



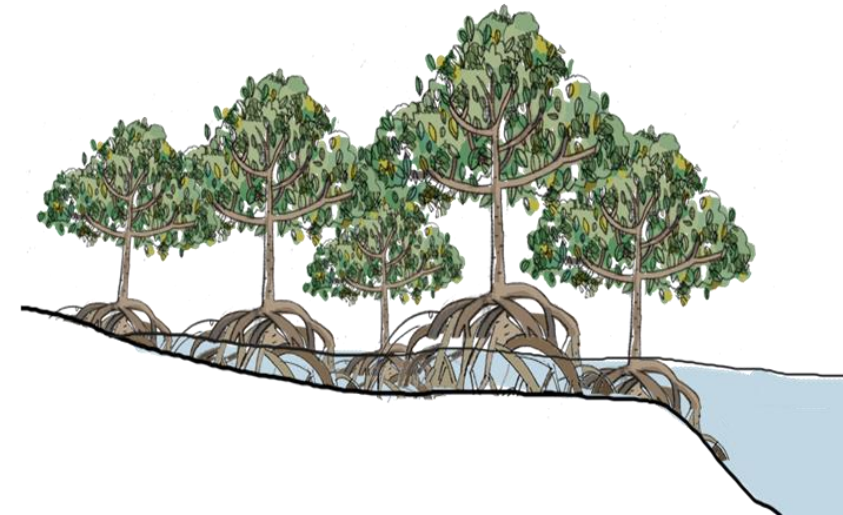
UNITED ARAB EMIRATES
MINISTRY OF CLIMATE CHANGE
& ENVIRONMENT

Coastal Ecosystem Restoration in the UAE

Bonn Climate Conference - SB58

Ocean and Climate Change Dialogue

June 2023



Introduction

The United Arab Emirates (UAE) is a federation of seven emirates located in the Arabian Peninsula in Southwest Asia.

It's bordered by Oman and Saudi Arabia and shares maritime borders with Iran and Qatar.



UAE: Eco-System Competencies Nationally and Globally

39th Globally
Environmental Performance Index 2022

1st Globally

- Marine Protected Areas
- Ecosystem Services
- The Scarcity Of Wetland Regression

16
Marine protected areas

3rd Globally **1st** Regionally
Index Of Ecosystem Vitality

1st Regionally
Index of biological diversity and natural habitats

50+
Habitats species @ UAE

UAE is

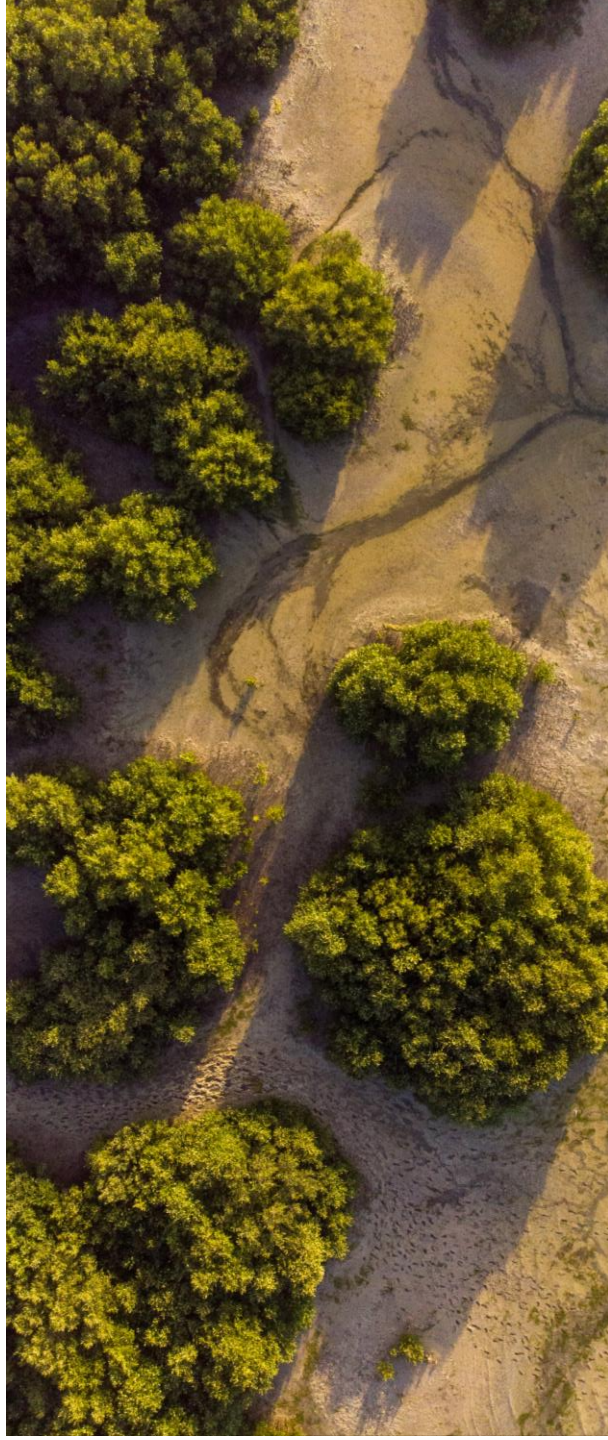
10th Globally **1st** Regionally
in the size of natural reserves relative to the population

The UAE has the **Largest Congregation Of Dugongs** in The World After Australia

The country is home to more than

60 Million mangrove

With the additional 100 million mangroves planted, the UAE's mangrove forests will sequester nearly **115,000 tons of CO2 per year**



National Biodiversity Strategy enablers

The UAE's capacity to carry out Nature-Based Solutions (NbS) is bolstered by various key enablers:

01
Ecological Diversity

02
Policy & Regulatory Framework

03
Technological Advancements & Innovation

04
Research & Development (R&D)

05
Public-Private Partnerships (PPPs)

06
Public Awareness & Engagement



Mangroves as a climate solution

01

Their carbon storage potential is 3 to 4 times higher than that of tropical forests.

02

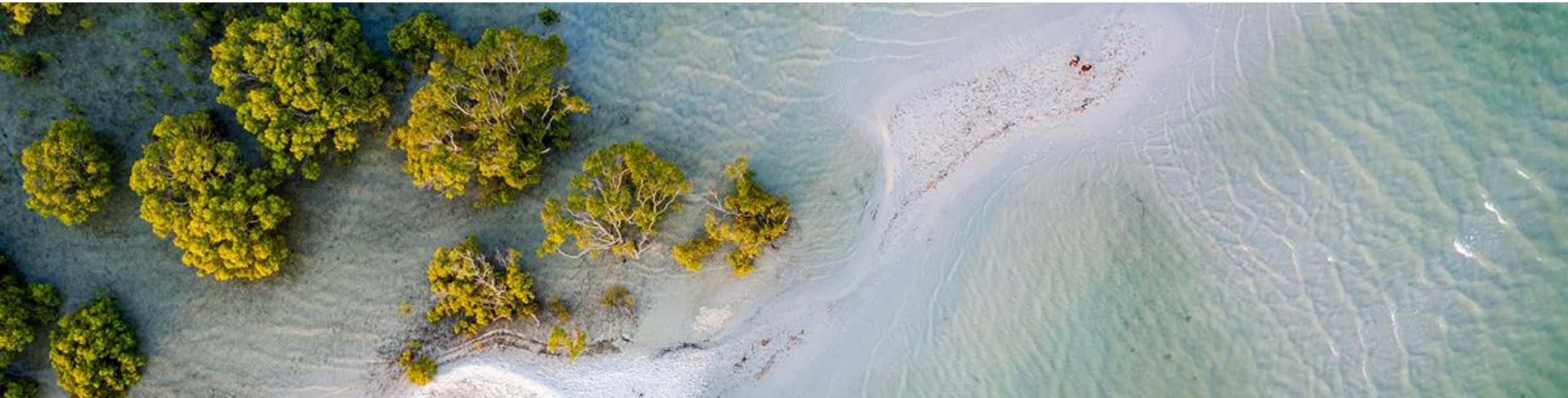
They provide a habitat for up to 80% of fish populations.

03

Mangrove systems provide shelter to a range of wildlife species including birds, deer and honey bees.

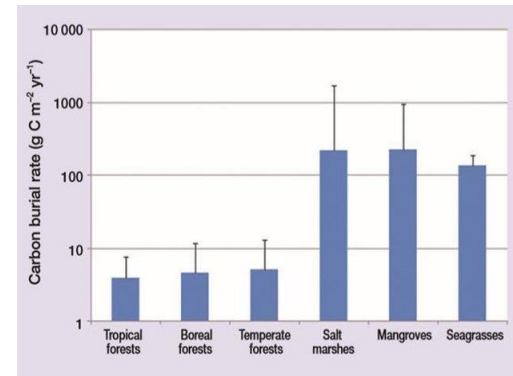
04

They prevent erosion and stabilize shorelines.



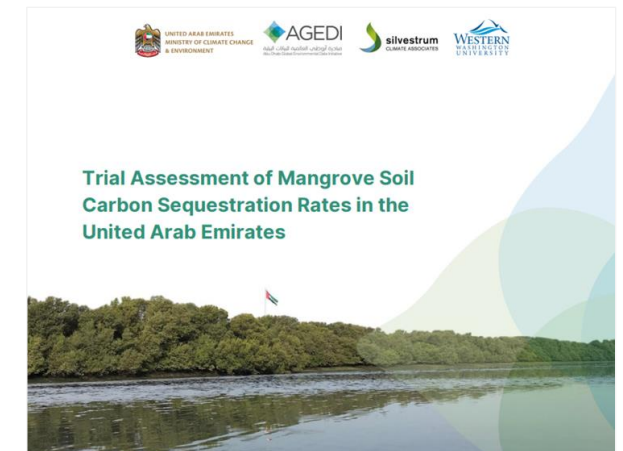
Blue Carbon and co-benefits

1. The Abu Dhabi Blue Carbon Demonstration Project (2013-2014) covered Abu Dhabi Emirate
2. National Blue Carbon Project (2014-2015), covered the Northern and Eastern Emirates
3. Mangrove Soil Carbon Sequestration of the United Arab Emirates: Trial Application (2019-2020) covered Abu Dhabi, RAK, Sharjah, and Dubai
4. Assessment of one oceanic blue carbon mechanism in the UAE: Biomass Carbon Audit Test case with a focus on Abu Dhabi Emirate etc.



Comparison of carbon burial rate per year for terrestrial and coastal habitats.

Source: Mcleod et al. (2011)



Blue Carbon and co-benefits: A Multi-habitat approach

A holistic approach to evaluate carbon and co-benefits for multiple habitats (mangroves, seagrass, saltmarshes, mudflats) taking a 'seascape approach'

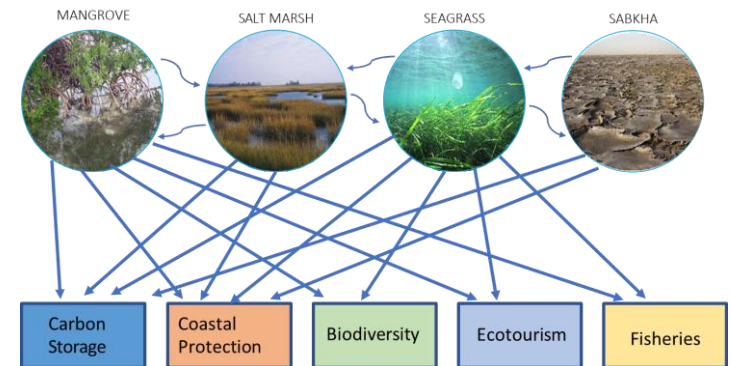
BLUE CARBON

- **Cumulative carbon storage:** mangroves account for the largest carbon storage; 40% in the study areas (primarily attributed to living biomass such as roots, branches, stems, etc.)
- **Carbon stored/ha in the soil:** similar carbon stored/ha by mangroves, saltmarshes, mudflats and microbial mats in the intertidal areas



BIODIVERSITY & NATURAL CAPITAL

- **Coastal lagoons are important areas for biodiversity:** critical habitats for sharks, marine turtles, fish nurseries, migratory birds (eg. Important Bird Areas)
- **Contributing to UAE Natural Capital Initiative** and supporting multi-lateral partnership to unlock blended finance for nature and climate



Thank you!

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