

# **Biodiversity**

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There is no unique definition of Biodiversity. The definition adopted by the United Nations Convention on Biodiversity is “biodiversity” as the variability among living organisms from all sources, including, ‘inter alia’, terrestrial, marine, and other aquatic ecosystems, and the ecological complexes of which they are part: this includes diversity within species, between species and of ecosystems”.

Biodiversity is a broad concept, so a variety of objective measures have been created in order to empirically measure biodiversity. Each measure of biodiversity relates to a particular use of the data.

The most primitive of the indices for measurement of biodiversity is Species richness. Biodiversity has contributed in many ways to the development of human culture, and in turn, human communities have played a major role in shaping the diversity of nature at the genetic, species, and ecological levels.

During the last century, erosion of biodiversity has been increasingly observed. Some studies show that about one of eight known plant species is threatened with extinction. Some estimates put the loss at up to 140,000 species per year (based on Species-area theory). This figure indicates unsustainable ecological practices. Most of the species extinctions from 1000 AD to 2000 AD are due to human activities, in particular destruction of plant and animal habitats. Almost all scientists acknowledge that the rate of species loss is greater now than at any time in human history, with extinctions occurring at rates hundreds of times higher than background extinction rates.

The amount of biomass production on which human species survives depends on biodiversity and as such, any degradation of biodiversity is a threat to human survival itself. Efforts must be reached to prevent any further degradation of biodiversity and if possible restore it to its original state.