United Nations Decade on Biodiversity

Living in harmony with nature

Inland Waters Biodiversity

Water supports all life on Earth. Freshwater is the most important natural resource on the planet. Inland waters include all kinds of inland water bodies, fresh or saline, as well as groundwater. They are also closely interconnected with terrestrial ecosystems.

The biodiversity of freshwater ecosystems is declining faster than that of any other biome. Unsustainable practices lead to loss of habitat through construction, land conversion (mainly for agriculture) and pollution. Unsustainable use of water and invasive alien species also negatively impact biodiversity.

Inland water ecosystems provide services vital to human development and poverty reduction. These services include food, fibre, medicine, climate regulation, flood and natural disaster mitigation, nutrient recycling and drinking water purification. These ecosystems are also essential for production of energy, transport, recreation, tourism, and as habitat for animals and plants.

These services are taken for granted, yet they can be expensive to replace. For example, building and maintaining water treatment plants is often more costly than maintaining ecosystem infrastructure to provide clean water.

The main impacts of climate change will be felt through water, making inland water ecosystems particularly important in this context. For example, wiser use of freshwater ecosystem infrastructure can help us cope with the increasing frequency and severity of both droughts and floods.

In order to stop or reverse the decline in inland water biodiversity, we need to raise awareness of the importance of these ecosystems. It is urgent to act now, by applying the ecosystem approach when managing both land and water.

UNEP

Convention on Biological Diversity

www.cbd.int/waters

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Fast Facts

- Aquatic and terrestrial systems are tightly linked and interrelated
- Only 0.03% of the world's water is available as liquid freshwater on the Earth's surface
- Of the 29,000 known fish, about 30% are freshwater species
- Peatlands cover about 3–4% of the world's land area yet hold about 25–30% of the carbon contained in terrestrial ecosystems, and store twice the amount of carbon as the world's forests
- Wetlands, such as mangroves and river floodplains, protect human communities from natural catastrophes such as Tsunamis and floods
- Aquaculture development and the introduction of invasive alien species are major causes of mangrove loss
- Agriculture accounts for about 70% of all water taken from rivers and is the main cause of wetland loss worldwide, due to clearing, transformation and drainage, and water abstraction for agricultural development
- About 80% of the world's population currently live in areas lacking water security. By 2025, two-thirds of the world population could live under water-stress conditions and a similar proportion will be without adequate sanitation
- Nearly half of the world's large cities obtain some, if not most, of their drinking water supplies from protected or managed forested areas
- Two million tonnes of human waste (untreated sewage) are dumped into water courses each day, as well as 70% of untreated industrial wastes in developing countries
- Habitat loss and degradation is the primary cause of extinction of freshwater species

Learn More

The Ramsar Convention on Wetlands ▸ www.ramsar.org

COP decisions related to inland waters ▸ www.cbd.int/waters/decisions.shtml

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