

Effectively Governing the Oceans Economy and Boosting Trade Performance of Small States¹

Abstract

Whilst Small States total share in global trade has been declining over time, specific sectors related to the oceans economy have been growing. Coastal small States have been pioneering Blue Economy approaches underpinned by Integrated Ocean Governance Frameworks. This International Trade Policy Working Paper explores the associations between improvements in oceans governance, with a focus on fisheries and SDG14 trade-related outcomes. It draws on three Commonwealth case-studies: Seychelles, Barbados and Belize. Overall, Commonwealth Small States export a total value of \$2 billion of fisheries exports, around 6 percent of total exports. They score just below the global average with regards to coastal protection, according to the Oceans Health Index (OHI). The preliminary analysis undertaken in this paper suggests improvements in oceans governance through enhanced coastal protection could boost trade by \$3 million on average for Commonwealth Small States, for every incremental improvement and increase in score, based on the OHI. Boosting Commonwealth Small States coastal protection so as to exceed the global average could boost the value of fisheries trade on average for member states by \$10 million, annually. These initial exploratory results provide a number of avenues for further research, including as part of the Oceans Economy and Trade Strategies being pioneered in selected Commonwealth Small States.

Introduction

The oceans economy concept has emerged in recent years and been avidly adopted by policy makers in coastal and small islands developing states (SIDS) as a means through which they can advance their socio-economic goals and trade-related diversification efforts (World Bank and UN, 2017). Underpinning these efforts is effective oceans governance, which is strengthened by various domestic, regional and international institutional and legal frameworks including the United Nations Convention on the Law of the Sea (UNCLOS), intended to ensure greater value addition and capture, as well as enhanced environmental and socioeconomic outcomes. Efforts to bolster governance frameworks globally in view of public policy objectives are supported by Sustainable Development Goal 14 (Life below Water).

Poor fisheries management squanders roughly US\$80 billion annually in lost economic potential and 11 percent in catch potential (World Bank, 2018). Improved oceans and more specifically, fisheries governance can recapture a substantial proportion of the annual losses.² Currently, Commonwealth Small States export a total value of \$2 billion of fisheries exports, around 6 percent of total exports and score just below the global average for coastal protection. The analysis presented in this paper suggests that improvements in oceans governance through enhanced coastal protection could boost trade by \$3 million, for every incremental improvement. Improving Commonwealth Small States'

¹ This draft working paper has been prepared by Jodie Keane, Rosemarie Cadogan and Hilary Edu-Enos, Commonwealth Secretariat, London, Trade Oceans and Natural Resources Directorate. As a first draft and we welcome comments and suggestions. The views expressed in this paper are the authors and do not represent those of the Commonwealth Secretariat.

² See World Bank (2009, 2017).

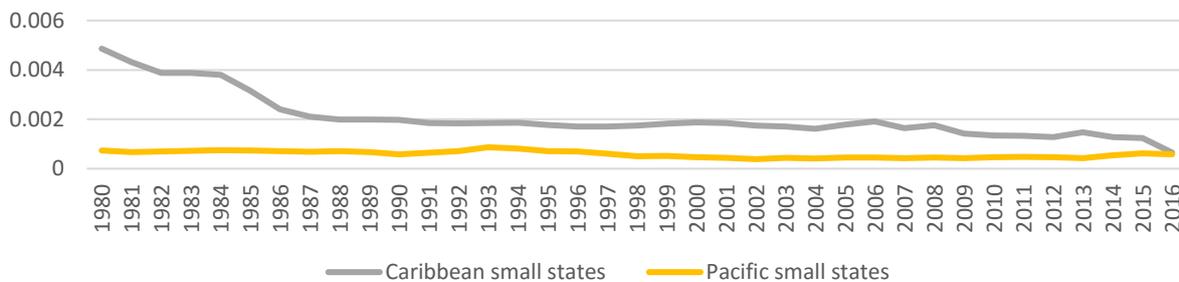
coastal protection so as to exceed the global average could, on average, boost their value of fisheries trade by \$10 million, annually.

Whilst the relation between improved management and trade performance is clear, the issues are complex given the challenges in managing access to oceans resources and major capacity constraints in small and developing oceans economies. However, through new partnerships including between the Commonwealth Secretariat, UNCTAD, and DOALOS, combined efforts are seeking to address these constraints at the national level and boost the trade performance of small states. This Trade Policy Working Paper underscores the importance of the oceans economy and enhanced governance for trade-related outcomes, focusing specifically on the fisheries sector and selected Commonwealth case-studies: Belize, Barbados, and the Seychelles. It first, reviews the recent trade performance of small states, before focusing on the aforementioned case-studies. It then reviews related oceans governance frameworks before proceeding to explore the causal relations with trade-related outcomes. Finally, it concludes with policy implications which can boost both oceans governance frameworks and trade, and advance SDG14.

1. Relative Trade Performance

Commonwealth Small States have experienced a relative decline in their share of world trade (both goods and services) over most recent decades, driven by the increased share of the emerging economies (including China), as indicated by Figure 1. The Caribbean region has been seemingly hit harder compared to the Pacific, especially in most recent years - since the global trade slowdown of (2008-9) and subsequent Eurozone crises (2014). However, the individual performance of Commonwealth Small States performance has been more mixed (Figure 2).

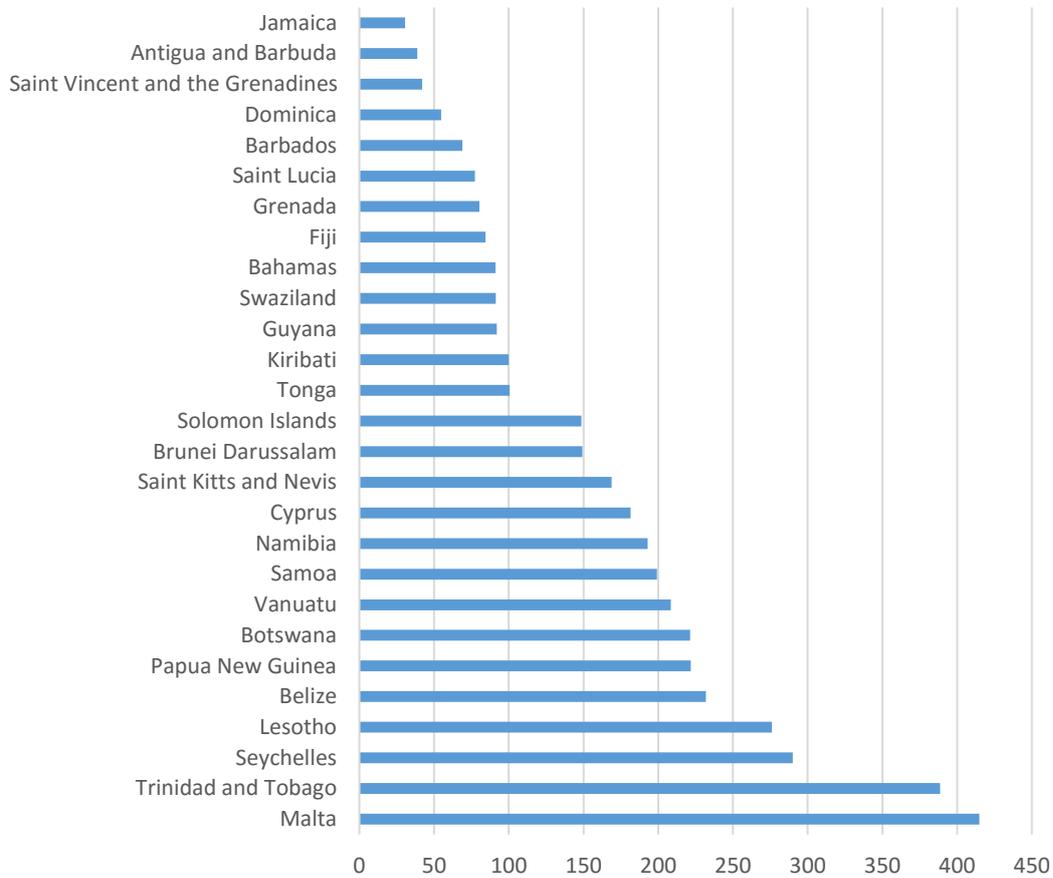
Figure 1: Commonwealth Small States Share of World Trade 1980-2016



Source: UNCTADstat (Goods and Services, BPM5)

It is clear from Figure 2 that mostly Small States in the Caribbean (with the exception of Trinidad and Tobago, as well as Belize) have experienced the lowest increases in their export values over the period analysed 1995-7 compared to 2014-16. Notably, there are some strong trade performers, which include the Seychelles and Belize; countries which are the focus of this Working Paper, that have managed to boost their export performance by more than 200 percent over the period analysed. Barbados, in comparison has experienced just under a 100 percent increase.

Figure 2: Small States, % Increase Exports in Goods and Services (US\$) between 2014-6 and 1995-7



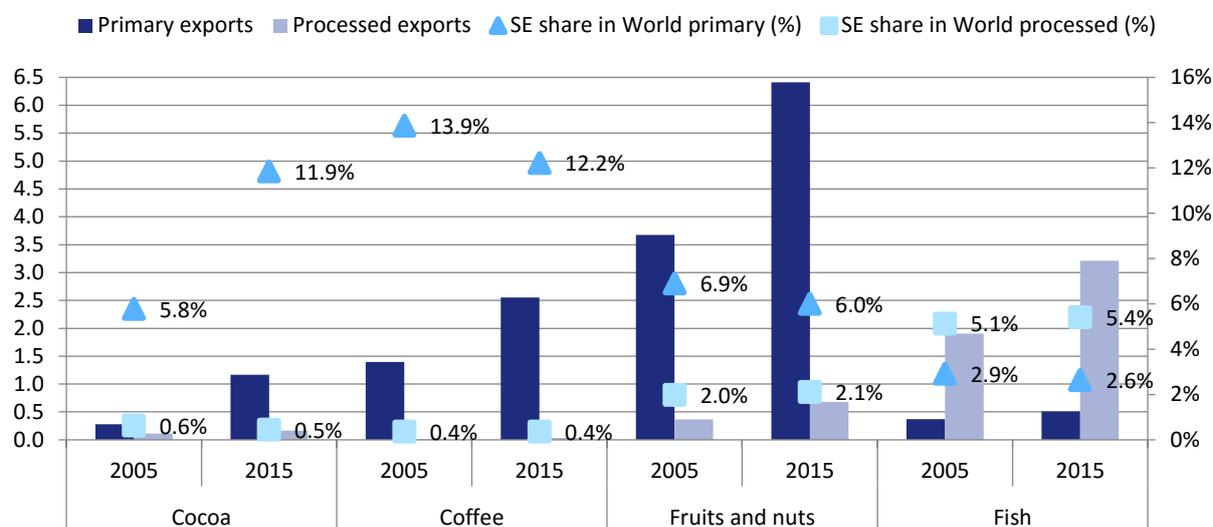
Source: UNCTADStat (2018)

Analysis of aggregate trade performance for Small States masks that of specific sectors, which in some cases have been strongly performing.³ While exports from the category of ‘fish’ accounted for 3.4 percent of total exports from small economies in 2013, they made up 90.5 percent of processed product exports. As shown by Figure 3, while small economies exported below US\$0.5 billion of primary fish products between 2003 and 2015, exports of processed fish almost tripled, from below \$1.59 billion in 2005 to \$3.2 billion in 2015; and their share in world trade of processed fish increased from 5.2 per cent in 2003 to 5.45 per cent in 2015.⁴ These results are indicative of strong performance in emerging sectors, which may be underpinned by improvements in oceans governance frameworks. However, it should be noted that the analysis of Lanz and Rainer (2018) focuses on all Small States globally, as opposed to those specifically within the Commonwealth.

³ The definition used for Small States is that defined by Lanz and Rainer (2018) and includes non-Commonwealth member states.

⁴ Lanz and Rainer (2018).

Figure 3: Small States Primary and Processed Exports



Source: Lanz and Rainer (2018)

1.1 Commonwealth Case-Studies: Barbados, Belize, Seychelles

There are some major differences in how each country has positioned itself within the fisheries value chain, the value added derived and subsequent potential for upgrading (economically, as well as socially and environmentally) within the fisheries value chain; which includes within domestic, regional, as well as global markets. Differences in specialisation within primary or processed fisheries exports provides an indication of the extent to which Barbados, Belize and Seychelles have moved into more labour intensive and higher value segments of the fisheries value chain.

The Seychelles has the largest coastal area compared to Barbados and Belize (Table 1). The greater access to fisheries resources this implies is reflected in the data. The Seychelles has boosted its export performance from fish trade substantially over recent years. The situation for Belize is rather more varied, given fluctuations in the value of fisheries trade over recent years. Barbados slightly increased its fisheries exports between 2014-2016.

Table 1: Country Profiles (2017)

Country	Population (millions)	Land area (km ²)	Coastline (km)	Coastal/Area Ratio (m/km ²)	GDP (current millions USD)	GDP per Capita (2017)
Barbados	0.286	439	97 km	226	4 901	16,789
Belize	0.375	22 810	386 km	88	1 789	4,905.5
Seychelles	0.095	445	491 km	1 642	1 487	15,504.5

Source: UNCTADStat, Country Profile: General and Maritime Profiles; World Development indicators; Authors calculations. Note: For consistency, we use UNCTADStat data even though there are some differences with National reported data.

There are major differences between the three countries in relation to their degree of specialisation within the processed and unprocessed fisheries sectors, with Seychelles exporting a much larger share

of processed fish compared to Barbados (Table 3). In comparison, Belize exports less fish products; instead, its product is more varied and includes crustaceans and molluscs.⁵

Table 2: Value of international trade of seven fishery commodity and processed goods groups (2014-2016) (USD 000s)

Trade	Country	2014	2015	2016
Imports	Barbados	24,856	25,787	23,522
	Belize	1,202	881	918
	Seychelles	129,902	96,929	124,708
Exports	Barbados	429	505	692
	Belize	57,297	44,596	21,617
	Seychelles	431,036	375,923	483,671

Source: FAO (2016) Fishery and Aquaculture Statistics Yearbook

Note: the seven fishery commodity groups are (1) fish, fresh, chilled or frozen; (2) fish, dried, salted or smoked; (3) crustaceans and molluscs; (4) fish, canned; (5) crustaceans and molluscs; (6) oils; and (7) meals

Table 3: Trade in Primary and Processed Fish and Revealed Comparative Advantage

Country	Exports (US\$ mill. 2015)		RCA (2015)	
	Primary	Processed	Primary	Processed
Barbados	1.51	0.14	2.74	0.08
Seychelles	1.43	373.10	1.86	157.88

Source: Adapted from Lanz and Rainer (2018)

Generally, Seychelles specialises in industrial fishing and the processing of tuna products. In the case of Barbados, artisanal fisheries tend to supply mostly the domestic market with linkages to the tourism sector. Belize has experienced growth in artisanal fishing and developed commercial value chains within the fisheries sector, mostly specialising in crustaceans and molluscs. In relation to domestic fleets, by ownership, Seychelles has the largest capacity followed by Belize and Barbados (Table 4). However, in relation to flagged vessels, Belize has the highest number followed by Barbados, with the lowest number in the case of Seychelles.⁶

Table 4: Information on Fleets – Flags and Ownership (nearest 2017)

Country	Fleet – national flag ¹	Fleet – ownership ²
Barbados	1 300 000 DWT	2 000 DWT ³
Belize	3 023 000 DWT	21 000 DWT
Seychelles	208 000 DWT	258 000 DWT

Source: Clarksons Research

Notes:¹Propelled seagoing merchant vessels of 100 GT and above, on 1 January.

²Propelled seagoing merchant vessels of 1000 GT and above, on 1 January. Source: Clarksons Research.

³DWT = Dead weight tons reflect the cargo capacity (in tons) of a ship. This table illustrates the total DWT for each fleet.

2. The Oceans Governance Framework

Oceans economies or 'blue' economies are complementary to and in a sense, a subset of, evolving development paradigms which emphasizing greener, more sustainable and inclusive economic paths (UNCTAD 2018). The cross-cutting nature of oceans presents opportunities for addressing some of the

⁵ Since a 2014 outbreak of Early Mortality Syndrome in Belize, shrimp production in the aquaculture industry has not recovered.

⁶ Not all of these flagged vessels will be directly involved with the fishing sector.

challenges SIDS face due to their small size, market openness, and vulnerability to external shocks; while also supporting economic diversification and environmental sustainability.

The SDGs' ambitious global targets seek to address the gaps in public policy frameworks which have so far governed the globalisation process.⁷ SDG14, which specifically relates to life below water, makes reference to different governance arrangements, some of which are directly trade related and others which have less direct impact. It is clear that SDG14 seeks to provide enhanced protection, greater access and improved governance whilst striking a balance between sustaining ocean health and increasing economic productivity, so as to ensure sustainability over generations to come.

The combined effect of the SDG14 implementation agenda, with its interrelated targets which bolster oceans governance frameworks, are geared towards increased access and therefore trade opportunities particularly for Small States – as recognised specifically in some of the targets of SDG14.

For example:

Target 14.7: By 2030, increase the economic benefits to Small Island developing States and least developed countries from the sustainable use of marine resources, including through sustainable management of fisheries, aquaculture and tourism

Indicator 14.7.1: Sustainable fisheries as a percentage of GDP in small island developing States, least developed countries and all countries

14b: Provide access for small-scale artisanal fishers to marine resources and markets;

Target 14.B.1: Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries

Oceans governance frameworks include the legal, policy and institutional intended to support activities in ocean-related sectors in ways that promote healthy oceans and sustainable use. When taken together, UNCLOS and other ocean-related regional and domestic instruments which incorporate the economic, social and environmental aspects of sustainability, can be instrumental in realising in attaining these objectives.

This is reflected in the aspirations of Target 14.C of SDG 14 which aspires to: *Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in UNCLOS, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of The Future We Want*

Indicator 14.C.1 focuses on the number of countries making progress in ratifying, accepting and implementing through legal, policy and institutional frameworks, ocean-related instruments that implement international law, as reflected in the United Nation Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources.

In the following subsections, a brief review of oceans governance frameworks is undertaken for each of the Commonwealth case-studies. This includes the implementation of international, regional and

⁷ See Keane (2018).

national legislation and policy initiatives, where these are directly or indirectly related to the fisheries sector. We present an indicative timeline for each country of the implementation of oceans governance frameworks⁸ and then review: maritime jurisdiction; international and regional frameworks; domestic institutional arrangements; and, finally frameworks directly related to fisheries.

2.1 Oceans Governance Implementation⁹ in Barbados, Belize, and Seychelles

2.1.1 Barbados: Timeline of Oceans Governance Implementation

- 1976 – Enacted the Marine Areas (Preservation and Enhancement) Act
- 1978 – Enacted the Marine Boundaries and Jurisdiction Act
- 1981 – Established the Folkestone Park and Marine Reserve (FPMR)
- 1993 – Ratified UNCLOS
- 1995 – Joined the World Trade Organization (WTO)¹⁰
- 1996 – Establishment of the Coastal Zone Management Unit (CZMU)
- 1998 – Enacted the Coastal Zone Management Act
- 2000 – Acceded to the 1995 United Nations Fish Stocks Agreement (UNFSA)
- 2000 – Accepted the FAO Compliance Agreement
- 2000 – Member of the Tuna Convention establishing ICCAT
- 2002 – Signed the Agreement Establishing the Caribbean Regional Fisheries Mechanism
- 2003 – Signed an Exclusive Economic Zone (EEZ) Cooperation Treaty with the Cooperative Republic of Guyana
- 2004 – Ministry of Agriculture and Rural Development launched the Third Barbados Fisheries Management Plan (2004 -2006)
- 2006 – Arbitral Award between Barbados and Trinidad and Tobago delimiting the EEZ and continental shelf
- 2009 – Signed maritime boundary treaty with the French Republic in respect of Guadeloupe and Martinique
- 2014 – Authorised the Caribbean Community Common Fisheries Policy (CCCFP)
- 2016 – Signed Maritime Boundaries Agreement with St Vincent and the Grenadines
- 2016 – Acceded to the Port States Measures Agreement (PSMA)
- 2016 – Signed Maritime Boundaries Agreement with Saint Lucia
- 2018 – Ministry of Maritime Affairs and the Blue Economy established.

Barbados is an Eastern Caribbean Island state, south of St. Lucia, east of St. Vincent and the Grenadines, and north of Trinidad and Tobago, with a land area of 441 km², coastline of 97km and an area of maritime jurisdiction approximately 400 times greater than that of its land space. Its economy has evolved from a low-income agricultural economy into a middle-income economy centred around offshore banking and tourism as its main foreign exchange earners. In relation to tourism, assessments of the economic valuation of coastal resources including natural capital and ecosystem services have been undertaken.¹¹ Tourists' probability of return is highly dependent upon their perceptions of

⁸ These lists are not meant to be exhaustive, but rather are indicative.

⁹ Governance implementation refers to a mix of international and regional instruments, national legislation and policy initiatives

¹⁰ Barbados joined the General Agreement on Tariffs and Trade (GATT) in 1967.

¹¹ Schumann 2007, 'Economic Valuation of Coastal Resources'

https://www.cavehill.uwi.edu/cermes/docs/technical_reports/schumann_2007_economic_valuation_of_coastal_resou.a_spx.

coastal and marine quality, illustrating a clear and significant link between the quality of the coastal and marine environment and tourism. This is a clear driver for Barbados to ensure strong coastal and marine environmental protection and sustainable management.

Maritime Jurisdiction

Barbados has delimited its maritime boundaries with France (Guadeloupe and Martinique), Saint Lucia, St. Vincent and the Grenadines¹², and settled its maritime boundary with Trinidad and Tobago by an Arbitral Tribunal Award in 2006. As a result, Barbados' only unresolved maritime limits are its potential extended continental shelf boundaries beyond 200 nautical miles with Guyana and Trinidad and Tobago.¹³

International and Regional Frameworks

Internationally, Barbados is a party to UNCLOS (1993), UNFSA (2000), Kyoto Protocol to the UNFCCC (2000) and the FAO Compliance Agreement (2000), and the 2009 FAO Port States Measures (2016), Cotonou Agreement, CITES (1992), Cartagena Convention and Protocol (1985 & 2002), and CBD (1994). In relation to regional frameworks, Barbados is a member of the following: the Caribbean Regional Fisheries Mechanism (CRFM), International Commission for the Conservation of Atlantic Tunas (ICCAT) and the Western Central Atlantic Fishery Commission (WECAFC). It is a member of the regional body CARICOM and party to the Caribbean Community Common Fisheries Policy (CCCFP). This binding treaty, currently in implementation phase, focuses on conserving, managing and sustainably utilizing fisheries and related ecosystems. One of its aims is to address ongoing challenges for fishers by broadening market and fisheries research and access to markets.

Domestic Institutional arrangements

Several agencies in Barbados play a role in ocean governance; the key ones being the newly established Ministry of Maritime Affairs and the Blue Economy, and the Coastal Zone Management Unit (CZMU). The Ministry of Maritime Affairs and the Blue Economy has primary responsibility for preserving Barbados' coastlines and its marine environment, including the health of its reefs and marine plants and animal habitats. It is charged with ensuring the sustainable use and development of fisheries, marine assets and resources, minerals and species for sustainable recreation and decent livelihoods for those directly and indirectly employed in the various marine sectors.¹⁴ The mandate of the CZMU evolved from its inception in 1983 as a Project Unit managing beach erosion, to an entity under the Coastal Zone Management Act addressing integrated coastal zone planning and development and broader marine environmental protection. A key output of the CZMU is the Integrated Coastal Zone Management Plan, underpinned by a Coastal Zone Management Area (CZMA) which encompasses Barbados entire coastline, comprising 8 subzones fringing the island, with landward and seaward boundaries.¹⁵

The CZMA is complementary to other ocean related policies and programmes such as the Physical Development Plan (PDP) and will be linked with any future ocean governance policies developed for Barbados' EEZ and its area of extended continental shelf by the Ministry of Maritime Affairs, and the

¹² France (2009); Saint Vincent and the Grenadines (2015); Saint Lucia (2016).

¹³ These are externally determined by the UN Convention on the Limits of the Continental Shelf, and the timeframe for such recommendations can range from 10 to 15 years from the date of lodgement of a submission.

¹⁴ Governor General of Barbados' Throne Speech June 5, 2018 <http://gisbarbados.gov.bb/download/throne-speech-june-05-2018/?wpdmdl=506696>.

¹⁵ Seaward boundary is the 100 meter isobaths or 200 meters seaward of the outer edge of the bank reef, whichever is further seaward. Barbados Coastal Zone Management Unit <http://www.coastal.gov.bb/content/integrated-coastal-zone-management-plan>.

Blue Economy. This underscores the need for an integrated ocean governance framework that builds on existing relationships and creates linkages among institutions and marine sectors (including fisheries trade and services) to achieve the effective coordination of marine activities covering the full extent of Barbados' maritime jurisdiction.

Trade in Fisheries and Related Services

The Fisheries Act 1993 (amended 2000) and Regulations made under it, provide the legal authority for management, conservation and development of fisheries in Barbados and for policy development such as the Fisheries Management Plan. The Plan allows for the training of local organizations to enable them to play an active role in fisheries management and quality assurance. The vision includes promotion of responsible fishing practices and implementation of agreed national, regional and international fisheries management measures; continued development of modern and appropriate infrastructure and production and marketing of quality value-added seafood products.

While Barbados remains a low exporter of fish and fish products, its domestic market is served by the small-scale fisheries. With the call for governments to provide access and opportunities for small-scale artisanal fisheries to marine resources and markets to fulfil SDG 14.b, the Barbadian government, through the Department of Fisheries offers incentives and services such as tax and duty concessions on marine fuel, boats, engines and fishing supplies; subsidised payments of water and electricity at boatyards and landing sites; free registration, licensing and inspection services; and a maintenance and upgrade subsidy of up to \$2000 per boat per year. The CZMU's efforts to conserve coastal and marine areas and build fish stock (SDG 14.5) has included the application of technical measures such as closed seasons for overexploited fishes and bans on sea egg harvesting to allow sea egg/fish stock to fully recuperate.¹⁶

2.1.2 Belize: Timeline of Oceans Governance Implementation

- 1948 – Enacted the Fisheries Act
- 1965 – The Belize Fisheries Department was established and mandated to sustainably manage and develop the Fishing Sector
- 1981 – Joined the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES)¹⁷
- 1983 – Ratified UNCLOS
- 1990 – Establishment of the Coastal Management Zone Unit within Ministry of Fisheries
- 1992 – Enacted the Maritime Areas Act¹⁸
- 1995 – Becomes a WTO member
- 1996 - Belize Barrier Reef Reserve System is inscribed on the World Heritage List
- 1996 – Enacted the Protected Areas Conservation Trust (PACT) Act
- 2000 – Established the Coastal Zone Management Authority and Institute (CZMAI)
- 2005 – Ratified United Nations Fish Stocks Agreement (UNFSA)
- 2005 – Accepted the 1993 FAO Compliance Agreement
- 2007 - Ratified the Convention for the strengthening of the Inter-American Tropical Tuna Commission

¹⁶ The Government has also designated the Folkestone Park and Marine Reserve as a protected zone. However, the country continues to face issues of effective management of its protected areas. See: https://www.cavehill.uwi.edu/cermes/getdoc/c80a2723-fe8e-40cd-a240-60d51fc6a0ef/pena_et_al_2016_barbados_sea_eggs_season_2015_ctr_.aspx.

¹⁷ Belize was previously party to CITES as part of the United Kingdom and Northern Ireland

¹⁸ http://www.un.org/Depts/los/doalos_publications/LOSBulletins/bulletinpdf/bulletin52e.pdf (p. 67).

(the Antigua Convention)

- 2010 - Ratified the Protocol concerning Specially Protected Areas and Wildlife (SPA) under the Cartagena Convention
- 2011 - Ratified the Convention on the Conservation and Management of the High Seas Fishery Resources in the South Pacific Ocean
- 2011 - Agreement on the International Dolphin Safe Program
- 2011 - Agreement on the International Dolphin Conservation Program
- 2011 - Agreement for the Establishment of the Indian Ocean Tuna Commission
- 2013 - Enacted the High Seas Fishing Act
- 2014 - Launch of the National Plan of Action to Prevent, Deter and Eliminate, Illegal, Unreported and Unregulated (IUU) Fishing on the High Seas
- 2015 - Enacted the National Protected Areas System Act
- 2016 Adopted a National Secure Fishing Rights Program for all small-scale fisheries, known as 'Managed Access'
- 2017- Signed a Joint Declaration on Marine Reserves with the Governments of Belgium, Nauru and Portugal
- 2017 - Passed a moratorium on offshore oil exploration to protect marine wildlife
- 2018 - Announced at the World Ocean Summit in Mexico that it will expand its no-take area from 3% to more than 10% by the end of 2018

Belize is located on the Eastern Caribbean Sea coastline of Central America, bordering Mexico to the North, and Guatemala to the West/Southwest and shares a maritime boundary with Honduras to the southeast. Belize spans a land area of 22,810 km², with an EEZ of 34,310 km² and a 386 km coastline. Its economy is heavily commodity based with exports mainly in sugar and citrus fruits, along with fish products (including crustaceans) and crude oil.

Since the 1990's, Belize has made continuous efforts to diversify its exports and expand its economy, and despite being highly susceptible to natural disasters, has transitioned towards tourism as a major economic activity and important source of foreign income. In maximizing the oceans economy, Belize's coral reef is a critical feature of the national economy and food security, as it provides commercially valuable fish, crustaceans, as well as opportunities for recreation and tourism.

Maritime Jurisdiction

Belize shares maritime boundaries with Mexico, Guatemala and Honduras. It defines its maritime jurisdiction in the Maritime Areas Act (1992), which makes provision for the territorial sea, internal waters and exclusive economic zone, extending 12 nautical miles outward in most areas, with the exception of the south, where it borders with Guatemala with a measurement of 3 nautical miles. Agreements entered into by the United Kingdom with Mexico and Honduras are binding on Belize, however, the maritime boundary with Guatemala is under dispute. Both governments agreed by Special Agreement to submit Guatemala's territorial, insular and maritime claim to the International Court of Justice in 2008 and signed a Protocol to the Agreement in 2017 regarding the claim, which remains unresolved.

International and Regional Frameworks

Belize is a party to UNCLOS (1983) and the WTO (1995) and a signatory on the UNFSA (2005), FAO Compliance Agreement (2005), the Nairobi Convention, the International Commission for the Conservation of Atlantic Tunas (ICCAT), the Inter-American Tropical Tuna Commission (IATTC), Convention on Biological Diversity (CBD) (1994), and the Cotonou Agreement. Belize succeeded to the

CITES in 1986.¹⁹ Regionally, Belize is a party of the Convention on the Conservation and Management of the High Seas Fisheries Resources in the South Pacific Ocean (SPRFMO Convention), the Central American Fisheries and Aquaculture Organisation (OSPESCA), CARICOM (and the CCCFP) and has membership in the CRFM, WECAFC, OLDEPESCA and INFOPESCA.

Domestic Institutional Arrangements

Oceans governance falls primarily under two key agencies, the Ministry of Agriculture, Fisheries, Forestry, the Environment, Sustainable Development and Immigration, and the Coastal Zone Management Authority (CZMA). The Ministry's Departments of Environment, Fisheries and Sustainable Development oversee the management of marine resources, fisheries and aquaculture and environment. Within the Department of Fisheries, the Ecosystem Management Unit (EMU) has the specific goal to provide holistic ecosystems management of the aquatic resources through a marine reserve network and international commitments. The units' objectives include zoning for marine reserves, rolling out the managed access program, enhancing biodiversity, and promoting recreation through managed tourism.

The Coastal Zone Management Authority and Institute (CZMAI) was set up in 1990, and was enacted under the Coastal Zone Management Act in 2000 as a focal agency responsible for coordinating programs and activities for integrated coastal zone management. In 2016, the Government, under the Coastal Zone Management Authority and Institute and the Ministry of Agriculture, Forestry, Fisheries, the Environment and Sustainable Development, initiated the Belize Integrated Coastal Zone Management Plan as a means to prioritize coastal development, marine transportation, fishing, and recreation.

Nationally, the government continues to take steps to ensure good governance practices and protecting its oceans biodiversity. The Government in demonstrating its commitment to promoting good ocean governance, passed a moratorium on offshore oil exploration to protect its marine diversity including its World Heritage Site Barrier Reef, coastal zones and important tourism sector in 2017.

Trade in Fisheries and Related Services

The Belize Fisheries Department under the Fisheries Act (1948) manages all fishing activities and regulations in the domestic market and issues annual licenses to both artisanal fishers and fishing vessels to fish for commercial purposes. The High Seas Fishing Act (2013) distinguishes foreign and domestic vessels, and is responsible for the provision of licenses, monitoring and the regulation of foreign vessels.

Since 2013, the Government of Belize has been taking strides towards achieving a more sustainable oceans based economy in line with meeting targets for the SDG 14. In compliance with the FAO Code of Conduct for Responsible Fisheries and the FAO Compliance agreement, the Government launched its National Plan of Action to Prevent, Deter and Eliminate, Illegal, Unreported and Unregulated (IUU) Fishing on High Seas in 2014 (SDG 14.4) to introduce a more holistic approach through new license regulations, monitoring and surveillance regulations. These include regulations for transshipment at sea, catch and effort reporting and regulatory scheme for sanctions. Managing and maintaining marine areas has been a priority for the Government in promoting SDG 14.5, and in 2017, the Government signed a Joint Declaration on Marine Reserves committing 10% of its EEZ as a marine

¹⁹ Belize was party to CITES from 1981-1986 as part of the United Kingdom of Great Britain and Northern Ireland since 31 October, 1976.

protected area. As of 2018, the country's marine protected areas cover 10.56% (3,622.3 km²) in 26 Marine Protected Areas (MPAs) and 0.69% (3,622.3 km²) of No-Take Reserves. The Marine Conservation and Climate Change Adaptation Project (MCCAP) comprises initiatives implemented by the Fisheries Department, the Coastal Zone Management Authority and Institute, and co-management NGOs aimed at increasing MPA and marine replenishment areas coverage to 20% and 3.1% respectively, effective implementation of the CZMP, and adoption of alternative livelihoods and reduced dependency on traditional fishing for household income.²⁰

The domestic market is primarily served by the small-scale fisheries. The Belizean Government, to improve artisanal and small-scale fisher's opportunities (SDG 14.b), adopted the 'Managed Access' program to end open access by commercial fishers, increase market access to small-scale and artisanal fishermen and women and to end IUU fishing by allocating and giving control of specific geographic areas for fishing to small-scale fishers and fishing communities. Based on successes in this pilot project; including reduced numbers of illegal fishing (down from 9% to 4%), reduced pressure on the resource and increased catch data reporting and stewardship by fishers, approval was given for a national roll out of managed access to all marine areas.²¹

2.1.3 Seychelles: Timeline of Oceans Governance Implementation

- 1984 – Established the Seychelles Fishing Authority
- 1991 – Ratified UNCLOS
- 1993 – Enacted the Fisheries Act
- 1995 – Became member of the International Ocean Tuna Commission
- 1996 – SADC passes its Protocol on Trade in the SADC region
- 1997 – Enacted the Maritime Zones Act
- 1998 – Ratified UNFSA
- 1982 – Aldabra Atoll inscribed on World Heritage List
- 2001 – Boundary Agreement with the French Republic (Glorioso Islands) on delimitation of the EEZ and the continental shelf
- 2002 – Boundary Agreement with the Republic of Tanzania on delimitation of the EEZ and continental shelf
- 2006 – Sustainable Fisheries Partnership Agreement is signed between the EU and Seychelles
- 2009 – Seychelles signs interim Economic Partnership Agreement (iEPA) with the EU as part of the ESA region (Comoros, Madagascar, Mauritius, Seychelles, Zambia and Zimbabwe), which has been provisionally applied since 14 May 2012²²
- 2008 - Boundary agreement with Mauritius on delimitation of the EEZ
- 2009 – Accepted the 1993 FAO Compliance Agreement
- 2010 – Commits to goal of 30% protection of marine areas
- 2011 – Signed the Convention on Biological Diversity 'Nagoya Protocol'
- 2011 – Received recommendations on the outer limits of its continental shelf in the Mascarene Plateau Region from the UN Commission on the Limits of the Continental Shelf
- 2012 – Boundary agreement with Comoros on delimitation of the EEZ and continental shelf
- 2012 – Joint Management Agreement with Mauritius
- 2013 – Acceded to the PSMA
- 2014 – Ministry of Environment, Energy and Climate Change launch the Marine Spatial Plan (MSP) for

²⁰ <http://www.fisheries.gov.bz/mccap-general-information/>

²¹ <http://www.fisheries.gov.bz/units/cfu-function-structure/>

²² http://ec.europa.eu/trade/policy/countries-and-regions/regions/esa/index_en.htm

15% of EEZ for biodiversity protection and sustainable use

- 2014 – Passed the Industrial Property Act
- 2014 – National Biodiversity Strategy and Action Plan launched
- 2015 - Launch of the Indian Ocean Federation of Artisanal Fishermen (member states: Mauritius, Reunion, the Comoros, Madagascar and Seychelles)
- 2015 – Became the 161st WTO member
- 2015 –Acceded to the SADC Protocol on Trade
- 2016 –The world’s first marine debt conversion aimed at ocean conservation and climate change adaptation is completed
- 2016 – Seychelles joins the Fisheries Transparency Initiative (FITI)
- 2017 - Ministry of Finance, Trade and Economic Planning initiates the SWIOFish3 Programme
- 2017 – IOTC adopts resolution to reduce fish catch allowances by 5 -15% in accordance with UNCLOS and UNFSA
- 2018 - Received recommendations on the outer limits of its continental shelf in the Northern Plateau region from the UN Commission on the Limits of the Continental Shelf
- 2018 – Phase One of Marine Spatial Plan completed, commencement of Phase Two to accomplish 30% of the nation’s EEZ by 2020
- 2018 – Seychelles, as part of the AU, sign a continent-wide free trade agreement, the Continental Free Trade Area (CFTA)
- 2018 – ‘Blue Bond’ for Seychelles’ sustainable fisheries launched
- 2018 – Blue Economy Roadmap approved and launched.

Background

Seychelles is an archipelago of about 115 islands in the Indian Ocean, covering a total land area of approximately 445 km², with a maritime jurisdiction over 3000 times its land space at 1.3 million km² and a coastline that spans 491 km. Its economy has expanded to include a variety of industries, with tourism at the forefront. The country has moved from a commodity based (exports in plantation crops such as copra, vanilla and cinnamon) towards a more ocean-based economy, with fisheries and marine-related services.

Maritime Jurisdiction

Seychelles has delimited its EEZ and continental shelf boundaries with France (Glorioso Islands), Tanzania and Mauritius. The Mauritius-Seychelles EEZ agreement does not delimit their continental shelves, which extend beyond 200 nm, however Seychelles and Mauritius have entered into two treaties²³ and have established a Joint Management area for the joint exercise and management of their sovereign rights beyond 200 nm in the Mascarene Plateau region. An undelimited boundary with Madagascar remains to be settled.

International and Regional Frameworks

Seychelles is party to UNCLOS (1983) and its subsequent agreements: UNFSA (1998), FAO Compliance Agreement (2009) and the FAO Code of Conduct, PSMA (2013). It is also a party to CBD (1993), Paris Agreement on Climate Change, Nairobi Convention, and IOFC, Cartagena Protocol (2004), CITES (1977), Nagoya Protocol (2014) and the Cotonou Agreement. Regionally, it is a member of COMESA and SADC, and party to the Indian Ocean Tuna Commission (IOTC) (1995) and Southwest Indian Ocean Fisheries Commission (SWIOFC) (2004).

²³ 2008/2012.

Domestic Institutional arrangements

The primary agencies responsible for Seychelles' oceans framework are the Blue Economy Department within the Office of the Vice President and the Ministry of Environment, Energy and Climate Change. The mission of the Blue Economy Department includes facilitating the implementation of the Blue Economy across sectors through projects and cross-sectoral coordination, and to act as a focal point for Blue Economy in regional and international fora.

As part of the implementation of government strategies to enhance its coastal zones and protect biodiversity, the Ministry of Environment, Energy and Climate Change launched the Marine Spatial Plan (MSP) in 2014 with the aim of protecting marine species and habitats, improving resiliency of coastal ecosystems and ensuring economic opportunities for fisheries, tourism and other users.²⁴

The Oceans Governance Framework in Seychelles continues to evolve with the ongoing incorporation of blue economy principles improving coastal protection, building resilience, encouraging diversification of current activities in fisheries and tourism sectors, innovative financing and promoting investment into emerging sectors such as mariculture, aquaculture and marine biotechnology. Seychelles continues to be innovative with its ambitions to not only meet its targets under SDG 14, but also in creating a framework centred on sustainability, market access and economic growth. Specific support towards this objective has been provided by the Commonwealth Secretariat ([see Seychelles Roadmap](#)).

Trade in Fisheries and Related Services

The Ministry of Fisheries and Agriculture in Seychelles is responsible for the fisheries sector and is responsible for the management of all marine resources and fisheries. Other key agencies include the Seychelles Fishing Authority (SFA) which regulates and promotes sustainable development of the local fisheries sector. Relevant legislation includes the Fisheries Act and Regulations, the Licences Act (1987) and Regulations which control fishing activities for both local and foreign fleet.

Seychelles' well-developed capture fisheries sector generates income from fish and fish product exports, and revenue from fishing activities, as well as contributing to local food security. The Fisheries sector is the second pillar of Seychelles economy with fishing and related sectors employing approximately 10% of the total formal work force.²⁵

Although the fisheries markets has mainly been corporate and industrialised, access to markets for artisanal and small-scale fisheries (SDG 14b) has been spearheaded by civil society through the Indian Ocean Federation of Artisanal Fishermen (member states: Mauritius, Reunion, the Comoros, Madagascar and Seychelles) which aims to strengthen fishing associations and communities across the Indian Ocean region by allowing all members to attain the same level and to provide for the opportunity for them to exchange expertise and best practices. International fisheries trade, with the EU is enhanced with the Sustainable Fisheries Partnership Agreement (SFPA) with the EU and greater trade efforts underscored with a bilateral fisheries agreement with Mauritius.

As part of the Third South West Indian Ocean Fisheries Governance and Shared Growth Project (SWIOFish3) the Government is working to expand sustainable-use marine protected areas, improve governance of priority fisheries, and enable sustainable development of the blue economy (SDG 14.5,

²⁴ <https://seymsp.com/>

²⁵ Seychelles Fishing Authority, Annual Report 2014 (Seychelles Fishing Authority 2017).

14c). To control overexploitation of the marine species, the Government as part of the FAO Code of Conduct for Responsible Fishing and the FAO Compliance launched a NPOA-IUU in 2004 (SDG 14.4) to keep fish stock at sustainable levels. In improving the coastal areas and stocktake of its fisheries (SDG 14.5), the Government through the SWIOFish3 Programme committed to protecting 30% of its marine and coastal waters. As part of the IOTC's adopted resolution, Seychelles signed on to reduce fish catch allowances by 5 -15% in accordance with UNCLOS and UNFSA.

3. Exploration of the causal relationship between trade performance and improved oceans governance frameworks

As the indicative review of Oceans governance frameworks has shown, whilst commonalities exists, there are also major differences between the Commonwealth countries reviewed. Moreover, despite the resource and structural challenges encountered as SIDS, as indicated by Table 5, in each of the countries examined, maritime delimitation and ocean governance processes and institutional frameworks are well advanced, with practically all of their EEZ maritime boundaries resolved, with only extended continental shelf boundaries remaining in each instance. In this sub-section we set out to explore the relationship between improved oceans governance and trade-related performance for the Seychelles, Barbados, and Belize.

Table 5: Maritime Zones and Maritime Delimitations – Barbados, Belize and Seychelles

	Exclusive Economic Zone	Continental Shelf beyond 200 M
Barbados		
St Vincent and the Grenadines	Delimited	Delimited
St. Lucia	Delimited	Delimited
France (Guadeloupe)	Delimited	Delimited
Trinidad and Tobago	Delimited	Unresolved
Guyana	Cooperation treaty in place)	Unresolved
Belize		
Mexico	Delimited	Delimited
Guatemala	Unresolved (under dispute)	Unresolved (under dispute)
Honduras	Delimited	Delimited
Seychelles		
France (Gloriso Islands)	Delimited	Delimited
Tanzania	Delimited	Delimited
Mauritius	Delimited (EEZ)	Joint management agreement in place)
Comoros	Delimited	Delimited
Madagascar	Unresolved	Unresolved

Source: DOALOS – Maritime Space: Maritime Zones and Maritime Delimitation; <http://www.un.org/Depts/los/LEGISLATIONANDTREATIES/regionslist.htm> and International Maritime Boundaries Reports (Brill)

We first, explore the relationships between oceans governance frameworks and trade-related opportunities firstly across the indicators presented in Table 6 below. These indicators are taken from the Oceans Health Index (OHI) assessment²⁶ and represent the implementation of ocean governance policies by: measuring the overall condition of the ocean; assessing socioeconomic benefits; and, determining how well coastal countries/territories make use of their marine territories. The index is

²⁶ <http://www.oceanhealthindex.org/about>

indicative of how well countries are achieving artisanal fishing opportunities²⁷, coastal protection²⁸ and coastal livelihoods/economics;²⁹ all of which have direct relevance for the advancement of SDG 14.

Whilst the OHI has been utilised in a number of studies related to the measurement of oceans health and economic benefits,³⁰ this is the first time it has been explored specifically for Commonwealth Small States and in relation to the specific goals and targets included in SDG14 related to their economic interests. It should be noted that the index focuses specifically on the coasts and EEZs that extend 200 nm seaward from the shore of coastal states so entitled. Table 6 presents the scores for the selected Commonwealth case-studies.

Table 6: Oceans Governance and Coastal Livelihoods (2017) (score out of 100)

Country	Ocean Health index	National Rank (out of 221)	Artisanal Fishing Opportunities	Coastal Protection	Coastal Livelihoods & Economics
Barbados	55	195	70	69	73
Belize	67	123	74	24	100
Seychelles	76	30	78	86	85

Source: <http://www.oceanhealthindex.org/region-scores>;

Notes: 1. All scores are out of 100 unless indicated otherwise; 2. South Georgia and the South Sandwich Islands are ranked #1; 3. Of the CW states, Antigua and Barbuda are #1 with a national rank of 18/221.

3.1 Exploration of Oceans Governance Indicators – the OHI

We first explore simple correlations between the indicators which comprise the OHI for all countries. Globally, we find the strongest correlations³¹ are between artisanal fishing opportunities and coastal livelihoods and economics, and not with coastal protection. However, our interest relates to how the Commonwealth Small States sample of countries differs to that of the Global average. Looking specifically at the correlation for Commonwealth Small States between both sets of indicators namely coastal protection and coastal livelihoods - the relationship with artisanal fishing opportunities is somewhat weaker and negative.³²

Given these results, we then proceeded to look more specifically at the relationship between the two variables: artisanal fishing opportunities and coastal livelihoods and economics. Figure 4 presents a scatter plot with results for artisanal fishing opportunities and improvements in coastal livelihoods for Commonwealth Small States.

²⁷ Measures whether people who need to fish on a small, local scale have the opportunity to do so.

²⁸ Measures the condition and extent of five ecological habitats that protect the coasts against storm waves and flooding. Habitats assessed are mangrove forests, seagrass meadows, salt marshes, tropical coral reefs, and sea ice.

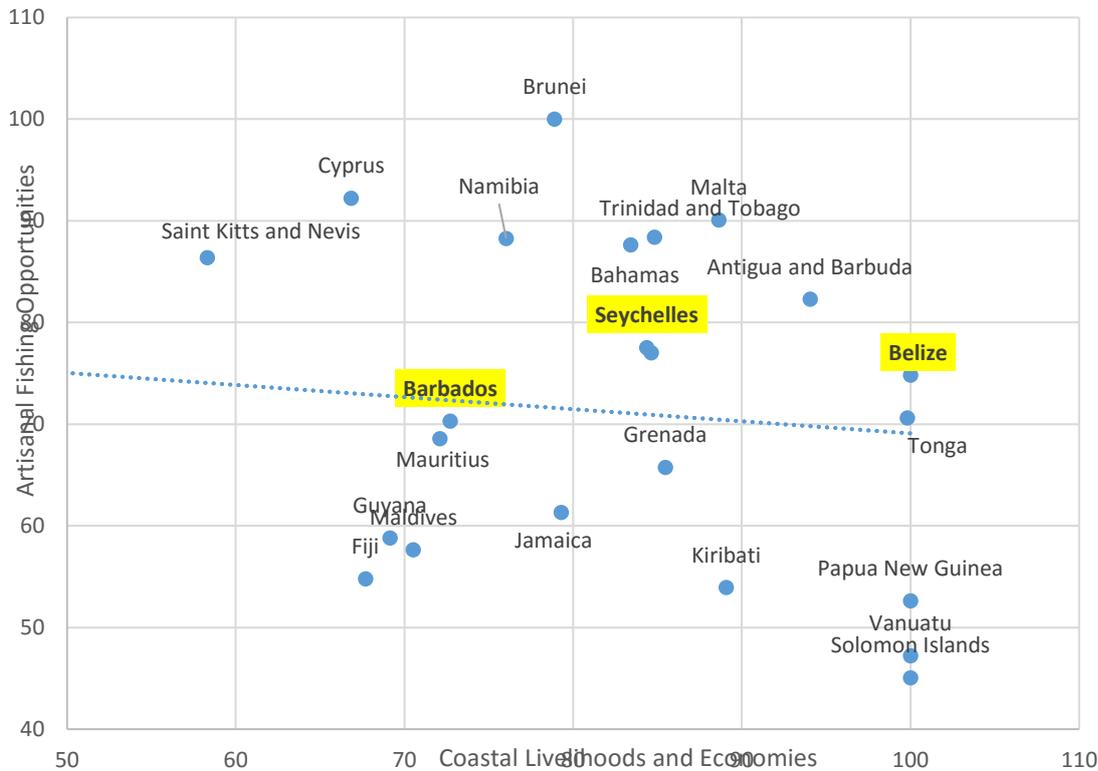
²⁹ Measures the jobs and revenue produced from marine-related industries, indirect value for community identity, tax revenue, and other related economic and social aspects of a stable coastal economy.

³⁰ Halpern et al., (2012).

³¹ Pearson correlation coefficient of 0.03 compared to -0.038.

³² Pearson correlation coefficient of -0.17 and -0.13, respectively.

Figure 4: Artisanal Fishing Opportunities and Coastal Livelihoods



Source: Authors elaboration of the OHI for Commonwealth Small States (<http://www.oceanhealthindex.org/region-scores>).

The data utilized in this instance are somewhat atypical given that they are comprised essentially of an index and take a maximum value of 100. Therefore, our interpretations are made cautiously. However, we can see when comparing the results for the global sample, compared to those for Commonwealth Small States is that the R^2 value is stronger.³³ In this instance, this result may be suggestive of how improvements in the coastal livelihoods and economics variable explains more of the variance around the mean for Commonwealth small states artisanal fishing opportunities. In other words, improvements in the coastal livelihoods variable enhance artisanal fishing opportunities for Commonwealth Small states to a greater degree, compared to the global average. The result may also be suggestive of greater efforts needed in translating in coastal planning and management for improvements in coastal livelihoods into the expansion of artisanal fishing opportunities, related to the specific target of SDG14b.

3.1.1 Analysis of the OHI and Relation to Fish Trade

Given the results of the analysis undertaken in the previous sub-section, we proceed to focus more specifically on associations with the trade-related outcomes which may arise from improvements in oceans governance, for which the OHI may provide a proxy. This includes those which positively influence both coastal livelihoods and artisanal fishing opportunities. Unfortunately, our analysis of trade performance is limited to fisheries trade and does not include related services, despite their

³³ The coefficient of determination is 0.0195 compared to 0.0012. Usually, the R^2 statistic is used when the purpose of analysis is to predict how improvements in one variable influence another and how well observed outcomes can be explained by the model. Generally, it is an intuitive measure of how a simple linear model (in this case) fits a set of observations.

growing importance and the interconnectedness of fisheries trade with transportation, as well as tourism. This is because of the acute data limitations within the realm of services trade data, particularly for Commonwealth Small States, which severely hinders analysis of oceans economy related services trade.

We therefore focus specifically on using the indicators for fish trade, derived from UNCTADStat. We explore the different variables included in the OHI of most relevance to this analysis alongside the total value of fish exports (using the log): coastal protection and artisanal fishing opportunities. Again, we find some interesting differences regarding associations between the Commonwealth sample of Small States compared to the global results.

Coastal Protection

The differences, between the Commonwealth sample of Small States compared to the global results, are most pronounced in relation to the correlation between coastal protection and total fish exports.³⁴ This result may reflect the relatively small geographic size of many member states compared to their large coastal areas and coastline, with their EEZ's playing a major role in boosting their trading capabilities (also considering port facilities, dedicated infrastructure, national vessels and vessel capacities (DWT)). For example, the Belize coastline is 386 km² compared to that of Seychelles with a 1,642km² coastline.³⁵ The Seychelles has the highest score for coastal protection and also has the largest export value compared to Barbados and Belize. It is important to note that although there is a correlation between coastal protection and fish exports, natural endowments play a role in the capability and capacity of states to trade. The Seychelles provides an example for this as it has larger tuna stock sizes and relatively greater canning capacities than other small states.

Taking this analysis further, a simple pooled OLS regression analysis, based on the data presented in Figure 5, suggests that for every 1-point increase in the coastal protection index, fish exports increase by 3 percent for Commonwealth small states. This is the simplest approach to analysis. Therefore, it is important to underscore the caveats: the approach does not recognise the cross section data, and has a number of assumptions.

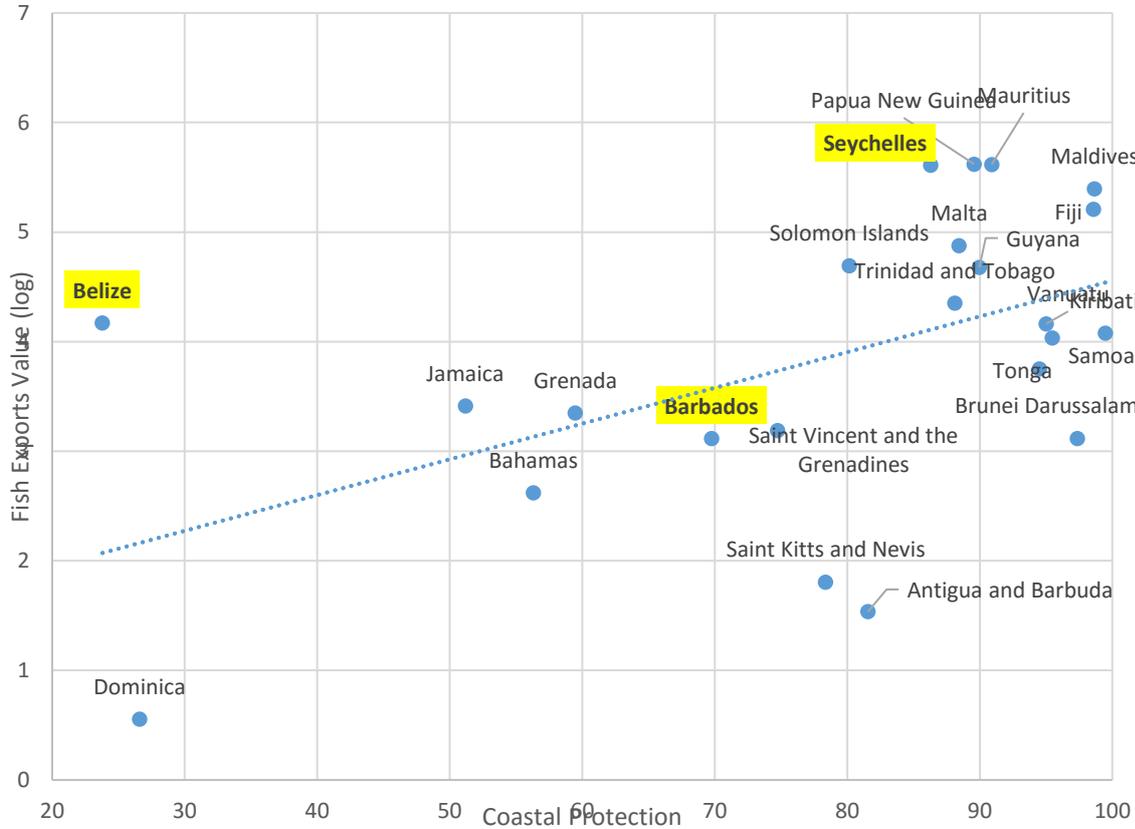
Understanding these limitations, this first step in analysis suggests is suggestive of how improvements in oceans governance through enhanced coastal protection could boost trade by \$3million, for every incremental improvement in coastal protection. Improving Commonwealth Small States coastal protection so as to just exceed the global average³⁶ could boost the value of fisheries trade by \$10 million, annually. Currently, Commonwealth Small States export a total value of \$2 billion of fisheries exports, around 6 percent of total exports. They also collectively, score just below the global average for coastal protection (79 compared to 81).

³⁴ Which is 0.5 for Commonwealth Small States compared to 0.001 for the global sample.

³⁵ Country priority sectors also matter, for example, in the case of Barbados given the overwhelming dominance of tourism and more limited development of export fisheries, given the focus on the domestic market.

³⁶ So as to score 82.

Figure 5: Coastal Protection and Fish Exports – Commonwealth Small States



Source: Authors elaboration of the OHI for Commonwealth Small States (<http://www.oceanhealthindex.org/region-scores>).

The global data however, illustrates a different relationship. While there is a positive correlation between fish exports and coastal protection (0.16), as well as fish exports and the overall ocean health, the correlation with coastal protection is much weaker compared to the result for Commonwealth Small States. Obviously, these results are reflective of how the fisheries global value chain is organised (Commonwealth Secretariat and UNCTAD, 2016). Moreover, it should be noted that for many industrialised fisheries states, most of their catch is on the high seas and out of their (and others) maritime jurisdiction. Globally, the top ten leading fish exporters are China, Norway, Vietnam, Chile (and Easter Island), United States, Thailand, Canada, the Netherlands and Sweden, whose combined total fish exports total over US\$60 billion; this is compared to a total of a little over US\$2 billion for the top 10 Commonwealth small states.

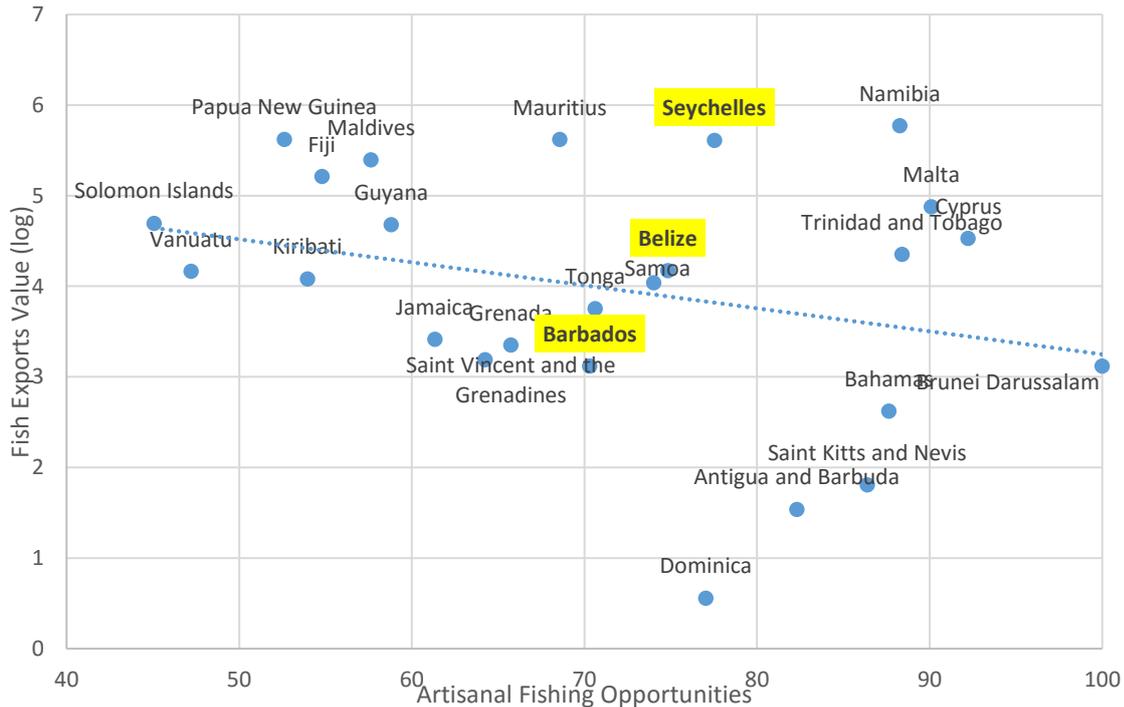
Artisanal Fishing Opportunities

Another interesting point of comparison between the results of the analysis of the global sample, compared to those for Commonwealth Small States relates to the opportunities for artisanal fisheries. Whilst the global results suggest a weak but positive relationship between total fish exports and artisanal fishing opportunities, the converse is true for Commonwealth Small States, which have a stronger negative correlation.³⁷

³⁷ -0.28 compared to 0.13.

On the one hand, this result could be suggestive for some countries, of the need for greater endeavours in order to advance effective oceans governance frameworks which also enable access for smaller scale producers. On the other, artisanal fishing opportunities whilst already high for some countries, (e.g. Dominica) may not translate into an increase in fish exports because of a focus on domestic markets and supply to the domestic market, perhaps resulting from weak infrastructure and capacity constraints.

Figure 6: Fish Trade and Artisanal Fishing Opportunities - Commonwealth Small States



Source: Authors elaboration of the OHI for Commonwealth Small States (<http://www.oceanhealthindex.org/region-scores>).

Looking more specifically at the case of Barbados, Belize and the Seychelles, results suggest that all countries score fairly similarly in relation to artisanal fishing opportunities, but there is a wider range regarding total fish exports – which is to be expected, given the different position of each country and their degree of specialisation within the global fisheries value chain.

Important caveats apply to the analysis presented in this paper. Of course, reverse causation cannot be excluded: is it because you have coastal protection that you export more or is it the fact that you are exporting a lot that leads to protect your coast in order to preserve your fish stocks? Without more country specific, case study analysis it is simply not possible to answer this question at this stage. Additional econometric analysis is required and some of the next steps in taking the analysis forward include more detailed econometric analysis, including the introduction of fixed effects.

4. Policy Implications

In order to address some of these capacity constraints, the Commonwealth Secretariat is working jointly with UNCTAD and DOALOS in order to develop Oceans Economy and Trade Strategies (OETS).

Barbados: In efforts to capitalise on the potential for economic growth with the fisheries sector, Barbados has identified 3 goods subsectors (marine catch and aquaculture production); seafood

processing and trade in marine fisheries; and 1 services sector (coastal and marine environmental services) for the OETS project. Based on the sensitisation exercise undertaken so far, in order to create better governance of activities in other sectors such as cruise tourism, commercial shipping, marine transportation and oil and gas exploration and extractive activities, there is a need for a strengthening of the overarching legal and policy framework.

Belize: Belize has identified marine catch and aquaculture production; seafood processing; and, marine and coastal tourism for the OETS project. This underscores the need for greater efforts in export diversification within the broader framework of the oceans economy.

Seychelles: The Blue Economy Strategic Framework and Roadmap developed for the Seychelles is now in implementation phase. It adopts a cross government and societal approach, utilizing innovative finance methods with a view to creating an enhanced environment for private sector development and investment in ocean-related sectors. As an ocean-specific policy framework, it raises greater awareness of Seychelles 'blue brand' internationally as well as domestically, and can be a catalyst for greater access to blue economy opportunities including increased support for artisanal fisheries and continued coastal protection. The main focus of the JMA is on extractive non-living resource potential, and this can be said to be a direct consequence of the acquisition of the additional marine acreage in keeping with the entitlement to areas of continental shelf beyond 200M under UNCLOS.

The experience gained from the management of its Marine Spatial Plan and the JMA continue to make Seychelles a leader in multi-sector and international oceans governance engagement. With this comes significant resource requirements supplemented by international donor support to increase local capacity.

Each of the three countries; Barbados, Belize and Seychelles; is party to UNCLOS and its related agreements, namely, the Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982, and the United Nations Conference on Straddling Fish Stocks and Highly Migratory Fish Stocks of 1995. This has enabled the enjoyment of rights to which the respective States are entitled under UNCLOS. The certainty established through the finalizing of agreements on the extent of maritime jurisdiction has benefitted Seychelles and Barbados, with their agreements with neighbouring States. Belize's historic challenges with Guatemala remain in need of third party settlement or through initiatives at the regional or international level.

Seychelles' and Barbados' favourable geographic location allows for management of the full extent of a 200M EEZ in some areas. However, with access to greater areas of maritime space, including the acquisition of areas of continental shelf beyond 200M, the extension of Barbados' coastal zone management areas to 200M and beyond is likely to be a major challenge to its absorptive capacity including resources and multi-sector responsibilities (for example, the Department of Energy responsible for EEZ and continental shelf offshore oil and gas licensing and the Ministry of Maritime Affairs and Blue Economy and the CZMU responsible for maritime policy and coastal zone management). This notwithstanding, Barbados' transition to a blue economy (including improved sectoral management) may make this less challenging as a result of its being an early mover in the application of green policies, sustainability principles and integrated coastal zone management. Additionally, from an institutional perspective, as a single island entity, its management of multi-user activities may also be more centralised than in the case of Seychelles as a multi-island State.

For each of the countries under consideration, appreciation of the value of protecting coastal and marine resources is high, given their strong dependence on sustainable fisheries and tourism.³⁸ These States have, in equal measure, demonstrated this through the establishment of strong institutional mechanisms for protecting marine and coastal resources, and allowing for the conduct of activities in ways that ensure longer term sustainability. Seychelles robust environmental and coastal protection mechanisms, and investment in port facilities and dedicated infrastructure are also indicative of this commitment; similarly, Belize's moratorium on extractive activities can be viewed as allowing for concentrated focus on maintaining the marine environment around its barrier reef.

Trade in fisheries and services is not one of Barbados' major economic pillars, so the impact of increased marine resources and jurisdiction may not be directly felt in these sectors. Due to species location and preferences, fishing access agreements have long been sought with Trinidad and Tobago, without real progress being attained. Whilst the fisheries sector has been an economic focus for the Belizean economy in the past, there has been a slowdown in its market and a concentration on crustaceans and molluscs. Similarly, with Seychelles' for the longer term sustainability of the fisheries sector which comprises one of its main economic pillars, there needs to be greater diversification into emerging sectors.

The analysis presented in this paper demonstrate how effective oceans governance frameworks, particularly aspects related to coastal protection for Commonwealth small states, can boost trade opportunities governance. Results presented in this paper are suggestive of particular actions which could be adopted by national governments working with development partners to increase the economic benefits derived from the sector (SDG14.7), to better provide access for small-scale artisanal fishers (14.7.1) and to enable some monitoring of progress by countries in the degree of application of a legal, policy and institutional framework which recognizes and protects access rights for small-scale fisheries. Clearly, the research findings have implications for monitoring SDG 14.B.1 and ensuing "Progress by countries in the degree of application of a legal/regulatory/policy/institutional framework which recognizes and protects access rights for small-scale fisheries"; and, Indicator 14.7.1 which requires further research beyond the scope of this paper, though we trust we have provided some avenues of future research that could be pursued.

To conclude, the analysis presented in this paper offers a snapshot of how trade performance within the fisheries can be bolstered through enhanced trade-related governance. The specific market access opportunities that could be better targeted have not been explored in detail; rather the link with artisanal, as opposed to commercial, fisheries opportunities have been explored in relation to enhanced domestic policy frameworks.

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³⁸ Note that both Seychelles and Belize have marine World Heritage Sites listings. Barbados' listing of its capital Bridgetown also has implications for its marine and coastal tourism sector.

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