



The Sustainable Development Goals Report 2021

Extended Report

-Goal 14-



Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Note: The UN Statistics Division (UNSD) prepares the annual *The Sustainable Development Goals Report*, also known as the glossy report, based on storyline inputs submitted by UN international agencies in their capacity as mandated custodian agencies for the SDG indicators. However, due to space constraints, not all information received from custodian agencies is able to be included in the final glossy report. Therefore, in order to provide the general public with all information regarding the indicators, this 'Extended Report' has been prepared by UNSD. It includes all storyline contents for each indicator as provided by the custodian agencies and is unedited. For instances where the custodian agency has not submitted a storyline for an indicator, please see the custodian agency focal point information linked for further information.

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Target 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

Indicator 14.1.1: (a) Index of coastal eutrophication; and (b) plastic debris density

Globally, the percentage of exclusive economic zones with high chlorophyll concentration frequency in the 90th percentile decreased by 20 per cent from 2018 to 2020. Further analysis is needed to identify the eutrophication status of these areas.

Coastal eutrophication is defined as excess nutrient loading into coastal environments from anthropogenic sources, resulting in the excessive growth of aquatic plants, algae and phytoplankton. The primary drivers of eutrophication are fertilizer run off, livestock waste, sewage discharge, aquaculture and atmospheric nitrogen emissions. While fertilizers have increased agricultural production, excessive nitrogen and phosphorus from fertilizers is known to reach the coasts with an estimated ~24 per cent of anthropogenic N from coastal watersheds reaching coastal ecosystems¹. Coastal eutrophication is known to cause detrimental impacts to the environment and coastal populations by driving harmful algal blooms, hypoxia, fish kills, seagrass die off, loss of coral reef and nearshore hard bottom habitats and health hazards to swimmers and fishers (figure 1).

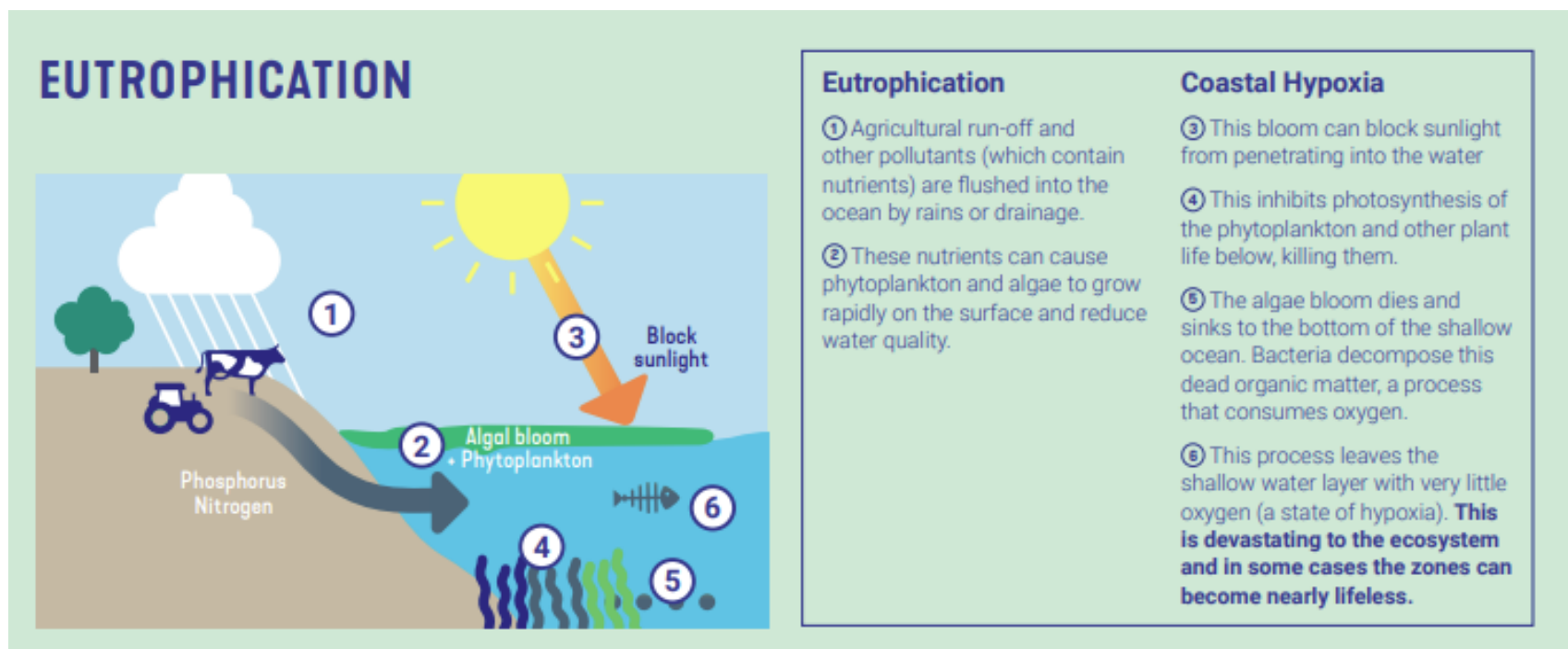
While efforts such as the Global Partnership on Nutrient Management (GPNM)² has been working with member countries and stakeholders to reduce nitrogen and phosphorous pollution, the use of nitrogen and phosphorous in Agriculture remains high (figure 2).

Indicator 14.1.1a monitors changes in eutrophication directly, by analysing nutrients, or indirectly, by analysing processes that are caused by or are related to nutrient inputs such as algal growth. One of the challenges for tracking global eutrophication is lack of globally available and comparable nitrogen and phosphorus measurements for coastal areas.

Chlorophyll-a is the pigment responsible for photosynthesis in all plants and algae and is monitored routinely from Earth-observing satellites. Many types of algae are the basis for the aquatic food chain and are essential for “healthy” ecosystems. However, excessive nutrients may lead to an overabundance of algal growth which results in eutrophication. Understanding coastal trends in chlorophyll-a and anomalies that indicate algal blooms can help environmental managers identify potential improvements or worsening of eutrophication and potential eutrophication hot spots for further investigation.

For this indicator, global satellite data was used to identify areas of Exclusive Economic Zones (EEZs) that showed high levels of chlorophyll-a compared to baseline values from 2000 – 2004. Globally, areas with high chlorophyll-a levels (in the 90th percentile) decreased by 27 per cent from 2019 to the baseline 2000-2004. Over the past three years, the chlorophyll concentration frequency percentage of EEZs with high chlorophyll (in the 90th percentile) varied by region. (figure 3) with an overall global decrease of 20% percent (figure 4). For the impacts of eutrophication, such as algal blooms and dead zones, to be reduced, action is needed to reduce human-caused nutrient inputs and monitor nutrients in the coastal zone and source inputs such as rivers. By observing chlorophyll-a with satellites, countries will have information about patterns of algal blooms and chlorophyll-a anomalies in time and space. Areas that demonstrate increases in chlorophyll-a overtime within a given year can be investigated for causes and then actions can be targeted to address the identified problem sources.

Figure 1. Eutrophication and resulting impacts.³



¹ <https://www.frontiersin.org/articles/10.3389/fmars.2020.00670/full>

² <https://www.unep.org/explore-topics/oceans-seas/what-we-do/addressing-land-based-pollution/global-partnership-nutrient>

³ <https://marine.copernicus.eu/access-data/ocean-state-report/ocean-state-report-2nd-issue>

Figure 2. World agricultural use of nutrient nitrogen N (total) and nutrient phosphate P2O5 (total), 2000-2018⁴

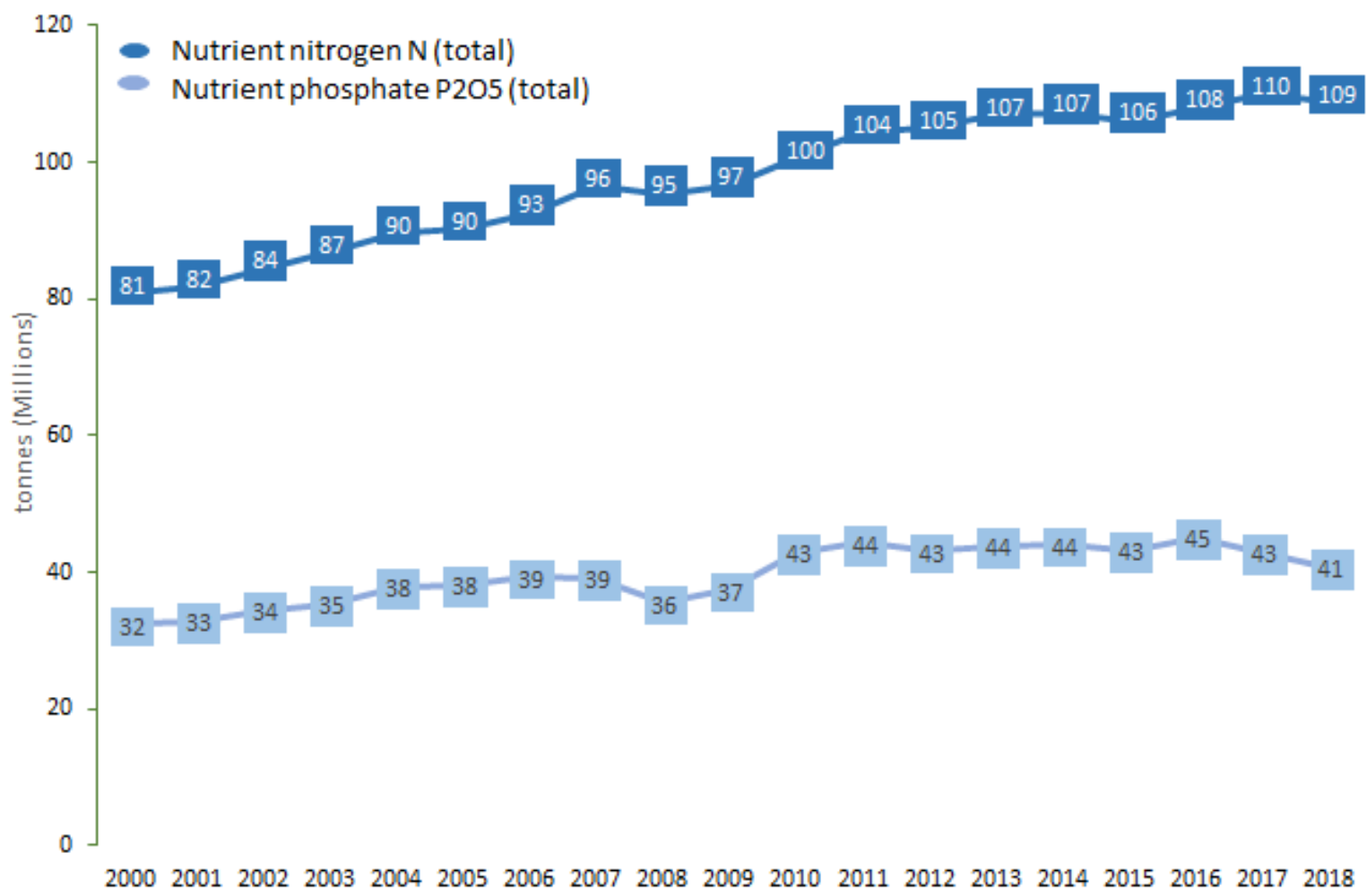
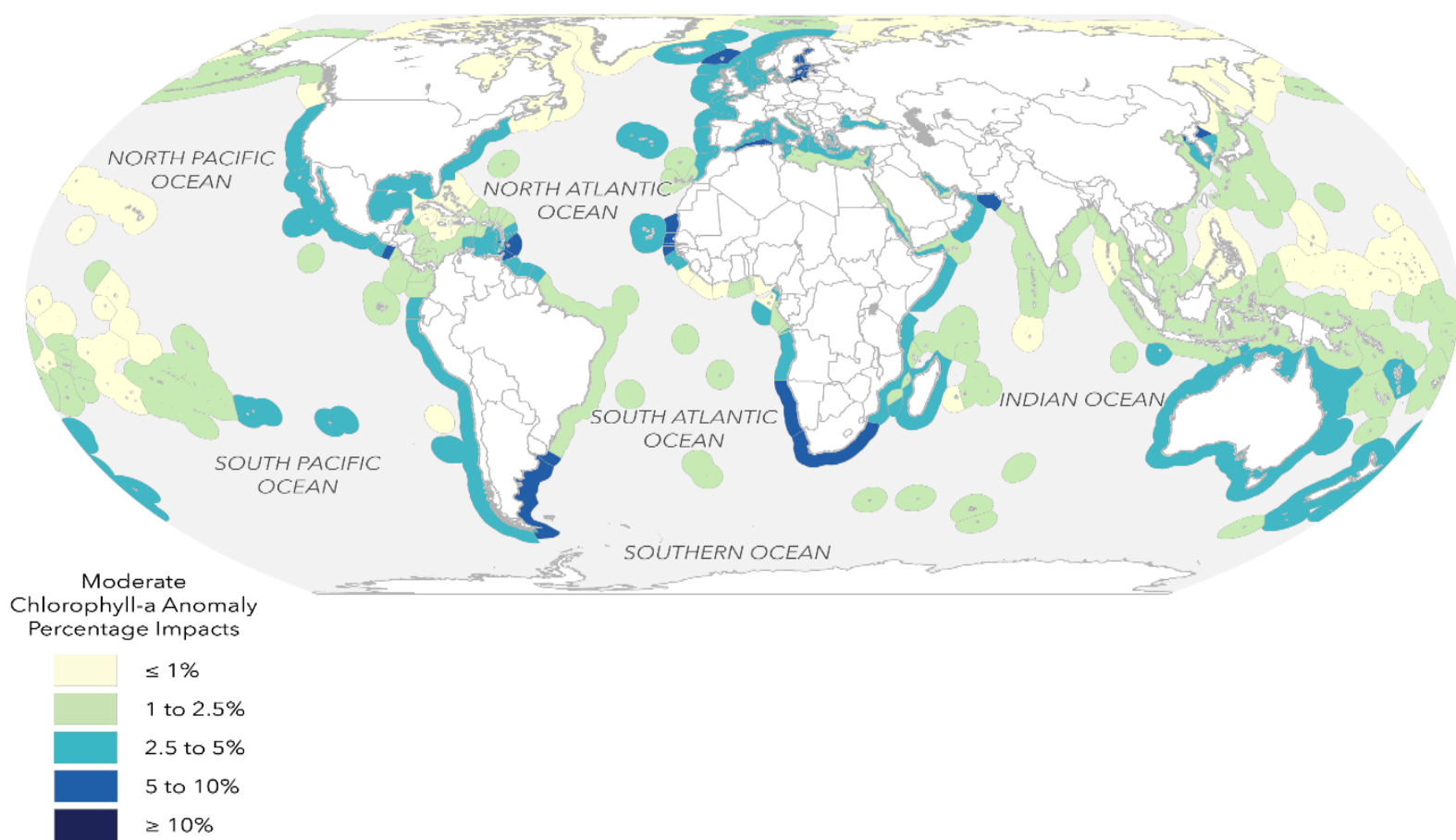
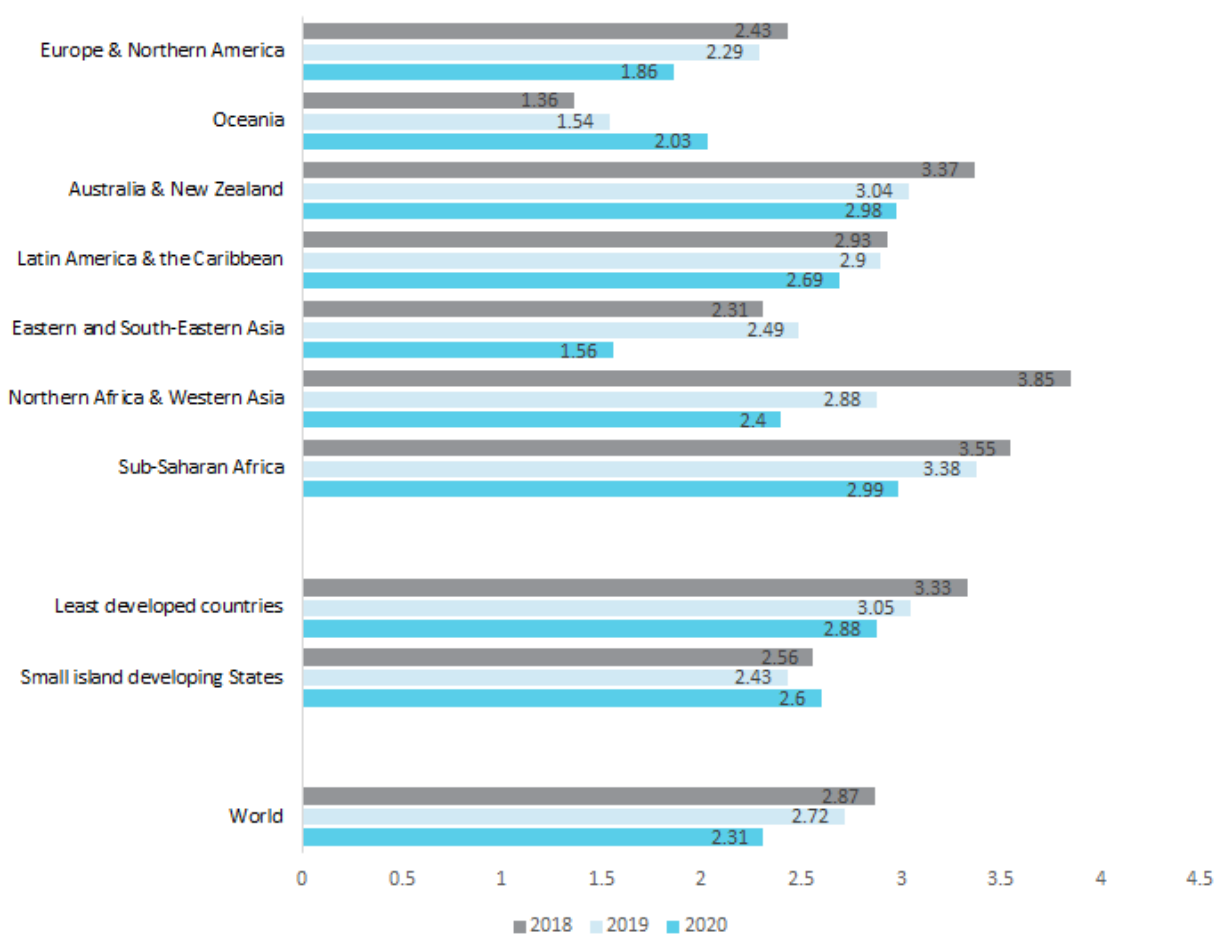


Figure 3. Percent of Exclusive Economic Zones with High Chlorophyll-a Levels (in the 90th percentile). Values shown are the average of 2018 – 2020.



⁴ <http://www.fao.org/faostat/en/#data/RFN/visualize>

Figure 4. Percentage of EEZ's with High Chlorophyll-a Levels (in the 90th percentile), 2018 - 2020 (90th percentile)



Additional resources, press releases, etc. with links:

- The [Esri Chlorophyll Hub](#) is an open platform that provides information about eutrophication monitoring and data on changes on chlorophyll-a changes over time and chlorophyll-a anomalies. The data and information on this platform will help decision-makers identify potential eutrophication hot spots to inform further monitoring and action to combat coastal eutrophication. For additional information about the methodology for this indicator, see “[Understanding the State of the Ocean: A Global Manual on Measuring SDG 14.1.1, SDG 14.2.1 and SDG 14.5.1](#)”.

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UNEP

Target 14.2: 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

Indicator 14.2.1: Number of countries using ecosystem-based approaches to managing marine areas

Custodian agency(ies):

UNEP

Target 14.3: Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

Indicator 14.3.1: Average marine acidity (pH) measured at agreed suite of representative sampling stations

Ocean acidification – a global issue with local and regional effects and impacts

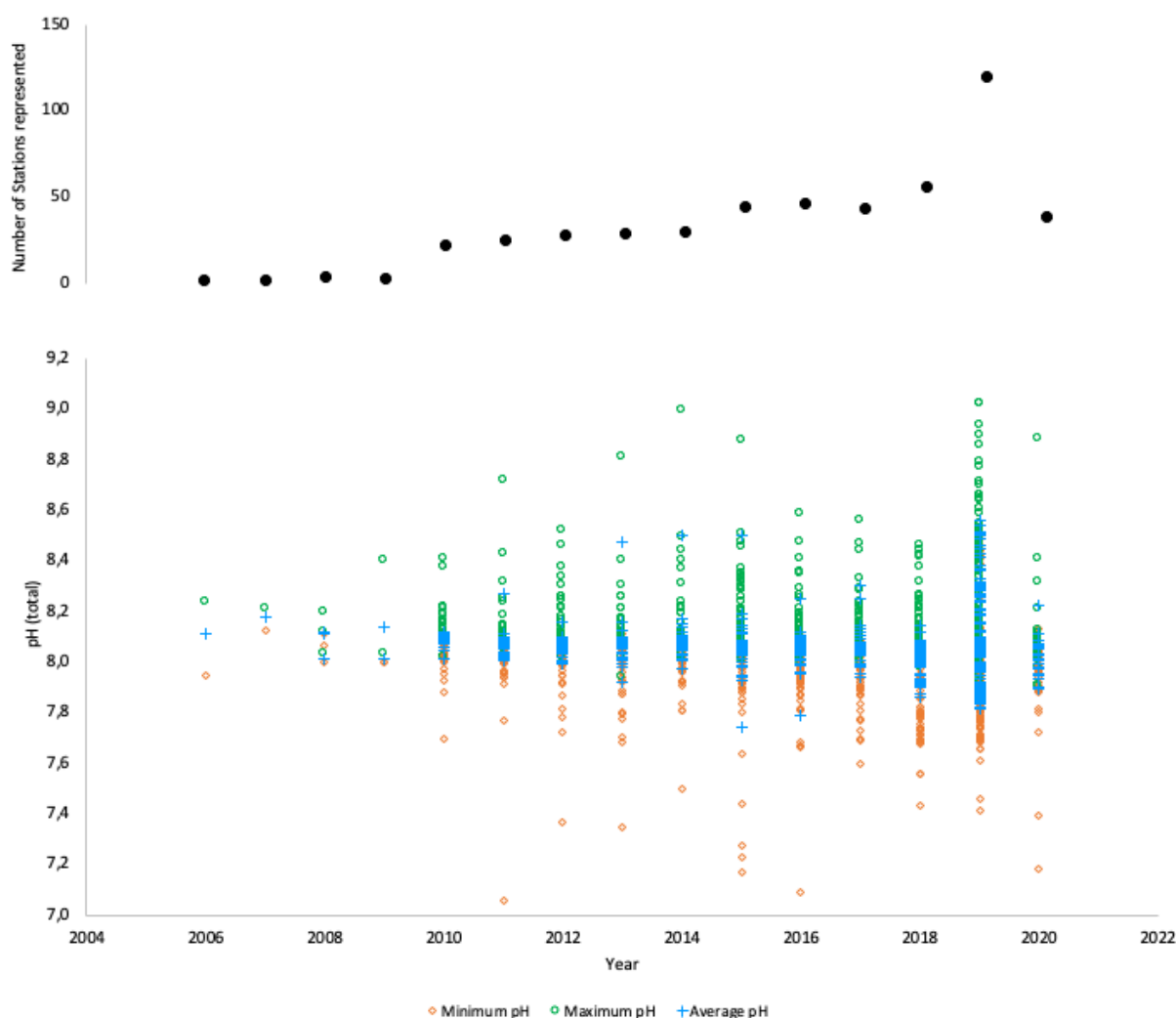
The ocean absorbs around one quarter of the annual emissions of anthropogenic CO₂ to the atmosphere⁵, thereby helping to alleviate the impacts of climate change on the planet⁶. The ecological costs of this process to the ocean are high, as the CO₂ reacts with seawater and changes the acidity of the ocean; this process is referred to as ocean acidification. Ocean acidification threatens organisms and ecosystem services, including food security, by endangering fisheries and aquaculture. It also impacts coastal protection (by weakening coral reefs, which shield the coastline) and tourism. As the acidity of the ocean increases, its capacity to absorb CO₂ from the atmosphere decreases, impeding the ocean's role in moderating climate change. Sustained, repeated observation and measurement of ocean acidification along the coastlines and in the open ocean are required to improve understanding of its consequences, enable modelling and predictions of change and variability, and to help inform mitigation and adaptation strategies.

The COVID pandemic has resulted in the cancellation of scientific research cruises as well as difficulties in the deployment and maintenance of moorings and buoys, leading to a potential gap in observations of ocean acidification. Capacity development has been limited to online training activities and workshops.

A limited set of long-term observations sites in the open ocean have shown a continuous decline in pH over the last 20 to 30 years. The national datasets from countries submitted towards the SDG 14.3.1 Indicator present a more varied picture of regional and local variations in ocean acidification (Figure 1). These annual variations in the reported observations reflect the multitude of factors influencing the carbonate chemistry at each of these particular stations (Figure 2) and the increased number of data submissions over the years. Coastal areas in particular are subject to a range of factors affecting carbon dioxide levels in seawater, such as freshwater influx, ice-melting, nutrient input, biological activity, temperature change and large ocean oscillations. This local and regional specific ocean acidification is of great relevance to marine organisms and biological processes who are exposed to the full range during their lifetime. The combination of observations of the chemical and biological impacts of ocean acidification at fine spatial and temporal scales are necessary to determine the vulnerability and adaptation capacity of marine ecosystems and coastal communities towards ocean acidification.

Globally conducted capacity building efforts increase the capability of many nations to measure and report ocean acidification data, confirmed by the growing number of countries participating in the data collection towards the SDG 14.3.1 (Figure 3). Continuous efforts in this regard will support regions still lacking sufficient information and infrastructure to determine ocean acidification conditions, to participate in the SDG indicator 14.3.1 collection in the future. The expansion in the observation and understanding of ocean acidification will support the development of solutions tailored to the end-users' needs and to the SDG target 14.3: the reduction of local, regional and global impacts of ocean acidification.

Calculated surface pH values based on ocean acidification data submitted to the 14.3.1 data portal (<http://oa.iode.org>).

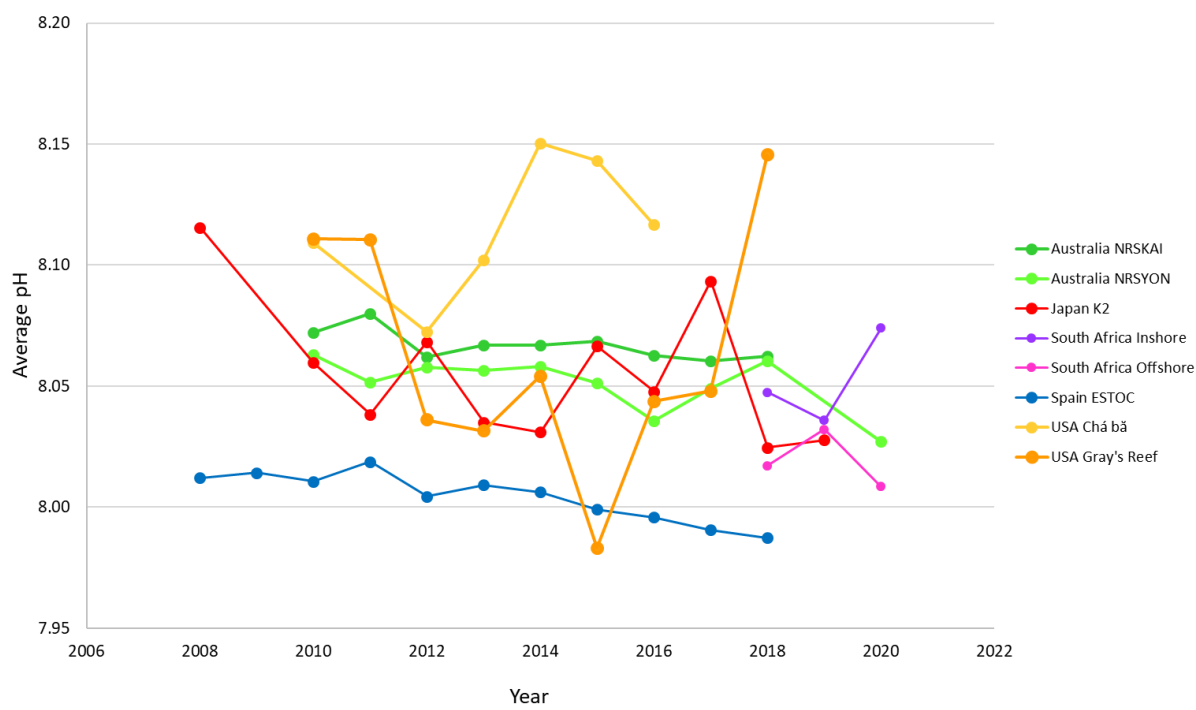


⁵ IPCC, 2019: IPCC Special Report on the Ocean and Cryosphere in a Changing Climate [H.-O. Pörtner, D.C. Roberts, V. Masson-Delmotte, P. Zhai, M. Tignor, E. Poloczanska, K. Mintenbeck, A. Alegría, M. Nicolai, A. Okem, J. Petzold, B. Rama, N.M. Weyer (eds.)].

⁶ Le Quéré, C., Andrew, R. M., Friedlingstein, P., Sitch, S., Pongratz, J., Manning, A. C., et al. (2018). Global carbon budget 2017. *Earth Syst. Sci. Data* 10, 405–448. doi: 10.5194/essd-10-405-2018

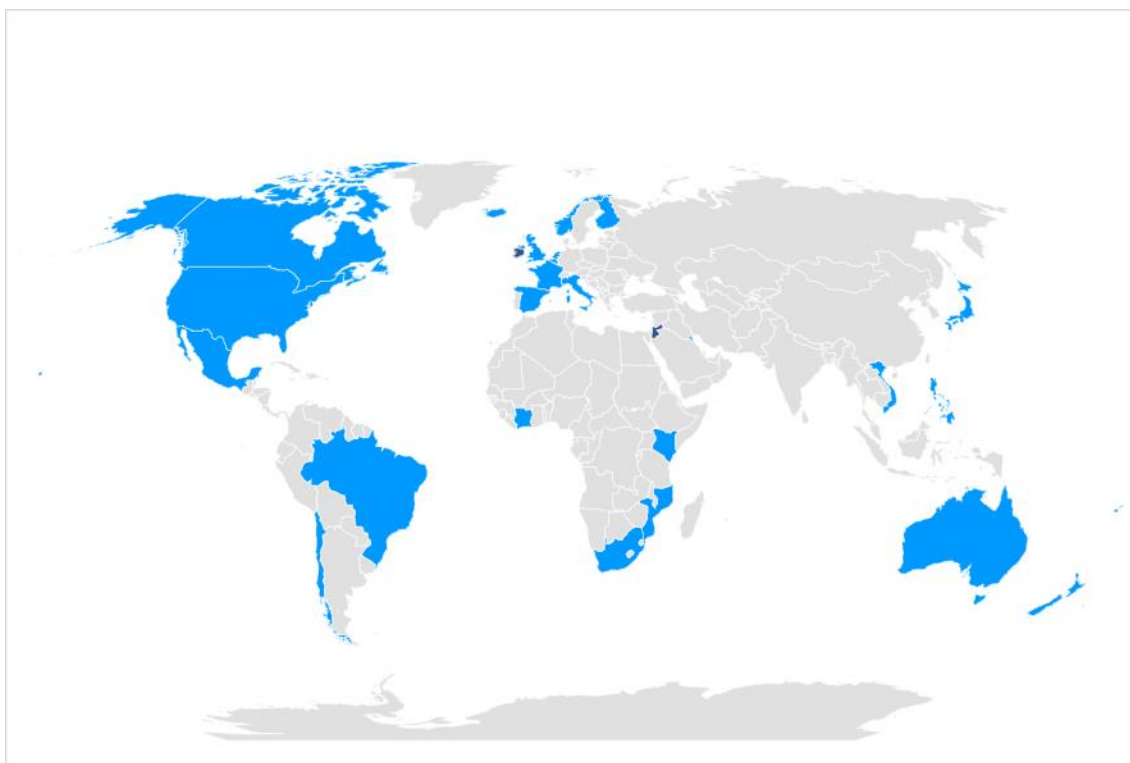
Top panel: Black dots – number of stations represented per year. Bottom panel: Blue crosses – average annual pH reported from quality assured measurements; orange diamonds – annual minimum pH values reported for each station; green circles – annual maximum pH values reported for each station. Number of stations represented per year - 2006: 1; 2007: 1; 2008: 3; 2009: 2; 2010: 21; 2011: 24; 2012: 27; 2013: 28; 2014: 29; 2015: 43; 2016: 45; 2017: 42; 2018: 55; 2019: 119; 2020: 37.

Variations in the annual average pH values from a suite of representative sampling stations.



Australia NRSKAI – Kangaroo Island National Reference Station (data from 2010-2020); Australia NRSYON – Yongala National Reference Station (data from 2010-2020); Japan K2 – subarctic western North Pacific Station K2 (data from 2008-2019); South Africa Inshore – Eastern Cape coastal station (data from 2018-2020); South Africa Offshore – Eastern Cape ocean station (data from 2018-2020); Spain ESTOC - European Station for Time-series in the Ocean, Canary Islands (data from 2008-2019); USA Chá bã – Pacific West Coast station (data from 2010-2016); USA Gray's Reef – Atlantic East Coast station (data from 2010-2018).

Map illustration surface ocean carbonate chemistry measurement locations received for the 14.3.1 ocean acidification reporting.



Blue – countries whose data was reported in accordance with the SDG 14.3.1 Indicator Methodology; dark grey – countries reporting ocean acidification observation data not collected in accordance with the SDG 14.3.1 Indicator Methodology.

Additional resources, press releases, etc. with links:

- http://ioc-unesco.org/index.php?option=com_oe&task=viewDocumentRecord&docID=21938
- <http://oa.iode.org>
- <http://goa-on.org>

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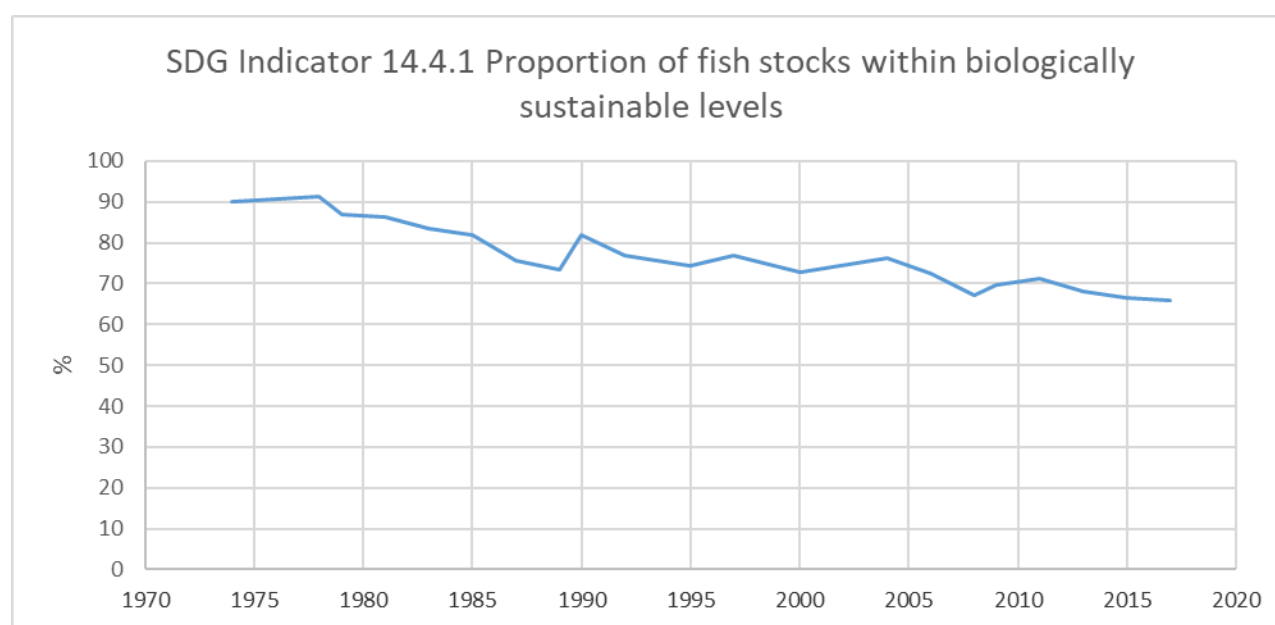
Target 14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

Indicator 14.4.1: Proportion of fish stocks within biologically sustainable levels

The sustainability of global fishery resources continues to decline, having dropped from 90 per cent in 1974 to 65.8 per cent in 2017. Fish stocks within biologically sustainable levels contributed 78.7 percent of the global marine fish landings in 2017, which have remained relatively stable at around 80 million tonnes since 1995. Despite the continuous deterioration, the rate of decline has slowed down in the most recent period.

The global trend masks great variations in the proportion of sustainable fish stocks between different regions. In 2017, the Mediterranean and Black Sea continued to have the highest percentage of stocks fished at unsustainable levels (62.5 per cent), followed by the Southeast Pacific (54.5 per cent) and Southwest Atlantic (53.3 per cent). By contrast, the Eastern Central Pacific, Southwest Pacific, Northeast Pacific, and Western Central Pacific had the lowest proportion (13–22 per cent) of stocks fished at biologically unsustainable levels.

Improved regulations together with effective monitoring and surveillance have proven successful in reverting overfished stocks to biologically sustainable levels. However, the adoption of such measures has generally been slow, particularly in many developing countries. This situation is reflected in the first national fish stock sustainability reports by thirteen countries – a majority of these have active assessment and management systems in place and are therefore able to achieve a high fish stock sustainability than the world average.



Progress analysis: [See progress chart](#)

Custodian agency(ies):

FAO

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

Indicator 14.5.1: Coverage of protected areas in relation to marine areas

Over the last 20 years, the world's governments have made progress in safeguarding important sites in the oceans, with mean protected area coverage of marine Key Biodiversity Areas increasing globally from 28% in 2000 to 44% now.

Safeguarding important sites for biodiversity is a core requirement for environmental sustainability. Over the last 20 years, the world's governments have made progress towards achieving this, with mean protected area coverage of marine Key Biodiversity Areas increasing globally from 28% in 2000 to 44% now. This said, increases in coverage were fastest in the mid-2000s, and seem to be plateauing recently, with only a 1% increase over the last five years, while on average over half of each site falls outside any protected areas.

There is considerable spatial variation in this progress. Worryingly, protected area coverage of important marine sites remains less than a quarter in Oceania. Average coverage of marine Key Biodiversity Areas exceeds 40% in four regions – Latin America and the Caribbean, Sub-Saharan Africa, Australia and New Zealand, and Europe and North America.

Human interest story:

An excellent recent example of the value of management of marine protected areas to safeguard Key Biodiversity Areas in the oceans comes from the sub-Antarctic. Here, marine Key Biodiversity Areas have been identified based on data from satellite-tracking seabirds and seals to highlight sites crucial to the persistence of these species. These data were then used to revise the management of the marine protected area to extend closure of krill fisheries by two months over the species' breeding periods.

What impacts the COVID-19 pandemic will have on protected area coverage of important sites for marine biodiversity remains uncertain. There have been anecdotal reports that the COVID-19 pandemic has undermined environmental sustainability in some countries, for example by reducing protected area income from tourism, and by destabilising environmental governance. As yet, however, no signal of the pandemic is visible in the indicator of protected area coverage of marine Key Biodiversity Areas.

As the world emerges from the COVID-19 pandemic, countries face a stark choice. Post-COVID recovery efforts could be directed towards activities which ensure safeguard of marine Key Biodiversity Areas: green stimulus via protected area establishment, for example; or development of other effective area-based conservation mechanisms which are managed for objectives other than conservation but nevertheless effectively maintain the biodiversity for which they are important. This is essential if countries are to be successful in achieving SDG14 and the new Post-2020 Global Biodiversity Framework. By contrast, if post-COVID recovery entails investments into business-as-usual, there is a danger that protected area coverage of important marine sites could plateau or even decline, jeopardising not just environmental commitments but sustainability overall.

Progress analysis: [See progress chart](#)

Additional resources, press releases, etc. with links:

- <https://www.birdlife.org/worldwide/news/new-research-shows-sustainable-fishing-and-conservation-can-coexist>
- <https://onlinelibrary.wiley.com/doi/full/10.1111/ddi.13041>

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Custodian agency(ies):

UNEP-WCMC, UNEP, IUCN

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 negotiation⁴

Indicator 14.6.1: Degree of implementation of international instruments aiming to combat illegal, unreported and unregulated fishing

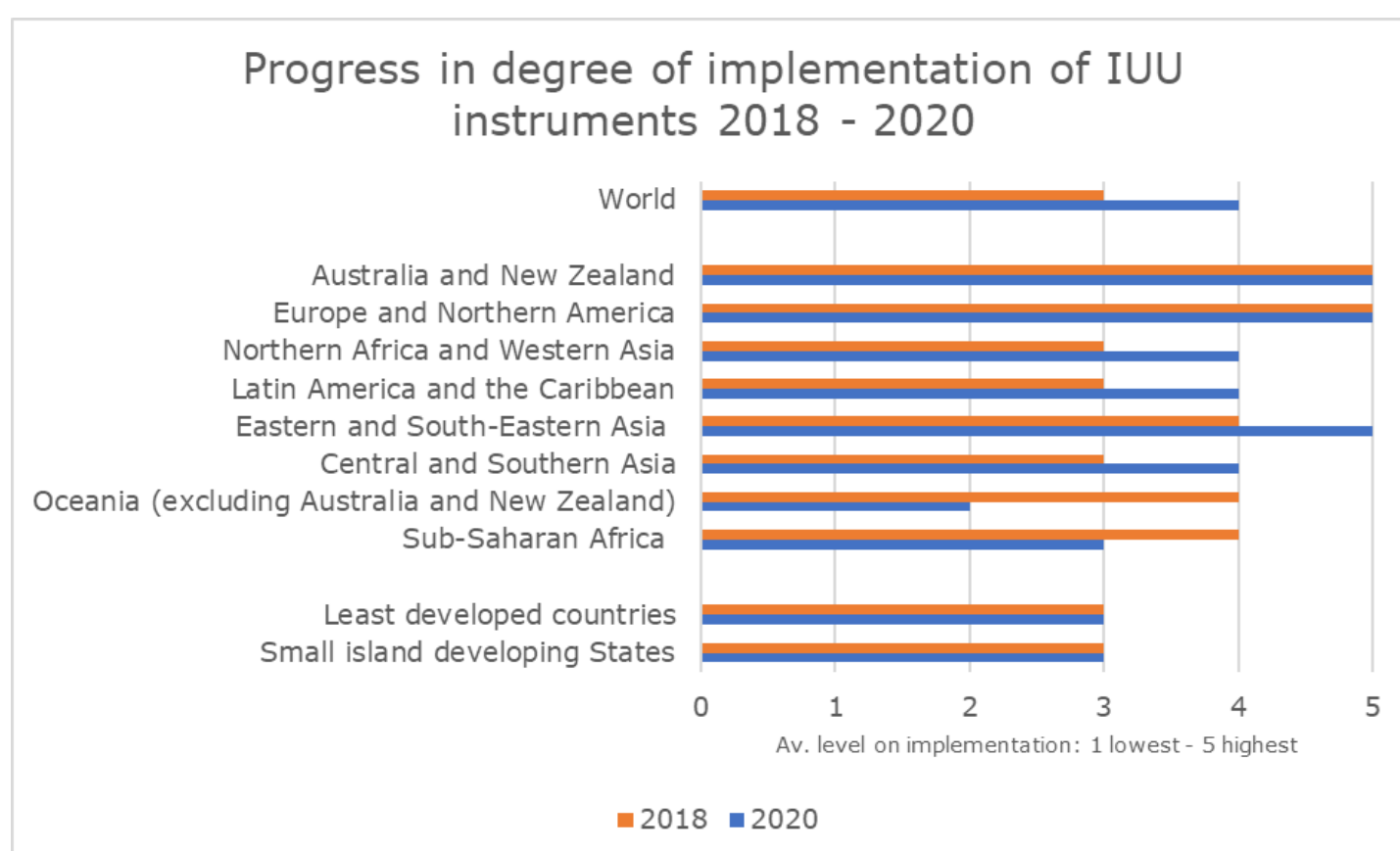
Countries have made progress in combatting illegal, unreported and unregulated fishing, but a more concerted effort is needed.

Illegal, unreported and unregulated (IUU) fishing poses a significant risk to the sustainability and profitability of the fisheries sector. IUU fishing has negative economic, social, and environmental impacts, and hinders countries' ability to manage their fisheries in a sustainable, responsible manner.

The key to ending IUU fishing once and for all is through cooperation, transparency and compliance. Cooperation between all actors as well as strengthening individual efforts is required. This begins at the national level with inter-institutional cooperation, right through to cooperation between different States, intergovernmental organizations and NGOs working towards this common goal. Transparency is needed, with States sharing information on the identity and compliance history of fishing vessels and other information to ensure the traceability of fish products throughout the value chain. Finally, compliance is needed within the ample international framework covering all steps from the sea to the plate. This includes having strong monitoring, control and surveillance (MCS) capacity, together with effective enforcement capacity, which are essential to proper implementation of international instruments to combat IUU fishing.

The framework of international instruments to combat IUU fishing, developed over the past few decades, provides a powerful suite of tools to combat IUU fishing, covering flag, coastal, port and market State responsibilities. The Agreement on Port State Measures (PSMA) is the first binding international Agreement that specifically targets IUU fishing. It lays down a minimum set of standard measures for Parties to apply when foreign vessels seek entry into their ports or while they are in their ports. In June 2016, the Agreement came into force and as at 03 July 2020, there were 66 Parties to the PSMA, including the European Union as one Party representing its Member States. This is a remarkable rate of adherence that reflects the importance placed by States in combatting IUU fishing.

Between 2018 and 2020, the average degree of implementation of international instruments to combat IUU fishing has improved across the world. A composite measure of the degree of implementation of the five principal instruments, the world score for SDG indicator 14.6.1 rose from 3/5 to 4/5 over this period. On the basis of their reporting for SDG indicator 14.6.1, States have thus made good progress overall in carrying out the recommended measures to combat IUU fishing, with close to 75 percent scoring highly in their degree of implementation of relevant international instruments in 2020 compared to 70 percent in 2018. Small island developing States (SIDS), faced with particular challenges in fully implementing these instruments due to their large amounts of waters under their jurisdiction, registered a medium level of implementation both in 2018 and in 2020. The same level of implementation was found in least developed countries (LDCs) between 2018 and 2020, which often face challenges to implement these instruments. In terms of regional groupings, most have either remained at the same level of implementation or improved, the exception being Oceania (excluding Australia and New Zealand) and Sub-Saharan Africa.



Custodian agency(ies):

FAO

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 proportion of GDP in small island developing States, least developed countries and all countries

Sustainable fisheries are essential for equitable development

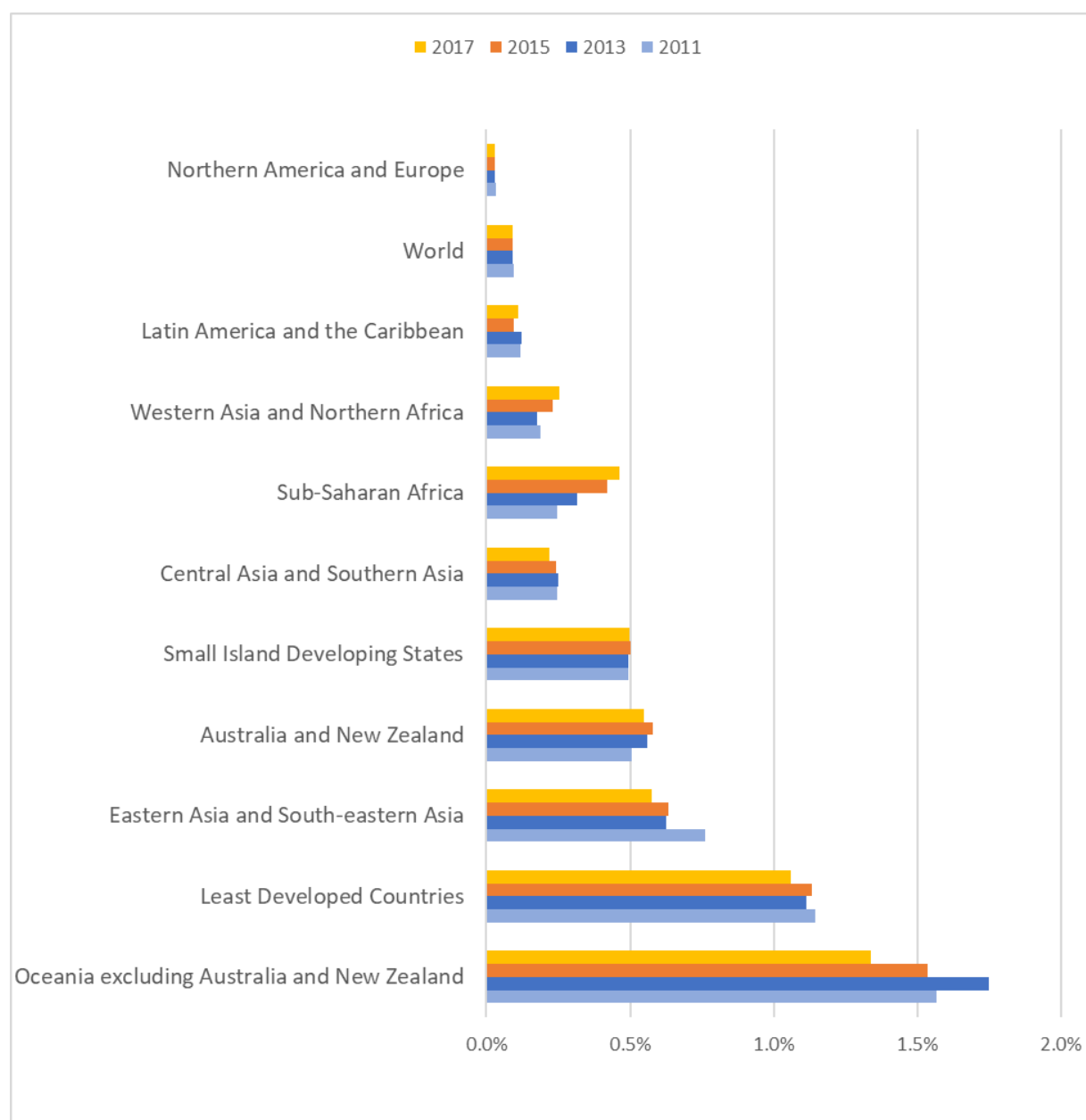
Sustainable fisheries have supported the livelihoods and food security of communities for millennia, playing an essential role in local economies and food security. Today sustainable fisheries account for approximately 0.1 per cent of global GDP, while in certain regions and Least Developed Countries they contribute more than 0.5 per cent. The sustainable management of fish stocks remains critical for ensuring that fisheries continue to generate economic growth and support equitable development, meeting the needs of today without compromising the ability of future generations to do the same.

Fish is now able to feed more people than ever before, providing livelihoods for millions worldwide while alleviating hunger and malnutrition. The global appetite for fish has driven production from 20 million tons in 1950, to about 179 million tons in 2018. As fisheries and aquaculture have expanded, so too have the economic dividends from the sector and its contribution to sustained economic growth. At a global level, the value-added of this sector has increased consistently, by several percentage points year on year. This has led to a positive trend in the contribution of sustainable fisheries in regions such as Sub-Saharan Africa, where it rose as a proportion of GDP from 0.25 per cent in 2011 to 0.46 per cent in 2017.

These economic dividends can only be sustained through prudent management of fish stocks that avoids overexploitation and depletion. The decline in fish stock within biologically sustainable levels continues, albeit at a slower rate, highlighting the need for improved regulations and effective monitoring. The declining sustainability of several stocks in the Pacific Ocean has led to a worsening overall trend for regions such as Southern and South-eastern Asia, where sustainable fisheries fell from 0.76 per cent of GDP in 2011 to 0.57 per cent in 2017.

COVID-19 poses further challenges for the industry. In the short-term demand has declined in many areas, with a drop in hospitality sales being particularly significant. This, in combination with logistical challenges and disruptions to production, has negatively impacted the profitability of the sector. While many of the long-term impacts COVID-19 remain to be seen, it is essential that fisheries management is empowered to operate effectively, and in combination with effective government policy ensure that fisheries recover in a sustainable manner that maximizes benefits.

Sustainable Fisheries as a Percentage of GDP



Custodian agency(ies):

FAO, UNEP-WCMC

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

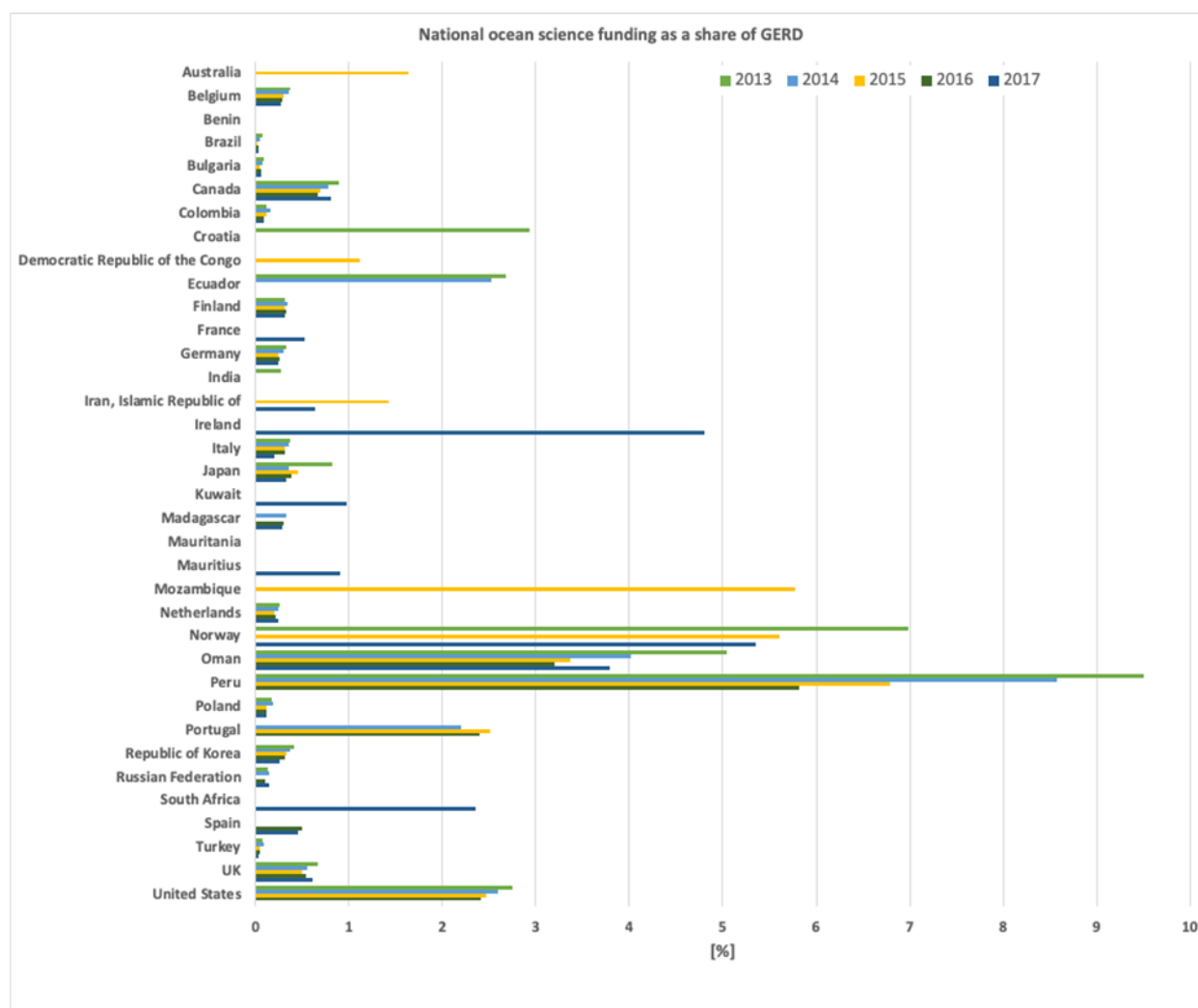
Indicator 14.a.1: Proportion of total research budget allocated to research in the field of marine technology

Funding for ocean science is insufficient to fill existing knowledge gaps and deliver the information required for decisions, tools and solutions leading to a sustainable ocean (SDG 14).

The availability and allocation of funding for ocean science continues to vary widely between countries and regions, with much lower budgets in developing countries. Currently, national governments are the key sources of financing for ocean science. Based on the global assessment conducted in 2020, the USA reports the highest budget for ocean and coastal activities, a figure which includes ocean science as well as other ocean and coastal government programmes, with more than US\$12 billion, followed by Japan (US\$600 million) and Australia (US\$511 million) in 2017. Six countries allocate budgets of over US\$200 million to ocean science: Norway (US\$367 million), France (US\$333 million), Germany (US\$312 million), the UK (US\$293 million), the Republic of Korea (US\$228 million) and Canada (US\$220 million). Ocean science budgets have varied significantly between 2013 and 2017. Based on the datasets, 14 countries increased their budgets on average over time (the Russian Federation had the highest annual growth rate, peaking at 10.4%, followed by the UK and Bulgaria), while 9 reduced them, in some cases quite markedly (particularly Japan, Ecuador, Turkey, Brazil and Italy). Given the estimated US\$1.5 trillion contribution of the ocean to the global economy in 2010 (OECD, 2016), ocean science funding seems remarkably small when compared to many other fields of research and innovation. The share of gross domestic expenditure on research and development (GERD) dedicated to ocean science is quite low. On average, around 1.2% of total GERD was attributed to ocean science between 2013 to 2017, with shares ranging from around 0.02% to 9.5%. Peru (9.5%) is the leading country in this respect, followed by Norway (7.0%), Mozambique (5.8%), Oman (5.0%) and Ireland (4.8%).

The sources of funding for ocean science have diversified over the years and today include national administrations, international programmes, the private sector, foundations and philanthropy, as well as new and innovative financing instruments. The number of private foundations, as well as the number of corporate donation programmes involved in ocean activities, is growing. Approximately US\$500.5 million were allocated to ocean-related projects in 2017, out of which US\$149.4 million were allocated to more than 1,000 marine science projects. Over the five years from 2013 to 2017, private foundations and donors provided around US\$668.2 million to marine science projects through more than 6,000 different grants.

The coronavirus (COVID-19) pandemic may have long-lasting impacts on the international ocean research landscape, with consequences for the re-prioritization of some programmes, long-term funding schemes and set-up of research infrastructures. In this context, the importance of ocean science will need to remain at the forefront, to face the challenges posed by intensifying economic activities in the ocean, its accelerating deterioration and the changing climate. In this context, there are many motivations for national investment in ocean science. Today, the quest for knowledge about the marine environment, climate and coastal processes is strongly associated with socio-economic and security considerations. Improved understanding about ocean processes and its resources, generated by ocean science, will increasingly be the foundation for managing activities in the ocean in a sustainable way.



Additional resources, press releases, etc. with links:

- Press release GOSR2020: <https://en.unesco.org/news/new-unesco-report-voices-concern-over-inadequacy-funding-ocean-research>
- GOSR portal: <https://gosr.ioc-unesco.org/home>
- Jolly, C., Olivari, M., Isensee, K., Nurse, L., Roberts, S., Lee, Y.-H. and Escobar Briones, E. 2020. Funding for ocean science. IOC-UNESCO, Global Ocean Science Report 2020—Charting Capacity for Ocean Sustainability. K. Isensee (ed.), Paris, UNESCO Publishing, pp 69-90.

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

Indicator 14.b.1: Degree of application of a legal/regulatory/ policy/institutional framework which recognizes and protects access rights for small-scale fisheries

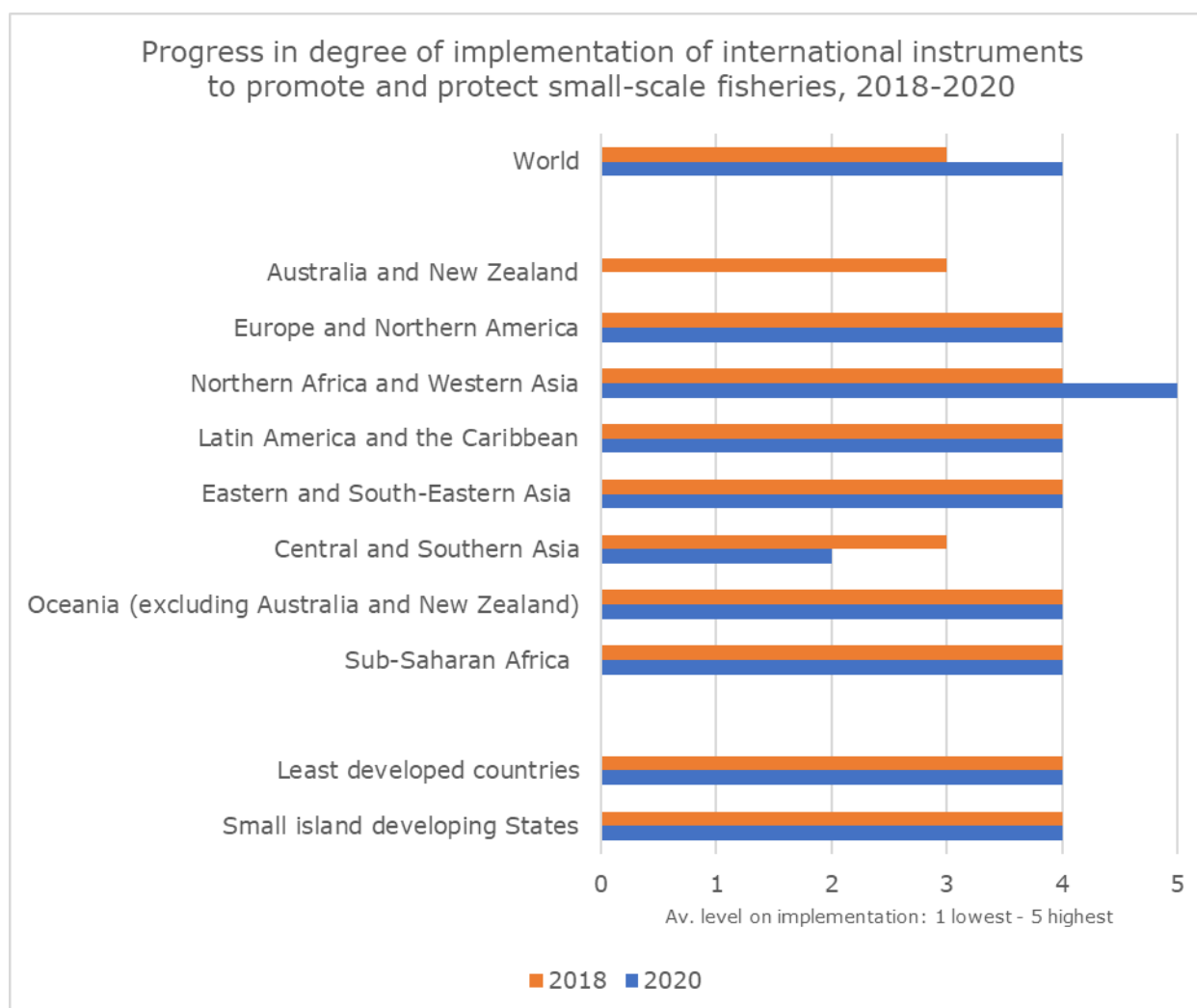
Increased support for small-scale fishers is critical in light of the coronavirus pandemic

As the world looks to the [International Year of Artisanal Fisheries and Aquaculture 2022](#), countries' commitment to providing access for small-scale artisanal fishers to marine resources and markets is gaining traction. Small-scale fishers, who account for more than half of total production in developing countries, continue to be among the most marginalized food producers, beckoning the international community to take action. There is evidence that the COVID-19 crisis is adversely affecting their livelihoods as global demand for seafood dwindles and transportation restrictions prevent market access.

At the same time, these small-scale food producers fulfil a vital role to nourish those depending on the sector and local communities in the current crisis. It is more important than ever for countries to support small-scale fishers as key contributors to sustainable food systems. Such action can be informed by adopting specific initiatives to implement the internationally agreed Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines), an internationally agreed instrument that promotes improved small-scale fisheries governance in value chains, post-harvest operations and trade, which include a dedicated chapter on Disaster Risks and Climate Change.

Since 2015, most regions have expanded the adoption of regulatory frameworks supporting small-scale fisheries and promoting participatory decision-making processes, including Small Island Developing States (SIDS), where up to 70 per cent of the people working in the fisheries sector are involved in small-scale fisheries. The average global score for SDG indicator 14.b.1 - a composite score for of implementation of legal / regulatory / policy /institutional frameworks which recognize and protect access rights for small-scale fisheries - has moved from 3/5 in 2018 to 4/5 in 2020. At regional level, Northern Africa and Western Asia reflect this leap, while Central and Southern Asia and Latin America and the Caribbean reduced their regional score from 3/5 to 2/5 and from 4/5 to 3/5 respectively, highlighting that efforts need to be redoubled and that there is no room for complacency. The other regions remained stable at a score of 4/5.

Among the main constituents of the composite score for SDG indicator 14.b.1, the adoption of specific initiatives to implement the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries reflects the lowest commitment by countries, despite their ability to guide actions to protect small-scale fisheries, particularly in the current circumstances. Only about half the countries in the world have adopted specific initiatives to implement the SSF Guidelines. The lack of financial resources and organizational structures among small-scale fishers are critical constraints, compounded by limited public awareness of the importance of small-scale fisheries, as well as piecemeal coordination with relevant national authorities.



Additional resources, press releases, etc. with links:

- SDG 14.b e-learning: <https://elearning.fao.org/course/view.php?id=348>
- FAO page on SDG 14.b.1 <http://www.fao.org/sustainable-development-goals/indicators/14.b.1/en/>
- Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines) <http://www.fao.org/voluntary-guidelines-small-scale-fisheries/en/>

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Target 14.c: Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, 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: 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 Nations Convention on the Law of the Sea, for the conservation and sustainable use of the oceans and their resources

Additional efforts are needed to achieve universal participation in and effective implementation of the 1982 United Nations Convention on the Law of the Sea and its implementing agreements

Many States around the world have ratified or acceded to the 1982 United Nations Convention on the Law of the Sea (UNCLOS) (168 parties) and its implementing agreements (150 parties for the 1994 Part XI Agreement, and 91 parties for the 1995 United Nations Fish Stocks Agreement). Moreover, a large number of states parties to these treaties have taken steps to implement them through legal, policy and institutional frameworks.

However, the extent of ratification, accession and implementation varies by country. With regard to ratification and accession, 60 per cent of the 45 countries score very highly (81-100), 24 per cent highly (61-80), and 16 per cent low (21-40) or very low (0-20). With regard to implementation, 50 per cent of the 42 countries score very highly (81-100), 19 per cent highly (61-80), 12 per cent medium (41-60), and 19 per cent low (21-40) or very low (0-20). Further progress is required in several developing countries, in particular least developed countries (LDCs) and landlocked developing countries (LLDCs).

Effectively implementing UNCLOS and its implementing agreements requires understanding existing bottlenecks preventing countries from doing so through legal, policy and institutional frameworks. Targeted and sustained capacity development initiatives, particularly for supporting developing countries, would be key for removing such obstacles, facilitating participation in the above-mentioned instruments and other ocean-related instruments and ultimately enhancing the conservation and sustainable use of oceans and their resources.

The first data collection for this indicator was completed in 2021 and resulted in 45 States as well as the European Union providing data on ratification of, accession to and implementation of UNCLOS and its implementing agreements. However, going forward, the collection of data from more States, in particular those from regions where responses to the questionnaire were limited or not received, such as Oceania (excluding Australia and New Zealand), would be critical.

Additional resources, press releases, etc. with links:

- Report of the Secretary-General on Oceans and the law of the sea, A/75/340 (2020)
- Summary of the second World Ocean Assessment, A/75/232/Rev.1 (2020)
- Note by the Secretary-General, Preparatory process of the 2020 United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development, A/74/630 (2019)
- Note by the Secretary-General, Preparatory process of the United Nations Conference to Support the Implementation of Sustainable Development Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development, A/71/733 (2017)
- UN Treaty Section website: <https://treaties.un.org/Pages/Treaties.aspx?id=21&subid=0&lang=en&clang=en>
- UN DOALOS website: https://www.un.org/Depts/los/convention_agreements/convention_overview_convention.htm

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UN-DOALOS and other UN-Oceans members