implementing countries. Its implementation will be revisited on an annual basis. UNCTAD and CITES will provide technical advice on request.

Approach to implementation

Advancing sustainable livelihoods in the OECS region entails improved understanding and the development and implementation of activities that support livelihoods, particularly of the poor and vulnerable populations. Participatory and gender sensitive approaches that include actors from the public and private sectors, civil society, academia, fisherfolk, fishing communities and women and youth are strongly encouraged in the implementation of this regional plan. In addition, the BT P&C emphasize the application of the following approaches:

- **Ecosystem-based management:** The ecosystem approach is based on a holistic vision that integrates ecological and social issues, as well as the interactions and processes that are involved in a productive system. In practice, the planning of productive processes related to BioTrade activities is undertaken according to the ecosystem approach. This guarantees that the activities will be environmentally and socially responsible and take into account their impact on species, habitats, ecosystems and local communities.

- **Value-chain:** The strengthening of value chains is a critical element in facilitating good practices related to the sustainable use and conservation of biodiversity and in promoting the equitable sharing of environmental, social and economic benefits among value chain participants.
- **Adaptive management:** In the context of BioTrade, adaptive management contributes to the implementation of sustainable practices, the identification of impacts on species and ecosystems and the continual improvement of BioTrade initiatives.

Synergies with international and regional agreements

This regional plan of action operates within a policy framework of national and regional agreements that are acknowledged and should be implemented. It is intended to complement and not replace the existing mechanisms and agreements. As such, the relevant bodies that manage the implementation of these international and regional agreements should be involved in its implementation. Additionally, in the execution of each of the strategic actions and activities, efforts will be made to map current projects and initiatives with similar objectives and actions. This mapping is intended to prevent the duplication of efforts and maximize the use of available knowledge and resources. The following are the agreements which have distinct synergies with this regional plan of action and whose implementation this plan of action fully supports:

- [United Nations Sustainable Development Goals](#)
- [CBD](#)
- [CITES](#)
- [Caribbean Community Common Fisheries Policy \(CCCFP\)](#)
- [Caribbean and North Brazil Shelf Large Marine Ecosystems Strategic Action Programme \(2015–2025\)](#)
- [OECS Development Strategy \(2019–2028\)](#)
- [Eastern Caribbean Regional Ocean Policy](#)
- [Regional Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing in WECAFC Member Countries \(2019–2029\)](#)
- [Regional Queen Conch Fishery Management and Conservation Plan](#)
- [Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries.](#)



Strategic regional action plan to implement BioTrade Principles and Criteria

Principle 1. Conservation of biodiversity

Information on queen conch stock health, location and spawning season in the Eastern Caribbean needs to improve to facilitate more effective management. Further research on these topics is required to enable evidence-based policy decision-making related to closed seasons, no-take zones and other important fisheries management measures. Important to this research is the acknowledgement that local resource users and coastal communities are significant sources of knowledge on the conch fishery and should be involved in research in a participatory way.

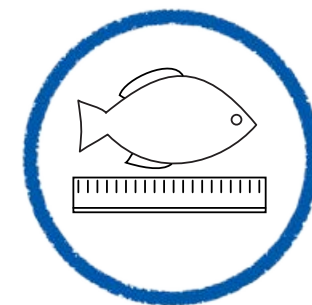
Additionally, opportunities to enhance and restore the resource exist through restorative aquaculture approaches. These are already being piloted in other Caribbean countries. They not only have the potential to enhance biodiversity, but may also provide alternative employment to fishers during closed seasons, build regional technical and educational capacity in aquaculture, and enhance diver safety through the restocking of shallow areas for harvest, reducing the risks associated with deeper commercial diving.

Table 1. Strategic regional action plan for Principle 1: Conservation of biodiversity

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
1.1 Strengthen research to facilitate informed decision-making for subregional queen conch conservation measures	<p>a. Conduct participatory research to identify and inform the establishment of appropriate fisheries conservation measures for fishing and trading queen conch in the Eastern Caribbean region</p> <p>b. Explore the use of proxy measures on the health of fished populations that are relevant to local conditions</p> <p>c. Conduct research to understand the potential for existing marine protected areas (MPAs) in the Eastern Caribbean to replenish the wild subregional queen conch stock and the need for expansion of MPAs and the establishment of MPA corridors, where applicable</p>	Regional, subregional and national policymakers use research findings to inform decision-making and progress policy cycles on critical subregional and national conservation measures	Research reports presented and used as reference documents at meetings of regional, subregional and national decision-making and advisory mechanisms	<p>Regional and national research organizations</p> <p>National fisheries authorities</p> <p>OECS Commission</p> <p>Caribbean Regional Fisheries Mechanism (CRFM) Secretariat</p> <p>MPA competent agencies</p>	2 years	200 000	Grant-based financing

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
1.2 Establishment of subregional queen conch nursery	<p>a. Conduct an environmental and socioeconomic study, including a cost–benefit analysis, to determine the ecological and socioeconomic impacts of using existing aquaculture facilities or establishing a queen conch aquaculture facility in the Eastern Caribbean</p> <p>b. Establish queen conch hatchery and nursery in appropriately identified location in the OECS</p> <p>c. Implement participatory development and implementation of phased queen conch aquaculture plan involving fishers, private sector actors, governments and higher level educational institutions</p>	<p>Improved health and sustainability of current queen conch stock</p> <p>Improved socioeconomic conditions for divers</p>	Increased stock density versus pre-restorative aquaculture activities	<p>Queen conch Laboratory (Puerto Rico)</p> <p>National and regional conservation trust funds (e.g. the Caribbean Biodiversity Fund)</p> <p>Fisherfolk organizations, processors and producers of value added products</p>	5 years	600 000	Grants Investments





Principle 2. Sustainable use of biodiversity

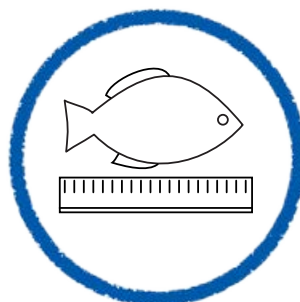
Sustainable use of the queen conch resource requires more information on stock location and health, regular fishery assessments and the exploration of catch limits as a critical measure to enable sustainable management. The high cost of conducting frequent stock assessments, combined with high levels of untapped local knowledge on queen conch stock locations requires participatory approaches and transboundary efforts to reduce and share costs associated with these activities.

Additionally, the sustainability of the queen conch fishery is in part dependent on fisherfolk, processors and exporters acting as stewards of the resource. To be effective stewards, these stakeholders must be equipped with the knowledge and skills to perform this important role. The need to strengthen the capacity for stewardship of queen conch fisheries is therefore a priority.

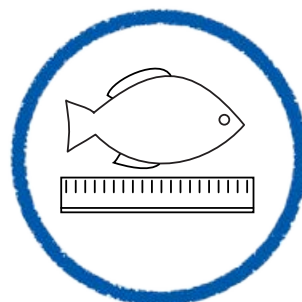
Table 2. Strategic regional action plan for Principle 2: Sustainable use of biodiversity

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
2.1 Strengthen capacity for stewardship of queen conch fisheries	<p>a. Design and disseminate communication using methods appropriate for different audiences and promoting sustainable and legal harvesting and trade of queen conch. Target fisherfolk, processors, exporters and fishing communities</p> <p>b. Provide training to queen conch harvesters on how to identify mature conch based on length and lip thickness</p>	<p>Harvesters, processors and exporters become more knowledgeable about national regulations</p> <p>Harvesters, processors and exporters comply with national regulations</p>	<p>Knowledge, attitude and practice studies show changes in knowledge and attitudes of harvesters, processors and exporters</p> <p>Reduced number of illegal trade reports</p> <p>Reduced number of reports on harvesting of juveniles</p>	<p>National fisheries authorities</p> <p>Fisherfolk, fisherfolk organizations</p> <p>Caribbean Network of Fisherfolk Organisations</p> <p>OECS Commission</p> <p>CRFM Secretariat</p>	6 months	20 000–30 000	Grant-based financing

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
2.2 Improve national capacity to conduct regular queen conch population assessments, using a collaborative management approach	<p>a. Use participatory methods to map and identify queen conch fishing grounds, current habitats, historical habitats, locations where restocking efforts are necessary and, appropriate areas for nursery activities. In order to facilitate regular (e.g., every 2 to 3 years) national fisheries assessments to inform management decisions – including the need for national total allowable catch limits – national fisheries assessments will not be limited to assessing only stock and population age structure, but also the socioeconomic aspects of the fishery</p> <p>b. Train fisheries officers, fishers, MPA personnel, dive operators and relevant civil society organizations to conduct underwater surveys for queen conch for collaborative management</p>	<p>Fishery assessments for national queen conch fisheries conducted regularly every 2 to 3 years</p> <p>Range of stakeholders collaborating to conduct underwater surveys</p> <p>Support one quick queen conch stock assessment at the request of OECS members</p>	<p>Number of fishery assessments conducted</p> <p>Number of fisheries officers, fishers, MPA personnel, dive operators and relevant civil society organizations involved in conducting underwater surveys</p>	<p>CITES</p> <p>Fisherfolk, fisherfolk organizations</p> <p>OECS Commission</p> <p>UNCTAD</p>	3 years	200 000	Grant financing, in-kind support



Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
2.3 Strengthen national policy and regulatory frameworks to facilitate sustainable management of queen conch fishery	<p>a. Review and update national legislation for queen conch fishery to include best management and conservation measures, based on fishery assessment findings</p> <p>b. Develop national queen conch conservation and management action plans, using an adaptive management approach</p>	National policy and regulatory frameworks to enable sustainable management of queen conch fishery	<p>Number of national laws and regulations updated and approved</p> <p>Number of national queen conch conservation and management plans drafted and formally approved for implementation</p>	<p>CITES</p> <p>National fisheries advisory committees or ocean governance committees</p> <p>Fisherfolk, fisherfolk organizations</p> <p>National fisheries authorities</p> <p>National queen conch subcommittees</p> <p>Regional and national research organizations</p>	2 years	100 000	Grant financing, in-kind support



Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
2.4 Strengthen participatory governance for queen conch fishery at the subregional and national levels	a. Establish a multi-stakeholder Queen Conch Advisory Committee for the OECS subregion to support the subregional implementation of the work of the CFMC/OSPESCA/WECAFC/CRFM/CITES Working Group on Queen Conch ¹ b. Establish multi-stakeholder (including fisherfolk) queen conch subcommittees as part of existing national intersectoral coordination mechanisms for the fisheries sector (e.g., fisheries advisory committees, national ocean governance committees)	Range of stakeholders contributing to and supporting decision-making for the queen conch fishery at the subregional and national levels Increased buy-in and mutual understanding among stakeholders for proposed and adopted management measures	Multi-stakeholder governance mechanisms for the queen conch fishery formally established and functioning at the subregional level Number of multi-stakeholder queen conch subcommittees established and functioning at national levels	To be defined by OECS Member States	Ongoing	N/A	

¹ Caribbean Fishery Management Council/Organization of the Fisheries and Aquaculture Sector of the Central American Isthmus/Western Central Atlantic Fishery Commission/CRFM/CITES Working Group on Queen Conch.



Principle 3. Fair and equitable sharing of benefits derived from the use of biodiversity

The illegal trade of queen conch deprives local producers of the opportunity to extract maximum value from the current harvest for the benefit of the OECS countries. Most of the value of the IUU conch trade is not retained by local fishers but is gained by traders in destination markets. Enabling legal trade through a simplified mechanism with major end markets for queen conch that are close in proximity to project countries is important. Additionally, creating a credible deterrent and an enforceable system against IUU fishing would reduce the occurrence of illegal trade and increase the retention of value by legal traders.

Table 3. Strategic regional action plan for Principle 3: Fair and equitable sharing of benefits derived from the use of biodiversity

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
3.1 Enable legal trade between Eastern Caribbean countries and Martinique	a. Establish an export task force focused on enabling a simple mechanism for legal trade with Martinique and other regional markets b. Initiate discussions with the European Union and Regional Council of Martinique on actions needed to improve the ease of legal trade of queen conch	Increased legal trade to high-value end markets	Reduced reports of undeclared/ unregistered and illegal trade Implementation of simplified mechanism to enable trade	OECS Commission European Union Regional Council of Martinique National governments Fisheries Division Exporters	1.5 years	50 000	Grant, in-kind and private sector support

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
3.2 Strengthen subregional coordination to assist with deterring IUU fishing	a. Convene a meeting of the Ministerial Council to explore the strengthening of the fisheries protection function of the existing Regional Security System (RSS) ²	Improved coordination among OECS countries to assist with deterring IUU fishing National policy and regulatory frameworks for IUU fishing strengthened in OECS countries	Number of national plans of action on IUU developed Number of bilateral/ multilateral agreements formalized and implemented Number of reports on the illegal trade of queen conch reduced	OECS Commission RSS Caribbean Community Ministries of national security	1 year	N/A	N/A
3.3 Strengthen national policy and regulatory frameworks to facilitate the deterrence of IUU fishing	a. Develop and adopt a National Plan of Action to prevent, deter and eliminate IUU fishing (NPOA-IUU) using the Regional Plan of Action to Prevent, Deter and Eliminate IUU Fishing in WECAFC Member Countries (2019–2029) as a guide			CRFM Ministries of national security	1.5 years	50 000	In-kind financing

² The RSS is an international agreement for the defence and security of the Eastern Caribbean region. The purposes and functions of the RSS are to promote cooperation among the Member States in the prevention and interdiction of traffic in illegal narcotic drugs, in national emergencies, search and rescue, immigration control, fisheries protection, customs and excise control, maritime policing duties, natural and other disasters, pollution control, combating threats to national security, the prevention of smuggling, and in the protection of offshore installations and exclusive economic zones.



Principle 4. Socioeconomic sustainability (productive, financial and market management)

The three value chain studies conducted under the Blue BioTrade project illustrated that additional value could be extracted from current queen conch harvests through the production of value added products and increased use and trade of discarded by-products. Socioeconomic sustainability of current and future harvest levels could be enhanced through the dedication of resources and sharing of best practices in value addition and by-product use that currently exist in project countries but are not universally practised.

Further, due to advances in information and communications technology, smartphone capability and blockchain approaches, low-cost approaches to improving fisheries traceability currently exist. These should be explored as simple ways of enhancing the marketability, market access and perceived value of queen conch produced in the Eastern Caribbean.

Table 4. Strategic regional action plan for Principle 4: Socioeconomic sustainability

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
4.1 Build capacity for processing and marketing of value added queen conch products	a. Train stakeholders in the production, packaging, branding and marketing of value added food products such as frozen conch samosas, soups, curries and burgers, for export and domestic consumption b. Promote domestic use of queen conch food products via the tourism market, e.g., hotels, restaurants and culinary festivals	Reduced waste Increased income from exports and domestic consumption of conch and conch products	Increase in value of exports of value added conch products Increased number of value added products offered in country Increased direct business to business sales of queen conch (e.g., processor–restaurant)	Main processors and exporters in project countries National fisheries authorities Ministries of tourism Caribbean Export	1 year	50 000	Blended finance – grant and private sector

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
4.2 Increase utilization and trade of queen conch by-products (i.e., trimmings, opercula and pearls)	<p>a. Trimmings</p> <ul style="list-style-type: none"> • Promote the use of trimmings in value added queen conch products for export and domestic consumption, e.g., conch burgers, samosas and soups and chowders • Identify markets for queen conch trimmings • Share processing best practice as it relates to the production of queen conch trimmings for value added products, through the development of a short video training series <p>b. Pearls</p> <ul style="list-style-type: none"> • Provide training to local stakeholders to appraise queen conch pearls • Develop an online queen conch pearl appraisal guide and auction system <p>c. Opercula</p> <ul style="list-style-type: none"> • Identify markets for queen conch opercula • Promote collection and trade of queen conch opercula through poster training series and identification of centralized collection points • Provide training to local stakeholders in appropriate processing of queen conch opercula for export <p>d. Shells</p> <ul style="list-style-type: none"> • Seek best practice in using shells for value added products, such as generation of beads, with a view to commercializing this important by-product 	<p>Reduced discard of valuable by-products</p> <p>Increase income and job opportunities for value chain actors, especially processors</p> <p>Stakeholders are more knowledgeable about the retail value of queen conch pearls</p> <p>Increase in trade and income earned from the sale of queen conch pearls</p> <p>Stakeholders have increased interest in collecting and trading conch opercula</p> <p>Increase in trade and income earned from the sale of queen conch opercula</p>	<p>Increase in local demand for queen conch trimmings</p> <p>Increase in export volume of queen conch trimmings</p> <p>Increase in trade of queen conch pearls that benefits value chain actors fairly and equitably</p> <p>Increase in traded value of queen conch pearls</p> <p>Increase in local demand for queen conch opercula</p> <p>Increase in export volume of queen conch opercula</p>	<p>Main processors and exporters in project countries</p> <p>National fisheries authorities</p> <p>Fisherfolk</p> <p>Fisherfolk organizations</p>	<p>2 years</p>	<p>100 000</p>	<p>Blended finance – grant and private sector</p>

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
4.3 Apply low-cost traceability systems to improve traceability and marketability of queen conch products produced in the OECS	a. Complete a review of low-cost traceability systems, particularly those developed within the Caribbean, to identify the most appropriate solution for the Eastern Caribbean queen conch value chain and to enable market access to key markets, including the European Union and the United States of America b. Train fishers and processors in the application of a cost- and time-effective traceability solution to enable further market access	Implementation of traceability systems in the queen conch value chain	Enhanced market access and marketability of queen conch products due to implementation of traceability systems	Processors fisherfolk Fisherfolk organizations National fisheries authorities OECS UNCTAD CITES	2 years	100 000	Blended finance – grant and private sector
4.4 Obtain Hazard Analysis Critical Control Point (HACCP) certification for all conch processing facilities	a. Conduct mapping of all facilities and stakeholders who have previously received HACCP certification and facilities with conch and fisheries export potential to identify additional training needs for facility certification b. Conduct programme of additional training and upgrading of facilities to achieve HACCP-level functioning c. Seek joint HACCP inspection of facilities across project countries to share cost of inspection and final certification			Processors National fisheries authorities Fisherfolk organizations OECS UNCTAD			



Principle 5. Compliance with national and international legislation

The importance of sustained compliance with CITES export requirements must be emphasized. Legal trade cannot occur without compliance with CITES rules and principles. In addition, the close alignment of this regional plan of action with the Regional Queen Conch Fishery Management and Conservation Plan,³ and its critical role in supporting its subregional implementation should be emphasized.

Table 5. Strategic regional action plan for Principle 5: Compliance with national and international legislation

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
5.1 Improve compliance with CITES requirements	a. Designate a CITES national authority and keep its contact information up-to-date b. Develop mutually agreed simplified non-detriment findings (NDF) and legal acquisition findings (LAF) guidelines and forms for the OECS countries c. Approach Queen Conch Working Group to volunteer project countries to act as test case for simplified NDF d. Conduct awareness and capacity building activities with agencies responsible for supporting queen conch exportation and importation	Simplified generation of NDF and LAFs by participating countries	No CITES trade suspensions based on non-reporting Simplified generation of NDF and LAFs	CITES Ministries of agriculture National fisheries authorities	18 months	50 000	Grant financing
5.2 Improve reporting compliance with CITES	a. Work with CITES authorities to ensure annual reports are submitted in a timely manner	Continued and improved compliance with CITES requirements	No CITES trade suspensions based on non-reporting Annual reports submitted to CITES on time	CITES Ministries of agriculture National fisheries authorities	Annually	N/A	N/A

³ For more information, see: <https://clmeplus.org/app/uploads/2020/05/2017-FAO-TP610-Regional-Queen-Conch-Fisheries-Management-and-Conservation-Plan.pdf>



Principle 6. Respect for actors' rights

Data and information on the socioeconomic aspects of the queen conch fishery, and fisheries in general, could be improved. These data are needed to support the management of the fishery to improve equity and the distribution of benefits generated by the fishery to various groups, including youth, women and vulnerable groups.

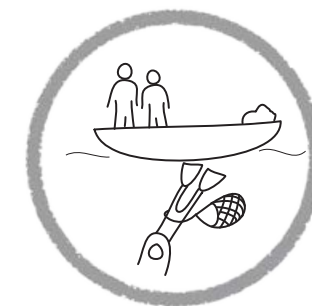
Table 6. Strategic regional action plan for Principle 6: Respect for the rights of actors involved in Blue BioTrade activities

Strategic objective	Action	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
6.1 Promote risk reduction mechanisms to improve diver safety	a. Identify existing insurance mechanisms related to fishing to see how the issue of diver safety can be incorporated b. Conduct training certification in diver safety c. Safety requirements incorporated as part of license (e.g., oxygen kits on vessel, training in diving and emergency oxygen response)	Improved diver safety Mechanism for social insurance to provide compensation	Reduced incidence of dive-related injuries	Regional non-governmental organizations	Ongoing	300 000	Grant financing
6.2 Improve effective communication material (considering language) on legality, environmental sustainability, profitability, market information and other needs to fishers and processors	a. Using appropriate means, communicate to stakeholders important information on legality, sustainability and profitability b. Identify agencies that can support actors in the value chain with critical socioeconomic data, including market intelligence and other research	Improved flow of information to key stakeholders in the value chain and improved relationships with these key actors Improved compliance with current and future management measures Diversified income sources for fishers and processors	Views and uptake of produced communication material	International Trade Centre Caribbean export processors and transaction brokers National fisheries authorities Fisherfolk cooperatives and fisherfolk	Ongoing	100 000	Grant financing

Strategic objective	Action	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
6.3 Improve collection, analysis and reporting of socioeconomic data for the conch fishery	<p>a. Conduct training courses for staff of fisheries authorities on fisheries socioeconomic data collection, analysis and reporting</p> <p>b. Develop training manual/handbook on low-cost methods to conduct socioeconomic assessments</p>	<p>Context for making management decisions broadened</p> <p>Role of women and vulnerable groups in the value chain and the impacts of management measures on women better reflected in adaptive management strategies</p> <p>Staff of national fisheries authorities more knowledgeable about socioeconomic assessments and how to conduct them</p>	<p>Socioeconomic data mainstreamed into fisheries data collection programmes for the queen conch fishery</p> <p>Socioeconomic assessments conducted regularly for the queen conch fishery</p> <p>Reports on socioeconomic assessments presented/used as reference documents at meetings of national decision-making and advisory mechanisms</p>	<p>UNCTAD</p> <p>OECS</p> <p>National fisheries authorities</p> <p>CRFM</p>	2 years	50 000	Grant financing

Strategic objective	Action	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost estimate (\$)	Financing type
<p>6.4 Formalize fisheries advisory committees and ensure this regional plan of action is presented to them for consideration</p>	<p>a. Identify fisheries advisory committees in all of the project countries and share this plan with all members of the respective committees to seek their support for its implementation</p>	<p>Improved flow of information to key stakeholders in the value chain and improved relationships with these key actors Improved compliance with current and future management measures</p>					





Principle 7. Right to use and access natural resources

For management measures like total allowable catch and quotas to function well, licensing systems need to be developed and enforced. Importantly, these licensing systems must consider historical use rights and traditional users, to ensure equity in the distribution of licenses and prevent capture by actors with greater power and resource availability. Licencing is important for more detailed tracking of fishing effort, socioeconomic data and catch.

Table 7. Strategic regional action plan for Principle 7: Clarity on right to use and access natural resources

Strategic objective	Actions	Desired outcomes/ impacts	Indicators	Partners	Time horizon/ duration	Cost	Financing type
7.1 Formalize access to conch fishery	a. Develop and implement national licensing systems for conch fishers and vessels which require fishers and fishing vessels to provide catch and effort and biological data to the national fisheries authorities	<p>Formalization of the conch industry through licencing</p> <p>Institutionalize the collaboration of fisherfolk in data collection and co-management</p> <p>Facilitate compliance with CITES LAF requirements</p>	<p>Number of national licensing systems established or strengthened</p> <p>Number of licenced conch fishers and vessels</p> <p>Improved data collection for the queen conch fishery</p>	<p>Ministries of agriculture</p> <p>National fisheries authorities</p> <p>CITES</p>	18 months	50 000	Grant financing

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