

Significance of the ecosystem services

[Science](#), [Biology](#)



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Ecosystem services are the benefits that humans gain from the ecosystem be it spiritual or cultural benefits, clean water or medicine that they obtain from nature. Ecosystem services are not specific to the science area and they can easily be interpreted depending on human's notions. The human societies consider ecosystem valuation a controversial and a challenging task and economists have always been disparaged for attempting to put a price tag on nature. However, agencies that are responsible for managing and protecting natural resources must always make challenging spending choices in the allocation of resources (Wilson 12). These are economic decisions and depend on both the implicit and explicit societal values. In this article, I will give examples of ecosystem services, biodiversity concepts and how ecosystem is considered from economics, ethics and science points of view.

Examples of ecosystem services

Examples of ecosystem services include regulation of climate. This is one of the most significant services of the ecosystem on a worldwide and European scale. European ecosystem functions as a significant role in the regulation of climate because the terrestrial ecosystem in Europe resembles a carbon sink in approximately 12 percent of the carbon emissions that humans emit to the atmosphere. Another example of ecosystem service is the purification of water. Both the soil organisms and vegetation have profound effects on improvements of water. Vegetation is a critical factor that helps in control of floods. Wetlands and forests often offer water at a lower cost compared to manmade facilities such as water treatment plants. Another example of

ecosystem services is the regulation of pests and diseases (Wilson 17). This occurs because of the actions of parasites and predators and also defense mechanisms of their prey. One example of this control of pests and diseases is the offered by insectivorous birds that are available in the farm lands.

Biodiversity concepts and how they relate to ecosystem services

Biodiversity concepts refer to variability and variety of living organisms.

Biodiversity is significant in the functioning of the ecological systems.

Ecosystem services represent ecological process that humans may benefit.

These processes function on an infinite number of scales. A number of ecosystem services ensure that their productivity in agriculture, including pollination, soil formation and pest control (Wilson 34). Biodiversity concepts may include diseases and pests control. Predators that prey on the parasites and insects control plant diseases. Another biodiversity concept is the decomposition of dead plants that act as manure. This manure is significant in agriculture because it improves productivity and also acts as a substitute for fertilizers.

Ecosystem services in science, ethics and economics

Economics: Economic valuation involves information and social communication and areas that are challenging and the focus of a number of researchers. It is often quite challenging to value the ecosystem services.

The ecosystem services make people avoid incurring costs in the deficiency of such services (Wilson 38). These services can also be substituted with manmade system.

Science: Science considers the ecosystem services as a valuable natural process that maintains the ecosystem. These services occur in nature to

ensure a balance in the ecosystem. For example, plants lose water into the atmosphere and this water condenses in the sky to form clouds that act as a source of rainfall (Wilson 56). This rainfall is also essential for the planet when it falls back and is purified by natural means.

Ethics: The human societies have completely failed to respect and appreciate the ecosystem services. This is because they perform activities such as deforestation that hinder the ecosystem services.

Works Cited

Wilson, Edward O. *The Diversity of Life*. Boston: Harvard University Press. 1992. Print.