Class 12 NEET Biology

ECOSYSTEM SERVICES

Healthy ecosystems form the foundation for a variety of valuable goods and services, spanning economic, environmental, and aesthetic realms. These services, known as ecosystem services, encompass tasks such as air and water purification, drought and flood mitigation, nutrient cycling, soil fertility generation, wildlife habitat provision, biodiversity maintenance, crop pollination, carbon storage, as well as cultural and spiritual enrichment. While assigning a precise value to biodiversity services is challenging, it is reasonable to consider them highly valuable.

Recently, Robert Constanza and his team attempted to quantify the value of nature's essential life-support services. They estimated an annual value of approximately US \$33 trillion for these services, which are often overlooked as they are freely available. This figure is nearly twice the global gross national product (GNP), which stands at US \$18 trillion.

Among the various ecosystem services, soil formation constitutes around 50 percent of the total cost, while others like recreation and nutrient cycling contribute less than 10 percent each. The expenses related to climate regulation and wildlife habitat are roughly 6 percent each.