

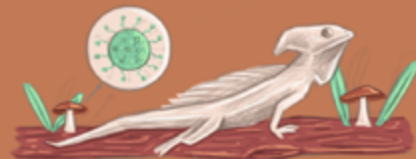
# Ecosystem services, nature's gift to humanity

During the last 50 years, nature globally has been transformed at a speed unprecedented in history and degrades ecosystem services by putting biodiversity and ecosystems at risk. We tell you what they are and why they are essential for human existence and its quality of life.

## What is the relationship between human beings and ecosystem services?

Environmental services depend on the functioning of ecosystems and the biodiversity they host in a healthy way. When they degrade, so do the services they provide. In addition, according to the Millennium Ecosystem Assessment (MA), there is a dynamic interaction between people and ecosystems: changing human conditions drive direct and indirect changes in ecosystems. These, in turn, impact human well-being.

## What is an ecosystem?



It is a biological system made up of interdependent communities of plants, animals and microorganisms, and the physical environment where they are related, which interact as a functional unit.

## What are ecosystem services?

Also known as environmental services, they are the benefits that people obtain from ecosystems\*. That is, the resources (goods and services) or processes of ecosystems that favor human beings.

\* Definition of the Millennium Ecosystem Assessment (MA). <https://millenniumassessment.org/documents/document.3.aspx.pdf>

## What kind of ecosystem services are there?

### SUPPLY SERVICES

These are the products obtained from ecosystems, including food, pure water, fuelwood, fibres, biochemicals and genetic resources.



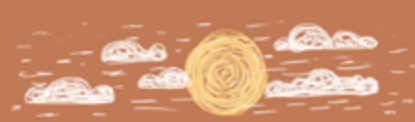
### BASIC SERVICES

These are the processes of ecosystems, necessary for the production of other ecosystem services, such as soil formation, nutrient cycles, the production of raw materials or the production of oxygen.



### CULTURAL SERVICES

Are the intangible benefits obtained from ecosystems, such as spiritual and religious, recreation and ecotourism, aesthetics, the sense of identity and belonging to a place, cultural heritage.



### REGULATORY SERVICES

Obtained from the regulation of ecosystem processes, e.g. maintenance of air quality, erosion control, climate regulation, disease regulation, water purification.



## What factors influence the degradation of ecosystems?

### INDIRECT DRIVERS OF CHANGE



Demographic



Science and technology



Socio-political (e.g., governance, institutional and legal frameworks)



Cultural and religious (e.g., choices about what and how much to consume)



Economic (e.g., globalization, trade, market, and regulatory frameworks)

### DIRECT DRIVERS OF CHANGE



Climate change



Harvests and resource consumption



Adaptation and use of technologies.



Introduction or elimination of species.



Changes in local land use and land cover.



External inputs (e.g., fertilizer use, pesticide control, irrigation)



Natural physical and biological drivers (e.g., volcanoes, evolution) uninfluenced.

## How does the loss of ecosystem services impact human beings?

It affects their safety, health, social relationships, and overall quality of life. For example:



Cultural and spiritual values associated with ecosystems are lost.



Access to clean air is reduced.



Increases their vulnerability to natural disasters.



It increases the possibility of acquiring preventable diseases.



Access to basic material goods for a good quality of life, such as food, fiber or pure water, is difficult.



Their security is put at risk due to the emergence of conflicts around the scarcity of resources.



The ability to access resources that allow them to have means of subsistence is reduced.



Due to the reduction of cultural services, social relationships within a community are weakened.