
What are “environmental services”, “payment for environmental services” and “trade in environmental services”?

The term *environmental services*, also known as *ecosystem services*, includes the noun “service”, a term that is widely used in the capitalist market economy, in which companies and professionals provide and charge for a wide range of services. Therefore, *environmental services* suggests that there is, on the one hand, something or someone that offers or provides a service, and on the other, someone who receives or uses it. This logic also seems to apply to the case of *environmental services* and their “trade”.

However, there is something that distinguishes *environmental services* from other services. They are not “provided” by a person or company, they are simply “supplied” by nature, and at no charge. The defenders of *environmental services* point to the example of forests which, due to their dense vegetation, are able to “store” and “produce” the *environmental service* of water, which, in turn, guarantees the supply of water for an indigenous community living in the forest or a small village nearby. This seems to imply the transformation of nature into some sort of “water factory”! And as we will see later, there are many corporate interests linked to this process.

U.S. biologist Gretchen Daily, a proponent of the idea of *environmental services*, defines them as “the conditions and processes through which natural ecosystems, and the species that make them up, sustain and fulfil human life.” She argues that *environmental services* guarantee the biodiversity of ecosystems and result in “goods” such as timber, food and medicinal plants which, in turn, are transformed into products essential for human life (3).

Other authors (4), from Europe and the United States, refer to “environmental functions”, not thinking solely in terms of “services provided” to human beings but rather essential “functions” for the maintenance of life on the planet, such as:

- Regulation functions: These refer to the capacity of ecosystems to regulate essential ecological processes and life support systems. These functions supply many beneficial services directly or indirectly to human beings, such as clean water and air, fertile soil and biological pest control.
- Habitat functions: These are related to the function of natural ecosystems in providing shelter and the conditions for reproduction to wild plants and animals, thus contributing to the maintenance of biological and genetic diversity.
- Productive functions: Natural processes of growth, absorption of carbon dioxide (CO₂) and nutrients from the soil, and production of biomass, resulting in many different foods, raw materials for many different uses, and sources of energy for communities.
- Information functions and others that include opportunities for reflection, spiritual enrichment and recreation.

Payments for environmental services means that someone pays a certain amount of money, a price, for a certain *environmental service* that is provided. Obviously, nature – for example, a forest that “stores” and “produces” water – does not have a bank account where it can receive money in exchange for “providing” this “service”. And this is why defenders of the idea of *environmental*

services maintain that there needs to be someone or some institution that can receive the payment, always on the condition that they are the “owner” of the forest in question, and also someone prepared to buy the service in question, thus creating the basis for *trade in environmental services*.

Although there are many other ecosystems aside from forests, such as savannahs, natural grasslands and oceans, forests are without a doubt the main ecosystem targeted in projects involving *payment for and trade in environmental services*, as demonstrated by proponents of the idea. This is due to the forests’ tremendous wealth of biodiversity and, as a result, the large number of “services provided”, such as the conservation of water and the absorption and storage of carbon, among others.

Within these forests, there are hundreds and thousands of people, forest peoples, who completely depend on them for their physical and cultural survival. A woman from the community of Katobo, located in the forest in the Walikali territory of the Democratic Republic of Congo (DRC), describes what the forest means to her in this way:

We are happy with our forest. In the forest we gather wood, we plant crops, we eat, it provides everything, vegetables, all kinds of animals, and that allows us to live well. That is why we are very happy with our forest, because it allows us to get everything we need. And we the women especially need the forest because that is where we find everything we need to feed our families. When we hear that the forest could be in danger, it worries us, because we could never live outside the forest. And if someone told us to leave the forest, we would be very angry, because we can't imagine a life that is not in the forest or next to it. When we grow crops we have food, we have agriculture and also hunting, and women catch crabs and fish in the streams. We have different types of vegetables, and also edible plants from the forest, and fruit, all kinds of things that we eat, which give us strength and energy, proteins and everything else we need.(5)

However, the idea of *environmental services* differs greatly from the vision expressed here. *Trade in environmental services*, as a business transaction between a seller and a buyer, is a market mechanism in which nature is transformed into quantifiable units, into tradable “goods” or “assets”, sometimes referred to as “certificates” or “securities”. What’s more, it presupposes the idea of profiting from this “trade”, and of being able to destroy environmental services in one place as long as there is corresponding “protection”, “recovery” or “improvement” in another to “compensate”. Therefore, *trade in environmental services* is radically different from the way in which forest peoples have always valued forests.

This is why it is worth analyzing how the idea of *environmental services* emerged.

1 - By “commodification of nature” we mean the process of carrying out commercial and business transactions with the goods of nature, whether through the extraction of concrete elements like timber or bottling mineral water, or through the marketing of more abstract components of nature, such as biodiversity, soil fertility, carbon, scenic beauty, the habitat provided by forests for different species, etc.

2 - By “financialization of nature” we mean the process by which speculative capital takes control of the goods and components of nature, marketing them through certificates, credits, securities, bonds, etc., seeking to obtain the greatest profit possible through financial speculation.

3 - Daily, G, 1997. Introduction: What Are Ecosystem Services? in Daily, G. (ed.), *Nature's Services: Societal Dependence on Natural Ecosystems*, Island Press, Washington D.C. *Information gathered from the Glossary prepared for the EJOLT course on Ecological Economics and Political Ecology, coordinated by the Autonomous University of Barcelona.*

4 - de Groot, R., 1994. Environmental functions and the economic value of natural ecosystems. In: A.M. Jansson, (ed.), *Investing in Natural Capital: The Ecological Economics Approach to Sustainability*, Island Press, pp. 151–168.; de Groot, R., M. Wilson, R. Boumans, 2002. A typology for the classification, description and valuation of ecosystem functions, goods and services, *Ecological Economics*, 41, 393-408. *Information gathered from the Glossary prepared for the EJOLT course on Ecological Economics and Political Ecology, coordinated by the Autonomous University of Barcelona.*

5 - WRM, “Forests: Much more than a lot of trees”. Video, www.wrm.org.uy, 2011