



SEAGRASS
ECOSYSTEM SERVICES
PROJECT

**MITIGATING CLIMATE CHANGE
BY CONSERVING SEAGRASS
AND THE BIODIVERSITY IT SUPPORTS**





Mitigating climate change by conserving seagrass and the biodiversity it supports -

(2019-2023 - € 4,780,000)

What?



Conservation of biodiversity, seagrass ecosystems and their services – safeguarding food security and resilience in vulnerable coastal communities in a changing climate.

Where?

- INDIA
- INDONESIA
- MALAYSIA
- PHILIPPINES
- THAILAND
- TIMOR-LESTE



How?

The Seagrass Ecosystem Services Project works in partnership with technical and scientific experts to empower local NGOs and coastal communities at the project sites to protect seagrass ecosystems through:



Assessing seagrass health and ecosystem services.



Empowering coastal communities with citizen science.



Integrating seagrass into policy frameworks.

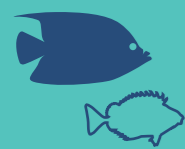


Diversifying livelihoods by developing community-led enterprises.



Advocating the value of seagrass.

What services do seagrass ecosystems provide?



Fisheries: seagrasses support global fisheries and provide nursery habitats for commercially targeted fish, bivalve and crustacean species.

Biodiversity: by providing shelter and feeding grounds, seagrass meadows are hotspots of marine biodiversity, including megafauna species such as dugongs and turtles.



Climate regulation: seagrass meadows store large amounts of carbon in the biomass and sediment below, helping to mitigate climate change.



Ocean acidification buffer: seagrass meadows regulate the chemical composition of seawater by releasing oxygen and removing carbon dioxide.

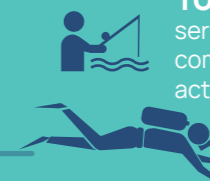


Coastal protection: seagrasses prevent coastal erosion and protect from flooding and storm surges.

Water filtration: Seagrasses improve water quality by filtering, cycling and storing excessive nutrients and pollutants.



Disease control: Seagrasses reduce exposure to bacterial pathogens for fish, humans and invertebrates by removing microbiological contamination from seawater.



Tourism: Seagrass meadows provide cultural services such as sense of identity for local communities and opportunities for recreational activities (e.g. Birdwatching, diving, fishing).

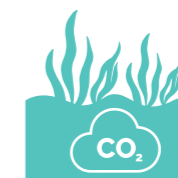
What are seagrasses?

Found all over the world, seagrasses are flowering plants that grow in meadows along shallow coastal areas.

Did you know that seagrass ...



Covers only **0.1%** of the ocean floor.



Stores **19.9** gigatons (**18%**) of the world's blue carbon, making it one of the most efficient nature-based solutions to climate change.



Sustains charismatic and vulnerable species like dugong.



Supports at least **200** fish species and **20%** of the world's biggest fisheries, which have a minimum total value of **€200**m/yr.



Protects coastlines by reducing wave energy by **40%**.



Only **26%** of seagrass meadows fall within MPAs, compared to **40%** of coral reefs and **43%** of mangroves.



Is disappearing at a rate of **7%** per year – the equivalent to one football field every **30** minutes. Mostly due to human activities.

Conserving and restoring seagrass meadows contributes to achieving **16** out of the **17** Sustainable Development Goals – “the most important to-do list in the history of humankind” - through the conservation and restoration of seagrass meadows.



Source: UNEP (2020) Out of the blue: The value of seagrasses to the environment and to people.

For more information, please visit www.dugongseagrass.org

