



Sustainable Development Goal - 14

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Dear Friends,

This month we shall discuss the 14th Sustainable Development Goal: 'Life below Water'. In this blog, we shall try to explain:

- a. What it is and why is this relevant
- b. What are its indicators and targets
- c. Where do we stand in India
- d. What can we do to support the goal

As stated earlier, I have little to contribute on my own. I have attempted to provide a few references, so that if anyone is interested in probing deeper, you could do so.



What is SDG 14? [1]

The purpose of SDG 14 is to 'Conserve and sustainably use the oceans, seas and marine resources'. One common example of non-sustainable use of the oceans and seas is over-fishing. Modern fishing trawlers scrape the bottom of the seas to catch all fish, so much so that the fish population is unable to regenerate itself, leading to the loss of livelihoods of all small coastal fishermen depending upon fishing. The case of the closed fisheries in Newfoundland was quoted by Prof. Johan Rockstrom in the PBHO MOOC. Similarly, ocean acidification leads to the death of coral reefs. Plastic waste ultimately reaches the oceans, adversely affecting marine lives. The definition of sustainable development calls for inter-generational equity, i.e. ensuring that we do not consume so much that nothing is left for the next generation. However, in this case of over-fishing, we are impacting the lives of people in our own generation!

Why is this important? [2]

Unknown to most of us, oceans touch and govern every dimension of our life on earth. The annual monsoon comes to mind first. Our fresh water requirements are refilled annually. The weather depends on the ocean currents, we get a lot of food from the seas, and 'even the oxygen in the air we breathe, are all ultimately provided and regulated by the sea' [1]. However mindless human activities on land (agriculture, pesticides, and untreated sewage and CO₂ emissions) are damaging the health of the oceans. These are leading to increasing eutrophication, acidification, and ocean warming and oxygen loss.

The lives of an estimated 3 billion people on Earth depends on oceans, and they play a vital role in mitigation of impacts of global warming, by absorbing 30% of the CO₂ emissions. Around 80% of all global trade happens through sea routes.

These are some of the reasons for conserving and sustainable using all marine resources.

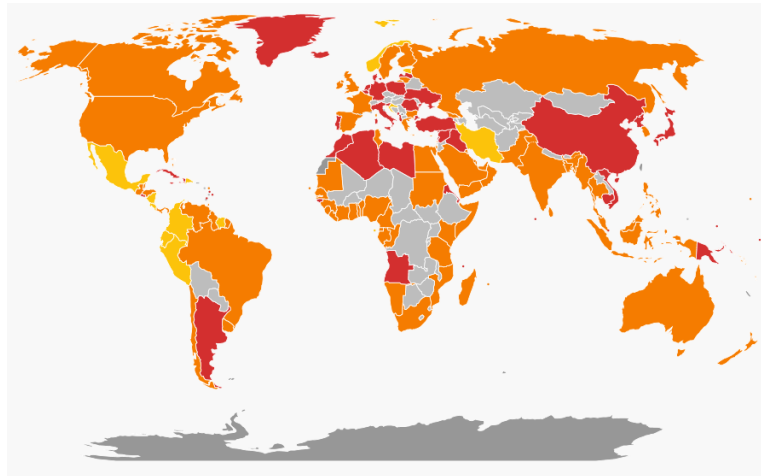
What are its indicators and targets? [1, 3]

The targets for SDG-14 are as under:

- 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
- 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
- 14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels
- 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
- 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
- 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
- 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
- 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
- 14.B** Provide access for small-scale artisanal fishers to marine resources and markets
- 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

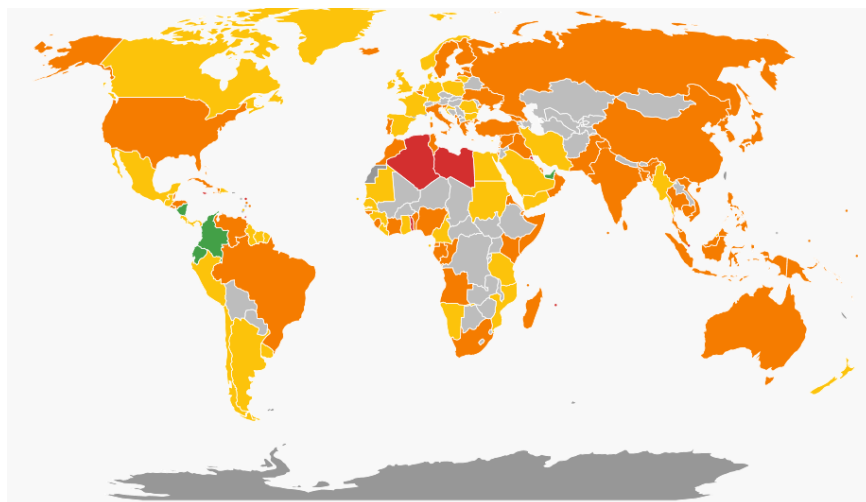
Where do we stand in India?

The following images [4] offer some national as well as global status on SDG-14 and trends:



Status of SDG-14 in 2020

The above figure shows that the status in India comes under the category ‘Significant challenges remain’, while the trend (below) shows that like most other parts in the globe, India is ‘Stagnating’.



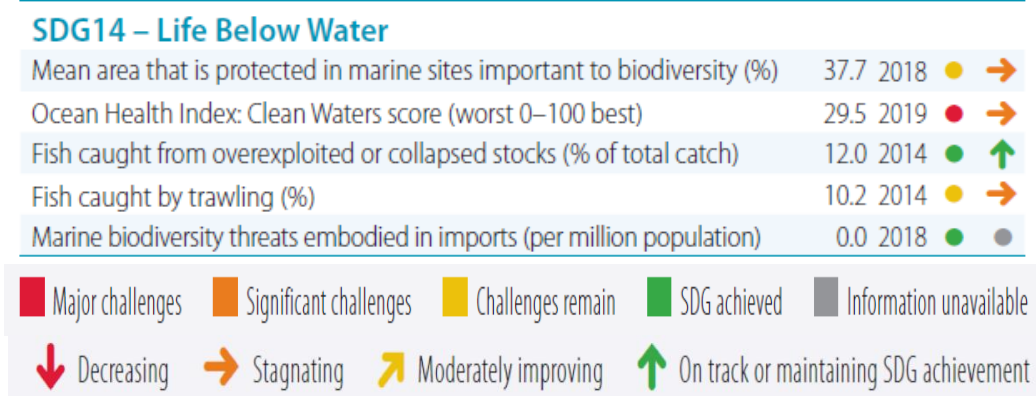
Trends SDG-14 in 2020

Specifically, India’s standing in 2019 [5] is shown below:

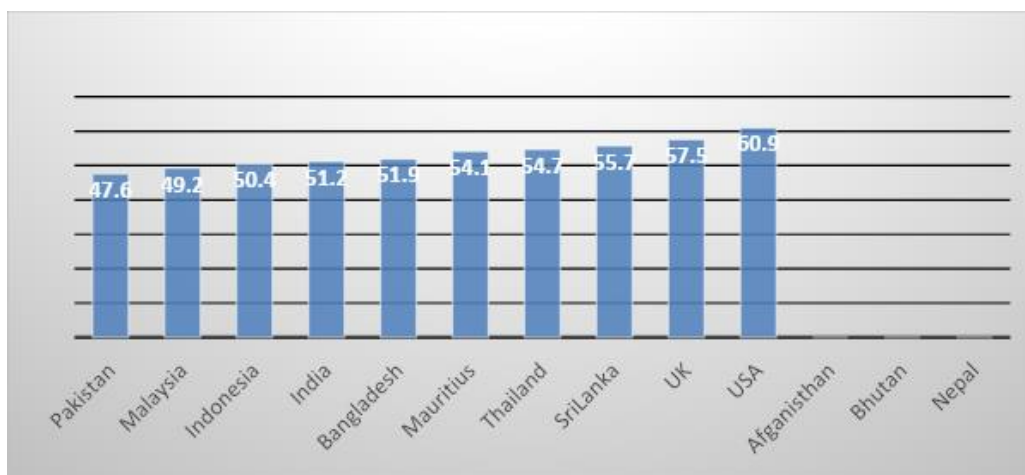
SDG14 – Life Below Water

Mean area that is protected in marine sites important to biodiversity (%)	29.0	●	→
Ocean Health Index Goal-Clean Waters (0-100)	22.7	●	→
Percentage of Fish Stocks overexploited or collapsed by EEZ (%)	12.4	●	↑
Fish caught by trawling (%)	10.2	●	→

The standing in 2020 [6] is as under:



In the following graph we offer a comparison of SAARC nations, 3 ASEAN countries and UK, and USA on the performance on SDG-14 in 2019. India is ahead of Pakistan, Indonesia and Malaysia, but trails behind the rest of the countries, including the neighbouring Bangladesh by a small margin. The key indicators are: coastal eutrophication; and plastic debris density, ecosystem-based approaches to managing marine areas, average marine acidity, and proportion of fish stocks within biologically sustainable levels and coverage of protected areas in relation to marine areas.



If we look at the indicators level, the comparison is shown below [5]:

This data should be cited as: Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (2019): Sustai

Country	Normalized Score sdg14_cp ma	Dashboard Color sdg14_cp ma	Normalized Score sdg14_cle anwat	Dashboard Color sdg14_cle anwat	Normalized Score sdg14_fis hstocks	Dashboard Color sdg14_fis hstocks	Normalized Score sdg14_tra wl	Dashboard Color sdg14_tra wl
Afghanistan								
Bangladesh	25.85	orange	0.00	red	98.13	green	83.54	yellow
Bhutan								
India	29.02	orange	0.00	red	86.28	green	89.66	yellow
Mauritius	8.67	red	45.78	orange	68.18	yellow	93.80	green
Nepal								
Pakistan	39.28	yellow	20.24	red	56.67	orange	74.25	yellow
Sri Lanka	43.40	yellow	38.63	red	79.91	green	60.91	orange
Indonesia	27.66	orange	38.05	red	76.08	green	59.69	orange
Malaysia	25.06	orange	49.79	orange	74.10	green	47.91	orange
Thailand	64.11	green	34.79	red	38.67	red	81.23	yellow
United Kingdom	83.38	green	48.15	orange	77.43	green	21.13	red
United States			64.43	green	66.86	yellow	51.28	orange
China	18.81	orange	1.62	red	90.51	green	33.71	red

Marine sites protect Ocean health Fish stocks Fish caught trawling

What can we do to support the goal?

We offer below, some highlights from the INDIA VNR 2020 on SDG 14 Life below Water [7].

SDG 14 holds an important promise for India. With a coastline of more than 7500 Kms, mangrove cover of around 4,900 sq.km, and 2 million sq. km of Exclusive Economic Zone, India is the second largest producer of fish in the world. Shipping accounts for about 95% of India's global trade. The 2020 Voluntary National Report of India acknowledges the in-built strengths as well as the challenges facing the nation on this front. Several initiatives, both at the central and state levels are listed as under:

A signatory to the MARPOL (International Convention on Prevention of Marine Pollution),
Coastal Ocean Monitoring and Prediction System,
Online Oil Spill Advisory System,
National Oil Spill Disaster Contingency Plan,
Marine Litter and Micro plastics research programme,
Marine Observation System Along the Indian Coast (MOSAIC),
25 MPAs (Marine Protected Areas),
106 sites earmarked as Important Coastal and Marine Biodiversity Areas (ICMBAs),
Mangrove For the Future (MFF) programme, with IUCN, UNDP,
National Strategy and Action Plan for mangroves and the coastal ecosystem,
Coastal Regulation Zone (CRZ),
Integrated Coastal and Marine Area Management (ICMAM),
Indian National Centre for Ocean Information Services (INCOIS), and
Coral Bleaching Alert System (CBAS)

We could actively engage with the fishing communities, to spread awareness of the multiple initiatives, and try to educate all concerned groups upon the importance and benefits of preserving our water bodies, shorelines, mangroves and adopt value additive measures to augment income from marine resources.

References

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2. 14_Why-it-matters.pdf
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4. SDG Index Dashboard
<https://dashboards.sdgindex.org/#/IND> Accessed on May 28 2020 14:10 IST
5. Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G. (2019): Sustainable Development Report 2019. New York: Bertelsmann Stiftung and Sustainable Development Solutions Network (SDSN).
6. Sachs, J., Schmidt-Traub, G., Kroll, C., Lafortune, G., Fuller, G., Woelm, F. 2020. The Sustainable Development Goals and COVID-19. Sustainable Development Report 2020. Cambridge: Cambridge University Press.
7. VNR_2020_India_Report.pdf

