HOW TO SAVE OUR HIGH SEAS FROM OVERFISHING, POLLUTION

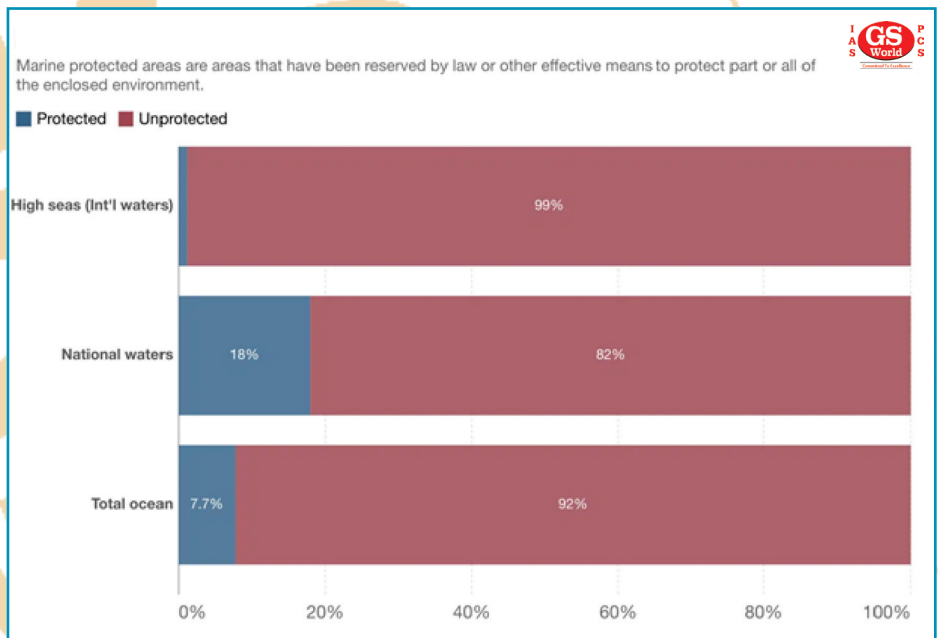**Indian Express**

Paper-III (Environment & Ecology)

While the high seas make up more than 60% of the world's oceans, they have long drawn far less attention than coastal waters. The UN wants to protect them in a global treaty. Here's why that's so important. Vast parts of the world's oceans are still the Wild West when it comes to conservation.

Current Scenario

Fishing, shipping, tourism and ocean protection are currently controlled by around 20 organizations. However, their regulations only apply to a distance of 200 nautical miles (370 kilometers) from the coast. Farther out, international waters start, and individual states don't have any power or say. Although the high seas make up more than half of the surface of the Earth and 61% of all oceans, only 1% of international waters are under protection.

Illegal fishing, overfishing and other forms of damage to the ecosystem, such as deep-sea mining, oil and gas drilling, can hardly be monitored, tracked or prosecuted in a consistent way.

That's why government officials from 51 countries want to now negotiate the High Seas Treaty at the United Nations in New York. The treaty has been in the works for years and is supposed to protect species and allocate the oceans' resources in a sustainable way.

Marine protected areas are areas that have been reserved by law or other effective means to protect part or all of the enclosed environment.

■ Protected   ■ Unprotected

	Protected	Unprotected
High seas (Int'l waters)		99%
National waters	18%	82%
Total ocean	7.7%	92%

0%   20%   40%   60%   80%   100%

Why is a healthy underwater world so important for humans and our planet?

The resources of the ocean don't just sustain coast dwellers, but almost 3 billion people worldwide. The entire sea industry has a worth of $3 trillion (€2.8 trillion) — that's 5% of the world's gross domestic product. The ocean isn't just important for beach tourists and fishers. We also need it in order to generate sustainable wave and tidal energy, as well as for the production of commodities and even medicine.

Legal Boundaries of the Oceans and Airspace

Some agents used to fight leukemia, for instance, are derived from a shallow water sponge called Tectitethya crypta, which can be found in the waters of the Caribbean. The poison of the fish-eating sea snail Conus magus is being used to develop an effective painkiller. Many similar possibilities have yet to be explored, but scientists see a huge potential for the treatment of diseases.

## Why climate change is stressful for oceans

More than half of the total amount of oxygen in our atmosphere is created by creatures in the ocean. At the same time, oceans store 50 times more carbon dioxide than what's currently found in our atmosphere. The warmer the ocean gets, the less CO2 it can store. It's a vicious cycle: the warmer it gets, the less our oceans can protect the planet from even more extreme weather events.

If temperatures keep increasing at their current speed, scientists believe many shellfish such as mussels and snails will not survive. That's due to ocean acidification: if the CO2 content in the seawater increases, the PH level in the water changes. The increasing acidity hampers the creation of the chalky shells of the animals. This throws entire biospheres off-balance, and could threaten entire economic sectors, such as the breeding of oysters and mussels.

The rising temperatures in the atmosphere triggered by the burning of coal, oil and gas also change ocean currents as the water gets warmer. This can already mean death for many creatures, such as corals. Corals live in symbiosis with colorful algae which help feed them. The warming of the water can lead to algae death, which means more stress for corals, leading to many losing their color, which is also known as coral bleaching.

How can we protect ocean ecosystems?

If nothing changes, half of all sea dwellers will be critically endangered by the end of this century, according to estimates by UNESCO. This doesn't necessarily mean we can't use the ocean any longer. It just means we have to use it in a way that doesn't harm it, or at least only harms it to the extent that it can regenerate on its own.
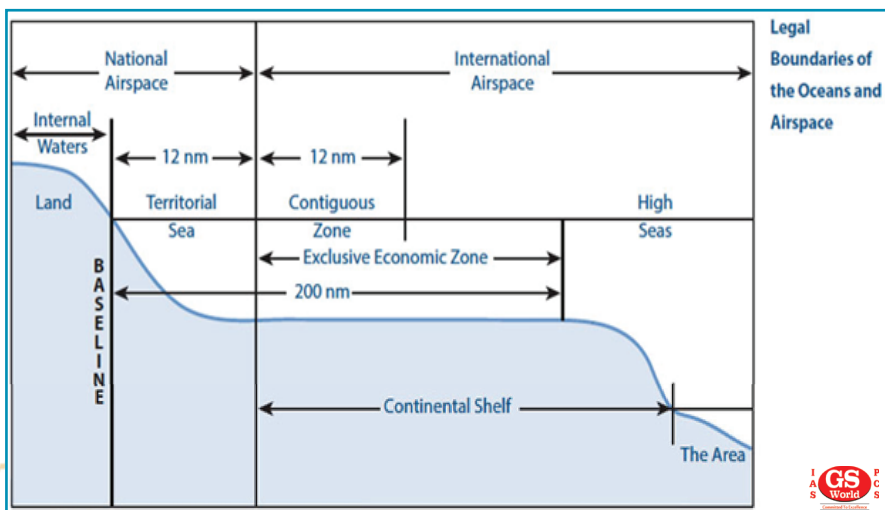
Every year, we toss away 10 million tons of fish — that could fill more than 4,500 swimming pools — because of bad fishing practices and processing. This could be prevented, and in turn directly decrease pressure on our oceans.

Another example: sewage. Around 80% of global wastewater is currently being diverted into oceans, unfiltered. In the poorest countries of the world it's even up to 95%. This wastewater pollutes, contaminates and destroys oceans and coastal regions. Building sustainable sewage systems, especially in developing countries, would protect ocean ecosystems and contribute to better drinking water supplies in many places.

Will a new treaty help?

According to the UN's environment program, international treaties are one of the best ways to stop the destruction of oceans. Many treaties have been signed in recent years regarding the protection of coastal regions. Some have already had a positive effect on the environment; many, however, have not been able to reach their goals. That has to do with the fact that agreements are always dependent on national parliaments turning them into laws, and allocating enough resources to institutions and projects so the goals can be reached.

The EU is pushing for an ambitious new treaty for species protection and the implementation of the historic 2022 Kunming-Montreal Global Biodiversity Framework. Part of this historic agreement is to put 30% of the globe under protection until 2030. Meanwhile, 18 developing and emerging nations are pushing for the introduction of a mechanism that guarantees the fair distribution of ocean resources.

Regulation of the high Seas

- The high seas are defined by international law, as all parts of the ocean that aren't included in the exclusive economic zone, the territorial sea, or the internal waters of a country, or in the archipelagic waters of an archipelagic country. This essentially means that the high seas and associated resources are not directly owned or regulated by any country.

- The high seas are some of the most biologically productive in the world teeming with plankton and home to ocean giants like predatory fish, whales, and sharks. The seabed sequesters tremendous amounts of carbon and the ocean volume traps heat slowing the effects of climate change on land and in the atmosphere dramatically.

- Coastal countries generally control the 200 nautical miles of ocean, that is, the water column and seafloor extending out from their coasts. These 200 nautical miles are known as a country's "exclusive economic zone (EEZ)," where the exploration and use of marine resources is a sovereign right. The high seas refers to the ocean water column that lies beyond the boundaries of any one country, also known as areas beyond national jurisdiction (ABNJ).

- The seafloor beyond the limits of the coastal continental shelf is what is termed "the Area" by the 1982 United Nations Convention on the Law of the Sea (UNCLOS). The International Seabed Authority (ISA) is mandated, to regulate the exploration for, and exploitation of, seabed mineral resources in the Area for the benefit of humankind. The ISA has the power to allocate certain parts of the Area to countries for exploration and mining.

- Since 2017, an Inter-Governmental Conference established by the United Nations General Assembly has been negotiating an agreement under UNCLOS that would allow for more effective management and protection of the high seas. This internationally legally binding instrument is often referred to as the Biodiversity in Areas Beyond National Jurisdiction treaty or "BBNJ treaty." However, the final agreement on the BBNJ treaty has not yet been reached.

- The BBNJ Treaty, also known as the "High Seas Treaty", is an international agreement on the conservation and sustainable use of marine biological diversity of areas beyond national jurisdiction currently under negotiation at the United Nations.

What is Overfishing?

- Overfishing is in some sense a rational reaction to increasing market needs for fish. Since the 1960s, the world's population has nearly quadrupled. With it came a revolution in lifestyle and food habits. Nowadays, people consume more than twice as much seafood as they did 50 years ago, with per capita aquatic food consumption growing from an average 9.9 kilogrammes to a staggering 20.2 kilogrammes in 2020.

- The fish market is now valued at US$406 billion and global fisheries and aquaculture production has reached an all-time high of 214 million metric tons in 2020 according to the UN State of World Fisheries and Aquaculture Report 2022.

- Unsurprisingly, the rising demand for seafood resulted in a steady decline in fishery resources due to overfishing, pollution, poor management, and other factors. Today less than 65% of stocks are considered to be fished within biologically sustainable levels, with the remaining part being classified as "overfished". This means that the stock of available fishing waters is being depleted faster than it can be replaced. The report also categorises more than 57% of all stocks as "maximally sustainably fished" and only 7% of stocks as "underfished."

Expected Question

Que. Consider the following statements-

1. The BBNJ treaty aims to "ensure the conservation and sustainable use of marine biological diversity in areas beyond national jurisdiction".

2. The International Maritime Authority (ISA) regulates the exploration and exploitation of minerals found in the deep seabed.

    Which of the statements given above is/are correct?

(a) Only 1   (b) Only 2

(c) Both 1 and 2   (d) Neither 1 nor 2

Answer : C

Mains Expected Question & Format

Que.: 'Apart from climate change, overfishing is also having a harmful effect on the ocean ecosystem.' Discuss the risks posed by it and the measures to save the ocean ecosystem.

Answer Format :

❖ Explain how climate change and overfishing are affecting the ocean ecosystem.

❖ State the risks arising out of.

❖ Explain the ways to save the ocean ecosystem.

❖ Give a balanced conclusion keeping in view the need of the future.

Note: - The question of the main examination given for practice is designed keeping in mind the upcoming UPSC mains examination. Therefore, to get an answer to this question, you can take the help of this source as well as other sources related to this topic.