

PAYMENTS FOR ECOSYSTEM SERVICES (PES)

Ecosystem Services

Nature provides human beings with a number of benefits. These benefits obtained from nature are called ecosystem services.

Types of Ecosystem Services



Provisioning Services

The products people get from nature, such as timber, food, water, medicine, fuel, etc.



Supporting Services

Services that support the provision of all other ecosystem services such as photosynthesis, water cycling, nutrient cycling, the creation of soil, etc.



Regulating Services

The benefits obtained from the regulation of natural processes such as climate regulation, water purification, coastal protection, flood mitigation, carbon sequestration, etc.



Cultural Services

Non-material benefits from nature such as aesthetics, education, spiritual nourishment, tourism, recreation, etc.

Payments for Ecosystem Services (PES)

PES is an innovative approach through which the beneficiaries of ecosystem services financially support or reward those whose lands and initiatives help provide these environmental services.



Key Elements of PES

- Voluntary transaction
- Buyers of services
- A well-defined ecosystem service
- Provider or seller of services
- If and only if, the service provider secures service provision as a conditionality

Ridge to Coast, Rain to Tap Project

PES is part of Work Package II of the Ridge to Coast, Rain to Tap (R2CR2T) Project, a sustainable water supply project implemented in response to problems in flooding and water supply in the Cagayan de Oro River Basin after being hit by Typhoon Sendong in 2011.

Wetlands International Philippines saw the opportunity to partner with the Cagayan de Oro River Basin Management Council (CDORBMC) to involve the beneficiaries of watershed rehabilitation in shouldering the cost of reforestation and maintaining the health of the PES sites in the river basin.

Applying PES in the Cagayan de Oro River Basin

Through the Valuing Ecosystem Services Together (VEST) program, PES is being implemented by the CDORBMC to engage people, industries, and businesses downstream in reforesting the CDO River Basin. By investing in the protection and restoration efforts being done by the indigenous peoples and communities in Mt. Kitanglad, the people living in downstream will benefit from improved water supply and decreased risk of flooding and erosion.

Wetlands International Philippines is involved in two of the PES sites being implemented by the CDORBMC: the Riparian Buffer Forest Restoration Model and the Reforestation with Coffee Model.

Riparian Buffer Forest Restoration Model

The PES site of the Riparian Buffer Forest Restoration Model is located along the riverside of Baungon Municipality in Bukidnon Province. It is voluntarily maintained by the Baungon Higaunon Tribal Council with funding from the Cagayan de Oro Bulk Water Inc.

This model has two zones:

- 1) Ecological Zone for the protection of the environment:
 - Indigenous forest trees
- 2) Economic Zone for livelihood and sustenance of the community:
 - Crops and fruit-bearing trees

Meanwhile, native grasses, i.e. vetiver grass, bagang, tambo, etc., are planted on the edges of the riverbanks to protect the trees from absorbing the direct impact of the river currents and to filter out pollutants from the uplands.



Rainforestation with Coffee Model



The PES site of the Rainforestation with Coffee Model is located in the hinterlands of the Mt. Kitanglad Range Natural Park. It is protected and reforested by the community-based Kitanglad Guard Volunteers (KGV) with funding from Unified Communications One (UC-1) Foundation.

Rainforestation farming is a sustainable farming system combines native or indigenous trees with crops. Replacing “kaingin” or slash-and-burn farming practice, rainforestation intends to recreate an ecosystem as close as possible to the original state of the forest while ensuring food and livelihood for the community. In this case, the KGV was able to develop a coffee plantation intercropped with indigenous tree species, such as Lauan, Bitag, Igem, and Tungog within buffer zones and outside the protected area.

Not only does the model form a buffer zone around the primary forests and protects their biodiversity, but it also helps maintain the water cycle and ensure more rainwater to be absorbed into the ground and supply the CDO river basin with more ground water.



GREEN INVESTING FOR SUSTAINABLE WATER

Businesses, industries, and individuals who wish to ensure quality water supply in the Cagayan de Oro River Basin may financially support the PES sites. Funds will be used to pay for the operational costs of reforestation and maintenance of the sites.

By investing in the PES sites, green investors will likewise have the opportunity to support the indigenous peoples, farmers, civil groups, and communities engaged in the protection and restoration of the PES sites. Interested investors may contact the CDORBMC Payments for Ecosystem Services Technical Working Group through their email address: cdorbmc@gmail.com.

Resources:

- https://wwf.panda.org/discover/knowledge_hub/where_we_work/black_sea_basin/danube_carpathian/our_solutions/green_economy/pes/
- https://wedocs.unep.org/bitstream/handle/20.500.11822/9150/payment_ecosystem.pdf
- <https://www.ipbes.net/policy-support/tools-instruments/payment-ecosystem-services>
- <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Understanding-Conservation/Ecosystem-Services>
- Quiaoit, H.A. 2023. “Key Elements of PES,” Presentation on Ecosystem Protection.



Warwin Sabasaje and Hilly Ann Roa-Quiaoit, 2014.