Coastal Ecosystems of Sri Lanka
reclassified in 2009

This poster presents a brief summary of Sri Lanka’s coastal ecosystems and habitats. Coastal ecosystems contain an immense amount of biological resources and they provide very useful ecosystem services for the well-being and survival of humans, plants and animals. These interconnected and interdependent ecosystems require holistic management approaches with a high level of understanding. Key management considerations are potential anthropogenic threats such as overexploitation, habitat destruction, as well as land and marine pollution. In addition, human population pressure, unplanned coastal development and poor land use practices, as well as potential climate risks also need to be considered in managing coastal ecosystems and habitats.


Coastal Ecosystems of Sri Lanka

Parent coastal ecosystems

Beaches

Description: Accumulations of loose sand, coral pieces, pebbles and mineral sand. Beaches are important as nurseries and breeding grounds for many commercially important fish and shellfish. Beaches are important as buffers for retarding the force of coastal hazards.

Tidal Flats

Description: Openings of rivers into the sea, where freshwater from inland and salt water from the sea mix, forming brackish water. Tidal flats serve as feeding grounds for many commercially important fish and shellfish. Tidal flats are key indicators of coastal health, as they respond quickly to changes in the marine environment, indicating degradation. They are called ‘biological sentinels’ because they protect the land from coastal hazards.

Value: The MCZ provides habitats for a wealth of species and is the area where coastal fishery is practised.

Parent coastal ecosystems

Tidal Flats

Bay

Description: Openings of rivers into the sea, where freshwater from inland and salt water from the sea mix, forming brackish water. Bays are considered in managing coastal ecosystems and habitats. Bays are late evolutionary stages of smaller estuaries where the opening to the sea is tidal. Bays are highly productive, supporting coastal agriculture and aquaculture.

Value: One of the most productive coastal ecosystems, providing habitats for many commercially important fish and shellfish.

Beaches

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Threats: Increased sedimentation and habitat destruction.

Lagoons

Description: Indentations in the coastline, with accumulations of loose sand, coral pieces, pebbles and mineral sand. Lagoons or estuaries where coastal fishery is practised. Lagoons are very valuable species of fish and shellfish.

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Value: The ECZ provides habitats for a wealth of species and is the area where coastal fishery is practised.

Parent coastal ecosystems

Tidal Flats

Mangroves

Description: Plant communities which live in marine, brackish water wetlands. Mangroves are one of the most productive ecosystems, providing habitats for many commercially important fish and shellfish. Mangroves are also important as nurseries and breeding grounds for many commercially important fish and shellfish. Mangroves are also important as buffers for retarding the force of coastal hazards.

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Coastal Habitats

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Threats: Erosion as a consequence of inland sand mining; flattening of dunes for illegal construction of coastal infrastructure.

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