Latin America and the Caribbean SDG 14 implementation assessment

Background and scope

The Economic Commission for Latin America and the Caribbean (ECLAC) launched a study to follow up on the implementation of Sustainable Development Goal (SDG) 14 in Latin America and the Caribbean, to identify the main developments, progress, gaps and barriers, and support the preparations for the UN Conference 2020 under the theme "Scaling up ocean action based on science and innovation for the implementation of Goal 14: stocktaking, partnerships and solutions".¹ The study also considers the five recommended actions of the document *The Ocean as a Solution to Climate Change* launched by the High-Level Panel for the Sustainable Economy of the Oceans (2019). The study will be concluded by late July.

Based on available scientific data on the region's four oceanic sub-regions conditions and existing indicators for its 10 Large Marine Ecosystems (or LME, see Figure 1), the study aims to understand the complex processes related to the marine and coastal ecosystems and the current global climate changing conditions and its regional expressions.

Existing environmental and ecosystem indicators were examined at the regional and sub-regional level. At the same time, due to the ocean - atmosphere interdependency, the study includes the potential contributions of the countries of Latin America and the Caribbean to the mitigation and adaptation issues that link SDG 14 with SDG 13 on Climate Action, leveraged with the findings of a direct survey consultation to 27 countries in the region regarding their statistical capacities and needs for SDGs indicators.

The study will also stress on the specific needs for cross coordination among SDGs, multiple regional organizations and regional existing programs, to reduce gaps, align resources, processes, and to understand what regional and national development programs must be reconfigured to rethink actions, processes, outcomes, and long-lasting gains for marine life, biodiversity, and coastal communities.

Figure 1. Latin America and Caribbean Large Marine Ecosystems

¹ See United Nations General Assembly, resolution 73/292



Main conclusions

Target SDG 14.C 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

The LME indicators provide an overview of how countries coordinate and whether they plan and make decisions on the same basis, principles, and objectives. The SDG14 survey in Latin America and the Caribbean shows that countries do not actively participate to enforce the international law of the sea. Despite this,

recent governance assessments in the region show three indicators that provide an overview of how countries coordinate and whether they plan and make decisions on the same basis, principles, and objectives.

- The "integration" level in the region is very high, as it measures whether countries share similar organization to address specific issues within applicable arrangements in force or the extent to which separate provision is made for integration.
- The "completeness" level, that it is the degree of institutional provision or arrangements that are in place to address one or more transboundary issues of concern, is medium.
- The "engagement" level in the region, or the extent to which all eligible countries within a given LME commit to participate to the highest level in agreements currently in place to address transboundary issues, is medium.

In the different marine regions, stakeholders should therefore build and strengthen cooperation for the implementation of the Ocean SDG14. Efficient collective action and self-government on the subnational level may be enhanced by local or national institutions, transboundary problems and international public goods increasingly tend to depend on a certain degree of transnational political coordination and governance. As a result, there is an intricate relationship between regional cooperation and the common regional good, on one hand, and national interests and ownership on the other.

Other SDG 14 targets

The overall condition of the marine environment can be seen through a benchmark referred as the overall risk factor, which is the result of the combined measure of the Human Development Index (HDI) and the averaged indicators for fish and fisheries and pollution and ecosystem health modules of the LME approach. Under this benchmark, the entire region in both oceans is in an overall high-risk condition.

T Referring to target SDG 14.1 (By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution) human activities and population growth generate large amounts of nutrients that enter coastal waters of LMEs resulting in high biomass algal blooms, leading to hypoxic or anoxic conditions, causing higher detrimental effects on marine fisheries than those expected from climate change. Latin America and the Caribbean has a serious condition in this regard, with a very high-risk level towards years 2030 and 2050. Persistent organic pollutants (POPs) including polychlorinated biphenyls (PCB), and Dichlorodiphenyltrichloroethane (DDT) are persistent in eight of the ten LMEs. Hexachlorocyclohexane (HCH) is low or very low. For example:

- PCBs in the South Brazil Shelf LME exhibit a very high indicator, whereas the East Brazil Shelf LME and the California Current LME show a moderate level.
- The DDT in the East Brazil Shelf LME exhibit a very high level, perhaps due to the subtropical climate and its application for Malaria control, followed by South Brazil Shelf and the California Current LMEs with a moderate category,
- The rest of the LMEs exhibit low or very low levels of DDT concentration.

Marine debris and plastics are a menace for the region facing a growing challenge for macro and microplastics, mainly due to poor waste management in the region, accumulating in coastal areas and patches in the ocean. Model distribution of the total amount of macro and micro plastics in the region indicates that the Wider Caribbean has a trend of very high levels of plastics, followed by the South Brazil Shelf LME. Whereas the California Current, Gulf of California, Pacific Central America Coastal LMEs in the Pacific and the North Brazil Shelf, East Brazil Shelf LMEs in the Atlantic exhibit a medium level of total plastics. The Humboldt Current and the Patagonia Shelf LMEs are the only two LMEs with very low levels of plastics.

With regards to SDG target (By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans), sensitive habitats such as seagrasses,

mangroves and estuarine salt marshes in the region have been impacted with significant losses caused by chronic anthropogenic stressors such as coastal development and eutrophication, but, there are also examples of restoration processes as well.

On SDG target 14.3 (Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels), coral reefs are naturally subjected to bio-erosion and chemical erosion, aragonite is essential for coral growth but it has decreased due to increased CO₂. Projections reveal that Latin America and the Caribbean is rapidly reaching aragonite limitation for coral reef development. The Caribbean region depends socio-economically on coral reefs ecosystem services for coastal communities' resilience, tourism, and fisheries. Healthy reefs allow the beach to accrete and allow for fish to thrive which is positive for local fisheries. The Mesoamerican Barrier Reef (MBA)is the second largest barrier reef of the world, and its net eroding due to acidification is 37%, with only 26% accreting. However, using the Reef Health Index (RHI) that combines multiple biophysical indicators into qualitative indices there are encouraging trends of improvement in the MBA. Considering the ten years of RHI data across this sub-region improved from 2.3 (poor) to 2.8 (fair); Honduras (3.0), Belize (2.8), Mexico (2.8) and Guatemala (2.0). Recent report cards (2018) for the Greater Antilles scored the subregion 2.5 or "Poor". Other indirect effects, such as reshaping of ecosystems and food webs may also prove important. Ocean acidification could cause tropical coralline algae to stop growing by 2040 and subsequently to start to dissolve.

With regards to SDG target 14.4 (By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics), the ten LMEs in the region exhibit a medium risk level indicator of collapsed and overexploited fish stocks. There is a continuous trend on issues and challenges on the coastal and small-scale fisheries, related to illegal fishing, limited institutional technical and economic capabilities, and the current COVID19 crisis represents a new challenge to enforce such regulations. The main challenge remains, the lack of ecosystem-based approach to conduct the fisheries assessments and permanent evaluation of stocks that is greatly limited along with the limited financial support for research and skilled personnel.

On the SDG target 14.5 (By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information), the rate of increase of Marine Protected Areas (MPA) and tools associated to the protection of the marine environment in the region shows low to medium level of increment. Countries like Chile, Brazil and México have an increment over 20% of protected areas a coverage, Venezuela has 15%, and Argentina, Colombia, Ecuador, Belize, Guyana and Dominican Republic over 10%. From the Pacific Coast of Mexico to Argentina in the Atlantic there is a total of 22,902,092 km² of marine area, of which 5,208,423 km² is MPA, equivalent to a 22.74% coverage. In the Wider Caribbean, the MPA coverage varies widely. Many small islands have less than 1% of marine coverage (i.e. Saint Lucia, Saint Vincent, Caiman, Turks and Caicos, Curazao), others as little as 2% (Saint Kitts & Navis, Suriname), and Bonaire has 10%. However, there are few outstanding cases with over 90% area coverage such as Guadaloupe, Saint Barthelemy, Saint Martin, and Martinique. The coverage in Latin America and the Caribbean includes 9,710 protected areas, of which 813 have management effectiveness evaluations. However, MPAs may have achieved legal designation, but the implementation of their regulatory structure, enforcement, and management are lagging far behind and challenges remain with regards to their financing.

Referring to SDG target 14.6 (By 2020, prohibit certain forms of fisheries subsidies which contribute to

overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation), there are successful examples for allocation of fishing rights in the region. However, an agreement on harmful fisheries subsidies at the World Trade Organization is a crucial opportunity to build on current momentum to achieve what has not yet been possible: a binding multilateral commitment to improving ocean equity and sustainability.

Regarding SDG 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), undoubtedly the marine environment provides ecosystem services and economic benefits to several sectors like fisheries, tourism, and energy. Tourism is worth over US\$53 billion to the economies of Caribbean countries. The region's mangroves, seagrass and salt marshes have the ability to remove carbon dioxide (CO₂) from the atmosphere and contain large stores of carbon deposited over centuries. But human activities impact directly or indirectly these marine ecosystems and their carbon sink capacity. For instance, carbon stored in the soil is released resulting in emissions of CO₂ that contribute to climate change. Latin America and the Caribbean urgently needs to advance in the achievement of the conservation processes to ensure such economic benefits like those from coastal carbon. The Blue Growth initiative is an excellent option in the region to strengthen the interactions among existing policies and financing processes and account for these ecosystems in the national reports and the intended Nationally Determined Contributions. Sub-regions like the Caribbean region depend largely on a healthy environment, and there is a current great concern associated to the Covid19 crisis, as the region tend to be more vulnerable.

The notion of a 'blue economy' is consistent with the principles underlying the SDGs and in particular SDG14 as it draws on the concept that oceans are development spaces. The Blue Economy will incorporate ocean values and services into economic modelling and decision-making processes.

SDG Target 14.A (Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries), highlights the critical need to allocate financial resources to support science and technology. Knowledge has been limited, due to the poor access to research infrastructure, oceanographic vessels, lack of coordination between scientific programs. Global programs and databases are needed, operational observing to promote assessments on the marine biodiversity.

With regards to SDG Target **14.B** (Provide access for small-scale artisanal fishers to marine resources and markets), small-scale fisheries (SSF) provide over 60 per cent of protein in the region, significantly contributing to food security and to the livelihoods of vulnerable populations. However, strong enforcement and a reduction of capacity in SSF could have a short-term negative social effect, but are important to safeguard their long-term sustainability. The region's fishing stocks in all LMEs exhibit medium numbers of collapsed and overexploited fish stocks, except from the North Brazil Shelf LME which exhibits high numbers. The stock catch condition in the 10 LMEs in the region is that fisheries are collapsed or overexploited between 40 to 60 percent. It is therefore urgent to understand the socio-political circumstances, the legal frameworks and local conditions of communities. Indeed, coastal fisheries can contribute to food security and poverty alleviation. Therefore, improving the understanding and dynamics of fishing communities, providing equitable access and distribution of the resource among competing

groups, keeping fishery access from being concentrated in too few hands and allocating fishery use rights to go fishing, rather than ownership over the resources is essential.

Opportunities

World leaders agree on the need for improving the condition of marine ecosystems, and to achieve a better and sustainable present and future. The complex environmental challenges of Latin America and the Caribbean will require coordination of economic, social and environmental policies and coherent governance frameworks. The region features deserve particular attention and are critical for defining the role of international cooperation to facilitate the region's future development. For the next decade, one of the important pathways toward sustainable development of the oceans is through the application of the ecosystem-based approach for assessing, managing and sustaining coastal ocean goods and services. While oceans are key to global climate and climate change, there are also new and old threats to marine environment in the region. Despite the pandemic and all stressors affecting the sustainable development of the region's LMEs, there are opportunities to implement SDG14.

Regional cooperation based on current capabilities and indicators to can contribute to the achievement of SDG14 and SDG13as many countries have started to include coastal ecosystem management into their national oceans policies and climate change mitigation activities to link the mitigation and adaptation benefits.

Governments and other actors in the region have been addressing the ocean issues for decades and are since 2015 aligning with SDG14 implementation. In terms of knowledge and indicators, there is an opportunity to establish a cohesive and well-developed mechanism to achieve follow up and review, by incorporating the framework of the decade of ocean research, promoting the creation of a regional ocean and coastal observatory accompanied by regional cooperation strategies, and using the existing institutional networks. Also, incorporating other indicators and key challenges such as marine litter, pollutants, ecosystem degradation and overexploitation of living marine or fishing resources is critical. Additionally, ECLAC could contribute to enhancing participation and multi-sectoral communication between scientific research entities and key stakeholders, expanding the horizon of communication to users of sea and coastal resources through virtual and face-to-face programs to create capacities for the management of marine resources and the conservation of ecosystems.

The COVID 19 crisis represents an opportunity to offer ad hoc support to coastal communities and fisheries that have halted activities and to retail and chain value processes that have been altered in order to implement capacity building strategies to strength the sustainability of the sector and contribute to their wellbeing. Assistance with a just transition is an area of opportunity that would facilitate the development of SDG14, along with innovative knowledge and capabilities to fulfill and reorient this sector towards sustainability. A knowledge dissemination mechanism could be put in place to showcase local conditions under the ecosystem-based approach, including the chain processes, and to improve data access on catches and stocks. Additionally, changing the existing non-decent working conditions of many fishermen is essential. Rather than subsidy programs, countries could support fishers and fishing sectors when necessary, based on strategies to reorient funds towards co-management, and/or condition them on strong sustainable actions. Fundamental principles for any effective program include clear short and long-term goals, which involve all stakeholders. Establishing a coordination mechanism for oceans under the pandemic is a critical component of the emerging regional ocean governance framework, as it can play a key role in placing oceans on the agendas of multilateral organizations, and also promoting uptake at the national level. The mechanism should go beyond and also coordinate SDG14 implementation to share best practices at national, regional and global levels, calling for South- South cooperation schemes.

The pathway to succeed on the implementation of SDG 14 can be expanded and accelerated with all opportunities for countries bordering the region's LMEs to collectively achieve the 2030 Agenda and the Oceans and the law of Sea.