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Operationalizing the Blue Economy in Small States: Lessons from the Early Movers

Cyrus Rustomjee

Key Points

- The blue economy — a concept and framework for economic activity that recognizes and seeks to maximize the potential for economic growth, employment and diversification through the sustainable use of resources from the ocean — has vast economic potential for small states; however, they confront several unique international governance challenges in pursuing a marine-resource-based development framework; have few comparative lessons of good practice to draw on; and face several practical obstacles in taking the first steps to operationalize the blue economy, resulting in modest progress.
- Collective experience highlights six key priorities in operationalizing the blue economy.
- Small states can take several new initiatives, supported by regional and international development partners, to focus attention on and coalesce policy effort and resources.

Introduction

The blue economy concept emerged following the endorsement of the green economy approach at the United Nations Conference on Sustainable Development in Rio de Janeiro in 2012, and has subsequently evolved as a marine-resource-based developmental framework, in particular for small coastal and island states. They have jurisdiction over marine areas that are typically much larger than their land area, depend on ocean resources to sustain economic activity and — if able to maximize the economic opportunities through sustainable marine-based development — can achieve many transformative developmental goals through the blue economy, including sustainable economic growth, food and energy security, and poverty reduction. The conservation and sustainable management of ocean and coastal ecosystems can also support small states' efforts to mitigate climate change and to reduce and address risks from natural disasters.

For most small states in the Caribbean and Pacific regions, although three traditional industries and sectors — fisheries, maritime transport and coastal tourism — collectively represent the largest share of economic activity, pursuing the blue economy also enables diversification into many other new and emerging ocean-based activities and sectors, including marine aquaculture, seabed mining, maritime safety and surveillance, marine biotechnology, offshore wind energy, ocean renewable energy and deep-sea oil and gas production.

About the Author

Cyrus Rustomjee is a CIGI senior fellow with the Global Economy Program. At CIGI, Cyrus is looking for solutions to small states' debt challenges and exploring the benefits of the blue economy. His research looks into how small countries in the Pacific, the Caribbean and elsewhere can benefit from greater reliance on the use and reuse of locally available resources, including those from maritime environments.

But several unique global ocean governance challenges associated with pursuing a marine-resource-based development framework have constrained small states' blue economy progress and limited diversification beyond fisheries, coastal tourism and maritime transport services. There are three key challenges. First, the existing global ocean governance framework is fragmented. The United Nations Convention on the Law of the Sea is the core framework governing the oceans. It was established in 1982 and is buttressed by several additional international agreements and conventions, *inter alia* on biological diversity, fish stocks, various conservation-related treaties, and several regional-level marine environmental and protection programs. A second challenge is declining ocean health, including rapid and sustained increases in marine pollution, ocean warming, declining oxygen levels and rising levels of ocean acidification, all of which have contributed to the degradation of ocean and coastal ecosystems. Finally, overfishing, illegal and destructive fishing practices and the presence of harmful fishing subsidies are a third challenge. Small states, with limited international voice and influence, are unable to strengthen the global ocean governance architecture on their own. Their ability to derive economic gains from the blue economy is dependent on the actions of the international community to address these challenges.

In an effort to strengthen momentum for the blue economy and acknowledge these unique governance challenges in developing a marine-resource-based development framework, the United Nations 2030 Agenda for Sustainable Development, agreed in 2015, includes Sustainable Development Goal 14, which is focused on the conservation and sustainable use of the oceans, seas and marine resources.

Large Untapped Opportunities

Both the relative size of small states' marine resource base and the pace of global growth in various blue economy sectors illustrate the enormous untapped opportunity from the blue economy for these countries. For most coastal and island small states, the exclusive economic zones

(EEZs) under their jurisdiction far exceed their available land area, suggesting that successfully prioritizing economic activity from the oceans and seas is likely to yield significant benefits. In the Caribbean region, the nine member states of the Organisation of Eastern Caribbean States, with a land area of 3,500 km², have jurisdiction over more than 350,000 km² of the Caribbean Sea (Patil et al. 2016). Pacific small states, with a combined land mass of approximately 500,000 km², hold jurisdiction over 28 million km² of ocean in their EEZs or eight percent of the global ocean (Govan 2017). Similarly, the Seychelles, with a land area of 457 km², has an EEZ of 1.37 million km².

Projected future global demand for the goods and services the ocean provides is enormous, across all blue economy sectors relevant to Caribbean and other small states, including aquaculture, maritime transport, marine tourism, marine biotechnology, deep-sea mining and ocean renewable energy. For example, global aquaculture production is expected to double by 2050 (Waite et al. 2014) and maritime freight transport to quadruple in the next three decades; port infrastructure and services will increase by nearly five percent a year, at least to 2020; global tourism and travel is projected to grow by 3.8 percent per year from 2015 to 2025; and marine tourism is expected to grow more quickly than international tourism (Organisation for Economic Co-operation and Development 2016).

Emerging Successes of Small States

Since 2012, several small states have actively pursued the blue economy as a strategy for transformation, commencing with a series of national marine policies, road maps and targeted sectoral initiatives. In the Caribbean, the Bahamas, Barbados and Grenada have all led national initiatives to develop the blue economy. Grenada has established a master plan for blue growth for its marine and coastal environments, focusing on fisheries and aquaculture, renewable energy, blue biotechnology, and research and innovation. It includes a vision for the ocean economy, guiding principles, policy goals and objectives (Patil and Diez 2016). The Bahamas has developed an ocean economy road map and is implementing an integrated marine

policy framework, to help shift from a traditional sector-specific approach to management and planning to an integrated ocean management approach (Commonwealth Secretariat 2013).

In the Indian Ocean, the Seychelles has developed a blue economy vision, focusing on preserving the marine environment, targeting fisheries sector reforms, integrating ocean-based technologies in the country's energy strategy and modernizing port infrastructure to secure participation in emerging blue economy supply chains (Agrippine et al. 2014); and a national blue economy road map and a dedicated ministerial portfolio for the blue economy have been established. Extensive stakeholder dialogue and consultation in Mauritius have produced an oceans economy road map, focusing on tourism, seaports and seafood-related activities; catalyzed a review of national blue economy legislation; and identified six key investment focal areas.

But despite these initiatives, progress in taking advantage of growing global demand for blue economy products and services in which small states already have a presence — or in diversifying into new and emerging blue economy sectors and industries — has been modest. Despite its vast marine area, the Caribbean ocean economy currently represents just 17 percent of the region's GDP (Patil et al. 2016), while across small states, marine biotechnology, deep seabed mining and ocean renewable energy activities, all emerging activities and sectors within the blue economy framework, have remained negligible.

Six Lessons from the Early Movers

Experience among early movers highlights six common areas in which, having confronted challenges in pursuing the blue economy, small states have taken small but significant practical steps to move beyond developing national visions and master plans toward operationalizing the blue economy. All offer useful lessons for other small states.

First, political leadership, by heads of government and, subsequently, through ministerial action, has proven to be a critical catalyst and driver of

successful efforts to begin the transition to the blue economy. In Grenada, Mauritius and the Seychelles, the blue economy has been catalyzed through leaders' emphasis on the opportunities for economic transformation through sustainable use of the oceans, insistence on ensuring that ocean resources are protected and used sustainably, and through their international advocacy for strong development partner support to small states in developing the blue economy. And political leadership has been particularly crucial, as multiple marine activities, including aquaculture, coastal tourism, marine conservation, shipping and marine bioprospecting, often occur in the same maritime space, competing for policy attention and prioritization, and for budgetary and other resources, necessitating clear political leadership and decision making.

Second, operationalizing and implementing the blue economy also requires new skills and human resources, for both current and emerging sectors and industries, some of which, such as marine bioprospecting, may not have been established. In addition to confronting limited human resources and skills for the terrestrial economy, small states face an array of new education, skill development and training challenges, including: training marine engineers, marine biologists, marine sustainable energy experts; encouraging engagement and investment in marine science and education; developing sector skills alliances between governments and industry; and building institutional relationships between industry and universities. While the challenge is not unique to small states, their small populations and vast maritime areas exacerbate this challenge. However, some early movers have begun to take steps to develop the longer-term skills needed for the blue economy. Mauritius, for example, has initiated the establishment of an oceans business park and oceans research centre, and established a Faculty of Ocean Sciences at the University of Mauritius, to strengthen ocean knowledge.¹

Third, pursuing the blue economy requires shifting from traditional sectoral planning to integrated land, coastal and maritime planning. Again, early experiences of Grenada, Mauritius and the Seychelles highlight a cluster of common features in planning for the blue economy, all

offering lessons for other small states. These recognize that the transition to the blue economy will be a long-term goal, requiring phased steps. Consequently, all three countries have developed national principles for the blue economy, a policy framework and set of policies to commence transition and ocean strategies to build and sustain momentum. All three countries have emphasized innovation and adaptation as integral to planning and policy implementation for the blue economy. Grenada, for example, has established a Blue Innovation Institute for this purpose. Marine spatial planning (MSP) has also emerged as a new approach to help integrate planning for multiple potential activities in the ocean, to address inter-relationships among sectors, and to manage conflict and competition when adjudicating between competing budgetary and institutional resource claims from diverse blue economy activities such as marine conservation, maritime transport and marine bioprospecting. In the Seychelles, for example, government has established an MSP initiative to expand marine protected areas to cover 30 percent of the country's EEZ.

Fourth, experience among the early movers has highlighted the need to develop inclusive and participative governance systems for the blue economy that promote strong, inclusive policy making, established collectively through state-civil society engagement and the participation of local communities and vulnerable and marginalized groups. For example, in the Caribbean region, including poor and vulnerable communities in planning for and implementation of new ocean-related activities has been shown to protect vulnerable individuals, communities and societies, avoid new cycles of marginalization and vulnerability, achieve collective agreement on competing uses of coastal and marine space, and share marine, near-shore and coastal resources equitably (see Lay et al. 2013). Similarly, the Seychelles, recognizing the threats to coastal communities and other vulnerable groups posed by unregulated and poorly planned development of blue economy sectors, has provided specific budgetary support to artisanal fishers and vulnerable communities.

Fifth, realizing the blue economy in small states also requires new forms of economic, environmental, marine, oceanographic and other data, including on ocean health and ocean temperature. And producing new data itself relies

¹ See www.investmauritius.com/investment-opportunities/ocean-economy.aspx.

on new and emerging technologies, for example, to understand wave and tidal movements, and new skills and capacities to analyze and interpret data. Caribbean small states are receiving valuable support through the World Bank's Caribbean Regional Oceanscape Program (CROP) (Patil et al. 2016). But many small states remain at an early stage of data assembly. A recent initiative in St. Lucia, for example, is collating standard industrial classification source and use data, to identify existing linkages between traditional sectors, including fisheries and tourism, and to trace forward and backward linkages, to determine the broader contribution of the blue economy to the national economy. Many Caribbean small states have yet to take this initial step.

Sixth, information and communications technology (ICT) plays a crucial role in advancing the blue economy in small states. With vast areas of ocean under their jurisdiction, ICT can help small states overcome constraints of distance and geography, *inter alia* by providing accurate satellite monitoring and data for integrated maritime surveillance; and can strengthen public awareness of blue economy policies and promote inclusiveness, consultation and participation in policy development and in monitoring results. Several UN agencies and some national authorities are already using big data for multiple blue-economy-related purposes, including measuring trends in fish stocks, fish migration, the incidence and impact of natural disasters, the evolution of ocean and other ecosystems, and biodiversity loss. But ICT access and diffusion has been slow and lags behind that in other larger economies. Complexity, policy and regulatory coherence and cost are all limiting factors.

Six Key Actions

Six key actions can help accelerate momentum for the blue economy in small states:

- A new approach is needed to develop and secure blue-economy-related skills and human resources. While national initiatives, including programs to develop local skills can help, the breadth and scale of need requires concerted regional and international initiatives, prioritizing critical blue economy skills development. A new intraregional program, financed by the World Bank, regional development banks and development
- partners, can help catalyze momentum by accelerating skilled personnel transfer and knowledge sharing among small states.
- There is an escalating need for both analysis and research on blue economy challenges in small states, and for sharing evidence of good practice, in particular on good practices in prioritizing and sequencing policies, regulatory, legislative and institutional changes, and in strengthening the evidence base for the blue economy. New tools for knowledge sharing are needed, including an international blue economy knowledge hub. A regular annual blue economy dialogue can also be established during the Annual World Bank and International Monetary Fund (IMF) meetings for this purpose.
- New internationally supported initiatives are needed to catalyze technical capacity and expertise to support the blue economy, including supporting many more small states in developing national plans and visions, accelerating MSP and supporting new blue economy activities in priority sectors including fisheries, aquaculture, marine and coastal tourism, and marine bioprospecting. An early expansion of the first phase of the World Bank's CROP, to a second phase including grant and loan financing to small states on concessional terms, can help enable small states to access skilled technical support that may not be available at a national or regional level.
- New multilateral and regional initiatives are needed to attract blue economy investments and infrastructure and to connect small states to global and regional blue economy value chains. A catalytic international conference, convened by small states and with participation by the United Nations Conference on Trade and Development, the World Trade Organization, the World Bank, regional trade organizations and institutions that have successfully facilitated these processes in larger developing countries, can help catalyze this process.
- New partnerships are needed to operationalize the blue economy for small states, by addressing the practical challenges they face, in accessing new technologies, new finance, new innovation and new opportunities for institutional and human capacity development for the blue economy, and for their strengthened access to data and ICT for the blue economy.

→ Several new international initiatives are also needed that support small states' ability to participate in the blue economy. First, new steps, led by the United Nations, are urgently needed to strengthen the global framework for ocean governance and to reverse declining ocean health. Second, the IMF, World Bank and regional development banks can expand technical, policy and financial support on favourable terms to small states in their pursuit of the blue economy. Third, the Group of Twenty (G20) and other developed countries can encourage small states' participation in blue-economy-related value chains and in global trade in blue economy goods and services. Fourth, and cognizant of the global governance challenges that impede blue economy progress for small states, an annual G20-small states dialogue can be established and supplemented by G20 blue economy support programs for small states.

Conclusion

Some small states have taken early steps to operationalize the blue economy. Their experience highlights the need for several key practical priority actions, including persistent national political leadership, skills development, new forms of planning, establishing participative national governance systems at the outset, new forms of data and access to ICT. But national efforts will need to be supplemented by significant regional and international support, if small states are to make progress in overcoming the overarching global governance challenges that impede their ability to participate in and derive economic benefits from the blue economy.

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