



**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?

- 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.

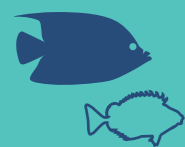


Diversifying livelihoods by developing community-led enterprises.



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](http://www.dugongseagrass.org)

