

Wetlands facts and figures

Why should the average Joe give a damn about wetlands? Because wetlands are *money!* Yes, those (often) stinking, swampy systems – which range from springs, seeps, mires and bogs in the mountains, to midland marshes and floodplains, to coastal lakes, mangrove swamps and estuaries at the interface with the sea – have an enormous monetary value and make huge, direct contributions to national economies and the creation of wealth.

What are wetlands?

A wetland is a family name given to a whole lot of different wetland types that occur from the top to the bottom of the catchment. They include springs and seeps, marshes, floodplains, swamp forests, mangrove swamps and estuaries and all these are connected by rivers and riparian areas.

According to the South African National Water Act a wetland is “land which is transitional between terrestrial and aquatic systems where the water table is usually at or near the surface, or the land is periodically covered with shallow water, and which land in normal circumstances supports or would support vegetation typically adapted to life in saturated soil”.

Why are they important?

Wetlands are able to reduce the severity of droughts and floods by regulating stream flow. Wetlands also purify water and provide habitat for many different plants and animals. In fact wetlands provide a host of services or **functions** (such as water purification, mitigating floods and droughts management) and goods or **values** (such as fodder, human food, fish, fibre (reeds and other plants) and wildlife)). No wonder *Nature* – one of the most respected scientific journals in the world – reported recently that worldwide, wetlands are worth some \$4.9 trillion (over R30 trillion) a year! (See more dollar values below.)

What's the problem?

We have managed to destroy some 50% of our wetlands so far. To name but a few culprits: draining them for crops or housing developments; building dams; overgrazing and incorrectly burning them; and planting water-thirsty alien trees too close to their edges.

Why is sustainable wetlands management so important?

It is no accident that river valleys and floodplains have been the focus of human civilizations for the past 6 000 years. Wetlands and water have always played a key role in human life. Our advancing technological skills may seem to have supplanted nature but recent catastrophes such as floods, storms and landslides suggest otherwise. We still depend on our natural ecosystems to sustain us. Wetlands manage our water flows, purify our water and provide food, fodder and fibre.

Wetlands as a tool in poverty alleviation

It is estimated that the majority (60%) of the children in rural South Africa are malnourished. Wetlands are one of the food security 'safety nets' potentially available to impoverished people.

More than anyone else, poor rural people depend on the life-support functions provided by wetlands. Wetlands provide livelihood resources to the rural poor in the form of drinking water, land for subsistence cultivation and grazing, and plant material for construction and craft production, and most importantly the maintenance of cultural and spiritual beliefs. From a food security point of view, wetland cultivation if done sustainably is particularly important especially during droughts. In addition, urban and rural wetlands are economic resources which can attract tourism and leisure activities offering further opportunities for local communities.

What are they worth?

We are finally appreciating the invaluable products and services that wetlands provide us with, and people have now been willing to spend large amounts of money rehabilitating degraded wetlands. One third of the world's population already lives under water stress. The amount of freshwater is fixed, yet the human population will increase by 70 million people a year. Americans have valued wetlands, and published their findings in *Nature*, the

most widely respected scientific journal in the world. This is what they have discovered the worldwide value of wetlands to be (Nature 387, 253 – 260):

| Type of wetland | Value US\$ per hectare per year |
|-------------------------|--|
| Estuaries | 22 382 |
| Seagrass/algae beds | 19 004 |
| Coral reefs | 6 075 |
| Tidal marshes/mangroves | 9 990 |
| Swamps/floodplains | 19 580 |
| Lakes/ivers | 8 498 |