Inland Waters Biodiversity

Source of food, income and livelihood

Inland waters biodiversity refers to biodiversity associated with inland water ecosystems. The diversity of this ecosystem is very complex and includes both aquatic and terrestrial influences.

Inland waters include lakes, rivers, ponds, streams, groundwater, springs, cave waters, floodplains, as well as bogs, marshes and swamps, which are traditionally grouped as inland wetlands. Inland water systems can be fresh or saline within continental and island boundaries.

The biodiversity of inland waters is an important source of food, income and livelihood, particularly in rural areas in developing countries. Other values of these ecosystems include: water supply, energy production, transport, recreation and tourism, maintenance of the hydrological balance, retention of sediments and nutrients, and provision of habitats for various fauna and flora.

Why it is important:

- Life as we know it can neither survive nor evolve without water. Water supports all life on Earth — including the entire human population, both rich and poor. It is the most important resource on the planet.
- Water is our most abundant resource, but most of it is salt water in the oceans. Of the world’s total water resources, less than 3% is represented by fresh water, and less than 1% of that occurs in the Earth’s liquid surface fresh water.
- The fraction of water available on Earth as fresh water supports a stunningly and disproportionately high level of biodiversity, which includes not only life living within water, but that which depends upon inland water habitat.
- Inland water biodiversity is critically important to poverty reduction and the achievement of human development targets, and provides food security for countless millions of the world’s poor.
- The broader ecosystem services provided by inland water biodiversity, such as climate regulation, flood mitigation, nutrient recycling, water purification and waste treatment, are critical to human welfare and development.

What the CBD is doing:

Adopted as a CBD thematic area in 1998, the inland waters programme of work identifies actions that countries need to carry out to halt biodiversity loss, including monitoring, assessment and evaluation of biological diversity of inland water ecosystems, conducting environmental impact assessments of water development projects, development of pollution prevention strategies, choosing and using appropriate technology, and promoting transboundary cooperation, ecosystem-based management and the involvement of local and indigenous communities.

In order to achieve a more comprehensive coverage of components of biodiversity through the designation of Ramsar sites, the Conference of the Parties (COP) to the Convention on Biological Diversity (CBD) invited the Ramsar Convention’s Secretariat and its Scientific and Technical Review
Panel, in collaboration with the Executive Secretary of the CBD and its Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), to further elaborate the guidelines on existing criteria for various features, consider the development of additional criteria and to develop guidelines on the geographical scale at which criteria should be applied.

At COP 9, the Parties will consider how to address the needs for improved international cooperation on transboundary water allocation and management, the extent to which criteria for Ramsar site designation meet the requirements for coverage of elements of biodiversity under the CBD, ways and means to further improve Ramsar–CBD synergy and cooperation, and the new joint work programme between the two Conventions.

For more information:

Inland waters biodiversity: www.cbd.int/waters/about.shtml

COP decisions on inland waters biodiversity: www.cbd.int/waters/decisions.shtml

Documents: www.cbd.int/waters/documents.shtml