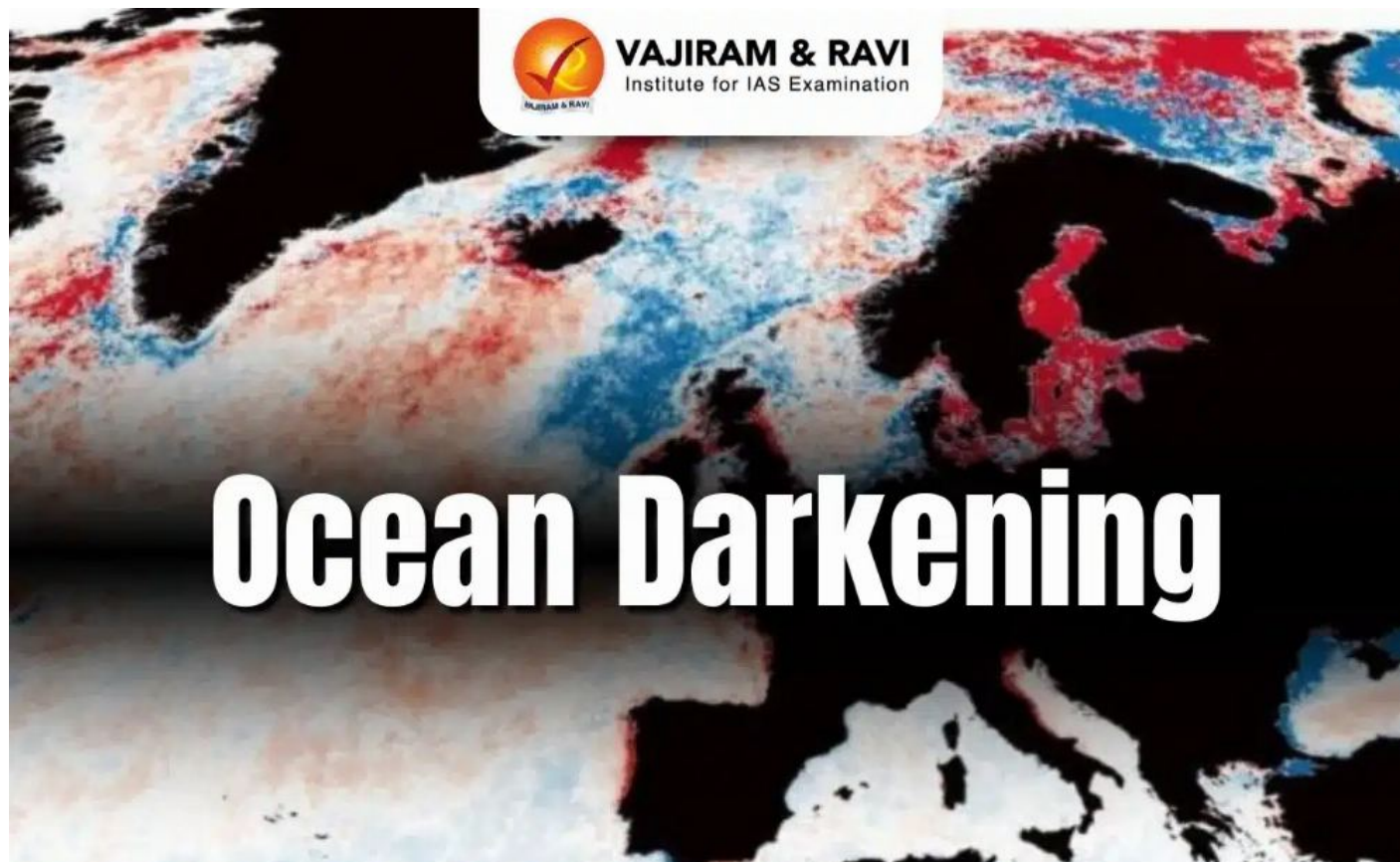


What is Ocean Darkening?

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Ocean Darkening Latest News

A new study seems to suggest that more than one-fifth of the global ocean has considerably darkened in the last two decades.

About Ocean Darkening

- Darkening of the ocean is essentially **shrinking of the photic zones** or those layers of water where sunlight can pass and induce the process of photosynthesis which is key to all biological processes.
- The photic layers can go **down to about 200 meters** and they also act as a base for nearly 90 per cent of the world's marine life.
- This layer is responsible for **increasing the productivity** of the ocean which also involves **regulating climate** and even supporting **global fisheries or related activities**.
- A new study seems to suggest that more than one-fifth of the global ocean has considerably darkened in the last two decades.

Why is Ocean Darkening happening?

- In **coastal zones**, darkening is usually due to **higher runoff of agricultural nutrients**, organic matter, and sediments into the ocean with rain which directly promotes algal blooms that block light.
- In the **open ocean**, the likely causes are **changes in plankton dynamics**, increase in **sea surface temperature** and changes in **ocean circulation**.

Impacts of Ocean Darkening

- The contraction of photic zones may **lead to fundamental shifts in marine ecosystems**. Those species that use sunlight and moonlight cues to feed, move, hide, and reproduce will be competing for shallower zones.
- This **might upset marine food webs** that are already working hard against an ecosystem with minimal fishing activity.

Source: **IE**

Source: <https://vajiramandravi.com/current-affairs/what-is-ocean-darkening/>

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