

Blue carbon in the Western Indian Ocean

Grimsditch Gabriel

International Union for Conservation of Nature (IUCN), Maldives

E-mail: gabriel.grimsditch@gmail.com

'Blue carbon' is defined as the carbon that is captured and stored by the world's oceans and coastal ecosystems. Carbon is captured by living organisms in the oceans and stored in the form of biomass and sediments. Of particular interest for sustainable coastal management is the carbon stored in mangrove, saltmarsh and seagrass ecosystems. Carbon concentrations in these coastal ecosystems have been found to be much higher per unit area than terrestrial carbon-rich ecosystems such as rainforests; raising the importance of managing coastal ecosystems in the context of climate change mitigation. As scientists discover more about the carbon being sequestered in coastal ecosystems, so policy-makers explore more options for leveraging climate change financing for sustainable coastal ecosystem management. In addition, sustainable management of coastal ecosystems can also maintain and enhance valuable ecosystem services that are the lifeline of many coastal communities in the Western Indian Ocean. As well as carbon sequestration and climate change mitigation, coastal ecosystems can also provide critical goods and services such as shoreline protection, food production from fisheries, nutrient cycling, water quality maintenance, revenue from tourism, among others.

This presentation will provide a global overview of the current state of blue carbon and coastal ecosystem services scientific knowledge. It will then focus on studies and case studies relevant to the Western Indian Ocean. It will go on to explore the various policy and financing mechanisms that are being developed for blue carbon communities around the world. Finally it will present the largest comprehensive blue carbon project in the Western Indian Ocean; the GEF/UNEP/GRID-Arendal Blue Forests project which involves a large network of partnerships in the region.