

Clegg, P., Mahon, R., McConney, P., & Oxenford, H. A. (2021). *The Caribbean Blue Economy*. London: Routledge. 262pp. Hbk. ISBN: 978-0-3672-6367-6. US\$262.

This book reviews the multi-dimensional implications, opportunities and challenges associated with the potential implementation of a blue economy strategy for the Wider Caribbean Region (WCR), and more specifically for the various Small-Island Developing States (SIDS) located there. It comprises 19 chapters (co)authored by 29 specialists. It provides a valuable analysis of the multiple dimensions involved in implementing a blue economy strategy in the WCR, and in other ocean regions where SIDS sustain their livelihoods by keeping healthy the diverse marine ecosystems surrounding them. The geographic coverage of the WCR includes four diverse Large Marine Ecosystems (LMEs): the Caribbean Sea, Gulf of Mexico, North Brazil Shelf and Southeast US Continental Shelf. The scope of the book extends to 29 small states – of which 16 are SIDS – and 18 small territories (i.e. departments of France, and dependencies of the UK, US and the Netherlands), covering a significant degree of cultural and socio-ecological diversity.

The book's first chapter argues that a Blue Economy '... restores, protects and maintains the diversity, productivity, resilience, core functions and intrinsic value of marine ecosystems'. Oxenford and Mahon (Chapter 4) report that ecosystem services provided by natural assets in the semi-enclosed Caribbean basin, currently contribute over US\$400 billion annually to the coastal and ocean economy. Nevertheless, natural stressors (e.g. water temperature, ocean acidification, sea level rise, sargassum and frequent extreme climatic events), and anthropogenic ones (e.g. fish stock over-exploitation, land-based sources of pollution and marine constructions), impose a growing set of challenges to the WCR. In so doing, they compromise the region's ability to conserve the health of its critical ecosystems, such as coral reefs, seagrasses and mangroves.

A key challenge identified by Clegg, Mahon, McConney and Oxenford (Chapter 2); Innis, Fanning Mahon and Remond, Chapter 6) and Fanning and Mahon (Chapter 9) is the complex geopolitical environment which requires robust coastal and marine spatial planning in Caribbean island states and territories. Only such planning would enable such jurisdictions to take advantage of the opportunities presented by a blue economy strategy, while at the same time protecting the health of ecosystems sustaining the livelihoods and socio-cultural heritage of the many diverse communities in that region.

To address its significant transboundary challenges, the WCR hosts a large diversity of organizations (i.e. 25 sub-regional, regional and international) that contribute to small island governance and decision-making concerning living ocean resources in the region. Among them, authors acknowledge key institutions that have ongoing regional initiatives of ocean governance within the WCR: the Association of Caribbean States (ACS), Caribbean Sea Initiative, Organisation of Eastern Caribbean States (OECS), Eastern Caribbean Regional Ocean Policy (ECROP), and UNDP's Caribbean Large Marine Ecosystem (CLME) Initiative funded by the Global Environment Facility (GEF). Fanning and Mahon (Chapter 9) also cite a transboundary diagnostic analysis (TDA) which identified gaps in transboundary governance impacting the marine ecosystems currently sustaining the WCR. The associated threats to effective governance arise from over-exploitation of marine species, pollution (untreated wastewater, nutrients from agricultural run-off, and marine litter, including plastics), and coastal habitat destruction.

Patil, Viridin and Cogan (Chapter 1) state that “governance in a blue economy is guided by public and private processes with a set of desirable attributes, such as: being inclusive; well-informed; precautionary and adaptive; accountable and transparent; holistic, cross-sectoral and long-term; and innovative and proactive”. The main challenge is making these notable aspirations operational.

Oxenford and McConney (Chapter 10) also recognized the importance of the historic contribution to livelihoods of a diversity of multi-species and multi-fleet small-scale fisheries (SSF) in the WCR. SSF fleets are currently targeting five groups of species with different degrees of mobility and spatial distribution: coastal benthic and coral reef-associated species, continental shelf shrimp and groundfish species, coastal small pelagics, demersal grouper and snapper species, and highly migratory pelagic finfish species. Mitigating the over-exploitation problem of some of these species, and protecting their habitats, should be a key element of a sustainable fisheries component in a blue economy approach in the Caribbean.

(Haraksingh, Chapter 13) and (Davis-Mattis, Chapter 15) identify opportunities for enhancing the regional economy by new innovative investment projects which are perceived as a potential source of regional economic growth, such as renewable energies, and biodiversity beyond areas of national jurisdiction (BBNJ) initiatives. Other initiatives, under the jurisdiction of the International Seabed Authority, such as investments in mining deep-seabed polymetallic nodules, also called manganese nodules, are perceived as a source of opportunity; but also of concern because of the associated environmental risks of potentially undesirable impacts on the ecosystems and livelihoods of communities of the WCR.

Also reported in the book by Leotaud, Girvan and Jattansingh (Chapter 3) is the concern for balanced and equitable distribution of benefits and costs resulting from new and emerging investment projects and technologies in the region. Careful analysis of socio-ecological effects (both positive and negative) of alternative blue economy projects are to be taken into account by stakeholders involved in planning, implementing and governing processes inherent to the blue economy strategy. Editors of the book acknowledge that a responsible implementation of a Blue Economy strategy is likely to take at least a decade.

One aspect that requires further study of the blue economy and its potential implementation in areas like the WCR is capacity building to strengthen the adaptability and resilience of institutions, public and private decision-makers, and local coastal communities. Capacity building is also needed to grasp opportunities for innovative and environmentally friendly investments in the region. A strong case can be made in support of projects dealing with renewable energies and biodiversity richness, on land as well as within and beyond the national oceanic jurisdictions of SIDS, for medical purposes and for enhancing non-use recreational opportunities.

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