





Session 4: Supporting SDG delivery

NB: The paper on Marine Protected Areas (MPAs) Outlook will be presented as part of Paper 2 in Session 3

Paper 4: Role of critical ecosystems in climate change adaptation and mitigation *Western Indian Ocean Mangrove Network*

Blue carbon describes the carbon storage potential of vegetated coastal ecosystems, including tidal marshes, mangrove forests, and seagrass meadows soil. Although they occupy less than 0.5% of the world's ocean surface area, these coastal ecosystems are estimated to bury nearly 70% of the carbon sequestered in the world oceans.

Blue carbon ecosystems, however, are being degraded globally at an alarming rate of 1-7% per year, which is significantly higher than the global loss of tropical forests, estimated at 0.5% per year. When these blue carbon ecosystems are degraded, they not only halt to take up carbon, but also release the already stored carbon back to the atmosphere leading to global warming impacts. The "carbon sink" service is one of the numerous important benefits blue carbon ecosystems provide to human well-being, along with food security, water quality improvement, raw materials and shoreline protection among others. When degraded, co-benefits provided by mangroves are greatly diminished along with the ecosystems' capacity to sequester carbon. Restoration and protection of mangroves is, therefore, recognized as a priority for both climate change mitigation and adaptation; and several countries have identified measures that harness these benefits in their National Determined Contribution to Paris Agreement.

The WIO region is endowed with 1.0m ha of mangrove forests, representing almost 5% of global mangroves in Kenya. This is in addition to extensive salt marshes and seagrass beds whose coverage is primarily less known in most of the countries. Over-harvesting of mangrove resources, conversion pressure, and pollutions effects are the factors responsible for nearly 40% loss and degradation of mangroves forests in WIO. Although most WIO countries do have emissions estimates in their NDCs; and have emissions reductions strategies for the agriculture and forestry (AFOLU); these strategies do not include blue carbon ecosystems, despite their high carbon sequestration rates and the multiple ecosystem services they provide. Indeed, in their NDCs, only three (3) countries in WIO have included blue carbon in terms of climate change mitigation while six (6) countries in blue carbon in their adaptations. None of the countries in WIO have included blue carbon in their emission reduction.

The main barriers to the integration of blue carbon in the NDCs of the WIO countries is the lack of robust and systematized information on the extent, conditions and trends of these critical ecosystems. There is also inadequate information of carbon stocks stored in blue carbon ecosystems and emissions levels when degraded. Total economic value of blue carbon ecosystem is also poorly understood, which undermines the development of strategies for minimizing tradeoffs between climate, conservation and coastal development goals. In addition, there is disconnect between the attributes of blue carbon resources and the regulatory frameworks and institutional regimes designed for their governance. Limited finances, lack of capacity and coordination among key government agencies are factors underlying lack of effective management of blue carbon ecosystems in the region.







Therefore, promoting its use by the Contracting Parties, providing them concrete tools to maximize success is very important. Thus, we wish to encourage the NC to consider these for testing in WIO as a potential candidate post-2020 target, considering that the Aichi targets are up for renewal.

We urge the Conference of Parties to scale up and accelerate conservation of blue carbon ecosystems for the benefits of climate change mitigation, community livelihoods, and biodiversity conservation in the region. We also urge WIO countries to work rapidly towards developing effective ecosystem management tools and conservation incentives to secure their blue carbon ecosystems. There is an urgent need to quantify economic values of blue carbon ecosystems in the WIO and use this value to entice investments into sustainable financing for their conservation.

Draft Decision on BLUE CARBON (as part of CRITICAL HABITATS)

- 1. Support and promote Blue carbon schemes in the management and protection of critical marine and coastal ecosystems and habitats, including mangroves, sea grasses and tidal/salt marshes and especially in their Nationally Determined Contributions to the Paris Agreement.
- 2. Request the Secretariat to provide assistance to the Contracting Parties to enhance their capacities and systematically integrate Blue Carbon schemes and programmes in the management and protection of critical marine and coastal ecosystems and habitats.