



WINROCK
INTERNATIONAL



Environment: Forestry, Energy & Ecosystem Services

Land Restoration and Afforestation/Reforestation

Winrock International's Ecosystem Services unit (WI-ECO) is a global leader in GHG measurement and monitoring approaches, offering extensive experience in land restoration and afforestation/reforestation. Ecosystem Services staff provide technical expertise on large land restoration projects worldwide, develop standard methodologies for designing and implementing A/R projects, and serve as members on the Clean Development Mechanism (CDM) Afforestation/Reforestation Working Group (ARWG), and the Verified Carbon Standard (VCS) AFOLU Steering Committee.

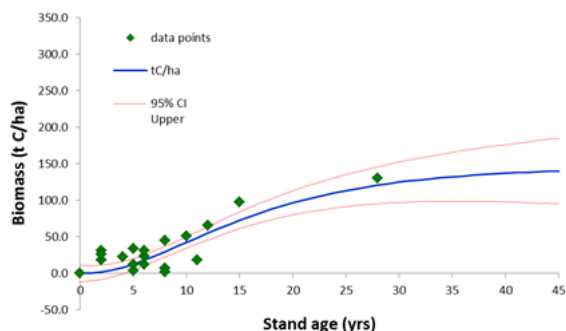
Tools for GHG Accounting

WI-ECO develops user-friendly tools that apply sound science to efficiently estimate GHG impacts of land use activities and assist in designing carbon projects and REDD+ programs.

Project Highlight: The Agriculture, Forestry, and Other Land Use (AFOLU) Carbon Calculator

(USAID) www.afolucarbon.org

The AFOLU Carbon Calculator is a set user-friendly, web-based calculation tools that use sound and transparent science to estimate the greenhouse gas (GHG) impacts from land use activities in over 130 countries worldwide. The Afforestation/Reforestation (A/R) Tool estimates how much carbon dioxide has been sequestered from the atmosphere by planting mixed native species (including mangroves) or key commercial species. The set of growth curves WI-ECO developed for this tool produce estimates that are specific to the type of planted trees as well as their age. This method is an improvement over the standard IPCC Tier 1 approach.



Aboveground biomass accumulation curve for A/R mangrove forest.



Frameworks for Measurement, Reporting and Verification (MRV)

WI-ECO provides technical assistance and capacity building to national and subnational governments in designing and implementing REDD+ programs.

Project Highlight: Developing Methodological Approaches and Providing Carbon Accounting Support to Rwanda and Ghana (IUCN)

WI-ECO is providing technical assistance in developing reference levels and effective monitoring systems to measure forest restoration and degradation in Rwanda and Ghana.

In Rwanda, a historical carbon sequestration profile is being developed, which will be used to plot a future "business-as-usual" scenario, as well as design and implement monitoring systems to estimate carbon removals post-baseline end time. It will also be used to measure and report enhanced carbon removals and prepare for verification.



Project Highlight: Climate, Nature and Communities in Guatemala (USAID)

WI-ECO is supporting the Government of Guatemala develop a governance framework for MRV and is providing technical assistance in developing a Reference Level (RL) for one pilot sub-national area. Guatemala has a history of large-scale A/R efforts, so WI-ECO is helping to develop accounting strategies for enhancements to incorporate in the MRV system.

Technical Assistance for Carbon Projects

WI-ECO has a long history of supporting project developers to design and implement a variety of carbon project types eligible for registration under regulatory or voluntary carbon standards.

Project Highlight: Campo Verde Carbon Project

WI-ECO provided technical assistance and training to support the development of the first afforestation project to be validated under the VCS. The project involved the reforestation and enrichment of degraded and impoverished land in the Peruvian Amazon with native tropical hardwoods.

Project Highlight: Small Scale Reforestation for Landscape Restoration CDM Project, Yunnan, China

WI-ECO provided technical support to Conservation International and the Chinese Forestry Department in conducting a carbon stock assessment and developing a project baseline.

Development of Methodological Approaches for Land Use Accounting

WI-ECO have authored many methodological approaches and standard procedures for land use accounting, including methodologies for land restoration and A/R projects for the CDM, VCS, and American Carbon Registry (ACR).

WI-ECO is comprised of scientists with advanced degrees in ecology, forestry, environmental science, GIS, and remote sensing. Team members participate in international panel discussions and provide thought leadership on climate change mitigation:

- Intergovernmental Panel on Climate Change (IPCC) as convening lead author
- Technical Advisory Panel for the World Bank's Forest Carbon Partnership Facility
- Clean Development Mechanism (CDM) Afforestation/Reforestation Working Group
- Voluntary Carbon Standard (VCS) AFOLU Steering Committee
- VCS Jurisdictional and Nested REDD+ (JNR) Initiative Technical Lead and JNR Expert Group
- Climate, Community, and Biodiversity Standards Committee
- Standard and Methodology development for American Carbon Registry (ACR), VCS, Climate Action Reserve, CDM, Gold Standard, Panda Standard

For additional information, please contact
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Winrock International is a nonprofit organization that works with people in the United States and around the world to empower the disadvantaged, increase economic opportunity, and sustain natural resources.