Strengthening Peatland's Carbon Sink Capacity through Multi-stakeholder Cooperation

Divisoria Peatland farmers pitching in details for the community map

Project Overview

The Leyte Sab-a Peat Swamp Forest in the Philippines plays an important role in long-term climate change mitigation, given its known benefits to carbon sequestration. It also serves as a refuge and sanctuary to diverse wildlife species and provides valuable ecosystem services such as regulating hydrological and geochemical cycles.

Unfortunately, decades of land conversion and harmful agriculture activities deeply degraded the peatland. A recent study on the impact of land-use conversion in the Leyte Sab-a Peatland revealed that when parts of the peatland are turned into grasslands or agricultural land, their ability to act as carbon sinks gets reduced. Such conversions also change the peatland on a physical and chemical level, reducing its ability to perform other functions.

The Forest Foundation Philippines, together with the International Institute of Rural Reconstruction (IIRR), the Environmental Legal Assistance Center, Inc. (ELAC), Visayas State University (VSU), and the Women Enablers Advocates & Volunteers for Empowering & Responsive Solutions (WEAVERS) implemented the Leyte Sab-a Peatland Forest Restoration Initiative to assist in the gradual recovery of the peatland ecosystem that has been destroyed and converted mainly for agricultural purposes. The project facilitated the revitalization of the area to become a productive and sustainable peatland through restoration, protection, and conservation activities.

NbS-inspired Interventions

VSU research team conducting analysis for Peatwater and Macroinvertebrate biodiversity

Societal challenges. The Leyte Sab-a Peatland Forest Restoration Initiative addresses in a transdisciplinary manner two primary societal challenges, the climate crisis and environmental degradation. The project implemented various strategies and communication campaigns to engage different stakeholders and increase their awareness of the role and functions of the peatland.

Biodiversity benefits. To restore the peatland forest, increase its biodiversity net gain, and therefore enhance its capability to serve as a carbon sink, the project updated the physical, biodiversity, and socio-economic profile of the peatland as well as the land ownership status of the landscape. The latter was accomplished by conducting legal research on the areas covered by a nationally implemented agrarian reform program in the 1980s. With the updated land ownership status of the peatland, reinstatement strategies have been identified and proposed. This updated information also served as a baseline for developing plans and formulating policies that are connected to the Leyte Sab-a Peatland.

Sustainable development integration. Because of the increased public awareness, the project contributed to the science and understanding of peatland areas in the Philippines, which also increased the number of champions for peatland conservation. The LGUs that have jurisdiction over the peatland forest legislated the Joint Local Conservation Ordinance to establish and declare the Leyte Sab-a Peatland Forest as a Local Conservation Area. Meanwhile, the baseline data collected by the project helped in the development of the Leyte Sab-a Peatland Forest Sustainable Management Plan. These initiatives strengthened the management system of the Leyte Sab-a Peat Swamp Forest.

Ways Forward

As the project provided baseline information on the Sab-a Peatland, it can serve as inputs to providing more evidence-based planning and interventions relevant to Sab-a's sustainable management. Further studies can be implemented in the future with a variety of potential areas of interest that can be explored for the next steps for the peatland's restoration, ranging from temporal biodiversity studies to carbon sequestration assessment of the peatland.

There is also a need to further strengthen the expanded consortium of the landscape's stakeholders to serve as a platform for information sharing, especially on the plans for the sustainable management of the Sab-a Peatland.

Get involved in forest conservation and restoration efforts in the Philippines! For inquiries and partnerships, contact us at info@forestfoundation.ph or through Facebook or Instagram (@forestfoundationph).

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