



Wetlands and Ecosystem Services

Wetlands are unique, productive ecosystems where terrestrial and aquatic habitats meet. Wetlands play a critical role in maintaining many natural cycles and supporting a wide range of biodiversity. They purify and replenish our water, and provide the fish and rice that feed billions. They serve as a natural sponge against flooding and drought, protect our coastlines and help fight climate change. Bursting with biodiversity, wetlands are a vital means of storing carbon. Wetlands are also tremendously productive ecosystems that provide a myriad of services to society worldwide.

Wetlands are particularly important providers of all water-related ecosystem services. They regulate water quantity, groundwater recharge, and can contribute to regulating floods and the impacts of storms. Wetlands also help in erosion control and sediment transport, thereby contributing to land formation and increasing resilience to storms. All these ecosystem services improve water security, including security from natural hazards and climate change adaptation. The final Rio+20 outcome document, "The Future We Want", inter alia, recognised the role of ecosystems in the supply of water and its quality.

Wetlands are productive areas for plant life, animals and wetland agriculture. Compared to many other ecosystems, wetlands are one of the most productive habitats in the world. With greater species diversity nutrient recycling and niche specialization than most other ecosystems.

Wetlands are the major habitat for most of the world's waterbirds and key habitat for migratory species. Almost all of the world's waterbirds use wetlands as feeding and breeding grounds. Migratory waterbirds use wetlands throughout their range which can sometimes literally be from pole to pole. The feeding, breeding and stop-over areas across and between continents that migratory birds depend on requires coordinated wetlands conservation efforts among many nations.

Wetlands are an important source of food. Well-managed rice paddy systems, for example, produce not only rice but also co-benefits from rice-associated biodiversity, such as highly nutritious food in the form of fish, molluscs and crustaceans. Wetlands also support the multitude of biota that helps sustain rice productivity through supporting nutrient cycling and pest and disease regulation. The entire production of inland capture fisheries and most coastal fisheries is derived from wetlands, as is most aquaculture production.











Values of coastal and inland wetlands ecosystem services are typically higher than for other ecosystem types. Wetland ecosystems can have some of the highest ecosystem service values compared to other ecosystems. This is due to the importance of clean water provision, natural hazards mitigation, for example mangrove forests and floodplains, and carbon storage, for example in peatlands, mangroves and tidal marshes. A large proportion of the values reported for most types of wetlands come from their water-related services.

Wetlands have high recreational, historical, scientific, and cultural values. Wetlands have played an important part in human development and are of significant religious, historical or archeological value to many cultures around the world. They are also often inviting places for popular recreational activities including hiking, fishing, bird watching, photography and hunting.

Information sourced from the Ramsar Convention on Wetlands and the Secretariat of the Convention on Biological Diversity

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Important links

- Convention on Biological Diversity: www.cbd.int
- Strategic Plan for Biodiversity 2011-2020 and the Aichi Biodiversity Targets: www.cbd.int/sp
- CBD Programme of Work on Inland Waters Biodiversity: www.cbd.int/waters
- Global Biodiversity Outlook 4: www.cbd.int/gbo4
- Convention on Wetlands of International Importance (Ramsar Convention): www.ramsar.org
- World Wetlands Day 2015: www.worldwetlandsday.org
- Convention on the Conservation of Migratory Species of Wild Animals: www.cms.int
- Open Working Group proposal for Sustainable Development Goals: https://sustainabledevelopment.un.org/focussdgs.html