

Partnering for Improved Forest Information

Forest loss poses a serious threat to economic development, biodiversity, and the stability of the global climate system. Vital forest resources are being destroyed and degraded at a rapid pace in many tropical countries, reinforcing cycles of poverty and associated social and environmental challenges. Decision makers are often poorly equipped to take effective action to address forest loss due to a lack of available information about ongoing forest changes, including changes in forest carbon.

Many tropical countries are working to close this knowledge gap by establishing national forest monitoring systems. National forest monitoring systems integrate remote sensing and ground-based data to generate accurate, timely information on forest dynamics and associated carbon dynamics. This information is essential for strengthening forest management and policy, implementing appropriate measures to quantify and conserve forest resources, and making sound investments in sustainable natural resource use that benefit the country, region, and world.

The SilvaCarbon Program supports country-led efforts to develop robust, transparent, and cost-effective national forest monitoring systems that comply with international standards.



What is SilvaCarbon?

➔ **SilvaCarbon is a technical cooperation program of the US Government to assist partner countries in the production and application of improved information related to forest and terrestrial carbon.**

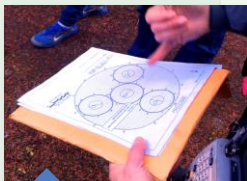
Drawing on the strengths of multiple US agencies and a global network of partners, SilvaCarbon provides targeted technical assistance to build country capacities for measuring, monitoring, and managing forest and terrestrial carbon. SilvaCarbon agencies include the US Agency for International Development (USAID), US Department of State, US Forest Service (USFS), US Geological Survey (USGS), US Environmental Protection Agency (EPA), National Aeronautics and Space Administration (NASA), National Oceanic and Atmospheric Administration (NOAA), and Smithsonian Institution.

Geographic Scope

SilvaCarbon works with 23 tropical forested countries through a combination of bilateral and regional capacity-building activities, as shown. The program engages additional countries through research partnerships.

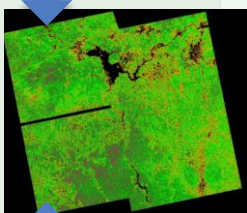


SilvaCarbon capacity-building activities typically focus on three interrelated areas and their integration:



National Forest Inventories

Ground-based forest inventories are essential for assessing forest resources and determining their value. SilvaCarbon draws on the forestry expertise of the USFS and other partners to help countries design and implement national forest inventories that are accurate, sustainable, and tailored to meet their unique needs.



Remote sensing

New remote sensing technologies and data can be highly effective tools for tracking forest change over time. By providing expertise from USGS, NASA, USFS, and other partners, SilvaCarbon helps countries adopt remote sensing approaches and integrate remote sensing data with field data for more comprehensive and efficient forest monitoring. SilvaCarbon partners with the Global Forest Observations Initiative (GFOI) to increase the availability and use of Earth observation data.



Terrestrial greenhouse gas (GHG) inventories

Many tropical forested countries are committed to transparently accounting for GHG emissions and removals from forestry, agriculture, and other land uses. Through SilvaCarbon, the EPA and other program partners help countries develop credible terrestrial GHG inventories that are consistent with the latest international guidance.

Accomplishments *(Illustrative examples)*

- Training technicians in **Vietnam** on the Agriculture and Land Use software tool, which they are now able to use in the production and analysis of the national GHG inventory
- Assisting **Peru** to produce a large-area map of forest change that can be used to estimate forest cover and deforestation rates and support Measurement, Reporting, and Verification for REDD+
- Working with **Bangladesh**, in collaboration with the Food and Agriculture Organization of the United Nations (FAO), to design the country's first national forest inventory and train the inventory field teams
- Assisting the **Republic of Congo** to produce its first national-scale, multi-strata forest/non-forest map for sustainable forest management
- Convening forestry departments, mapping authorities, and space data agencies throughout **South and Southeast Asia** to identify common forest monitoring needs, assess different approaches, and share lessons
- With **GFOI**, delivering needed Earth observation data to country partners and helping them develop long-term data acquisition strategies
- Contributing to international **guidance and tools** for forest monitoring, including GFOI's Methods and Guidance Documentation, FAO's Voluntary Guidelines on National Forest Monitoring, and the OpenForis toolkit
- Funding eleven innovative **research projects** focused on the application of emerging approaches for forest carbon measurement and monitoring

Contact Information – SilvaCarbon Global Program

December 2016



- **Sylvia Wilson**, Physical Scientist, USGS; snwilson@usgs.gov
 - **Sasha Gottlieb**, Senior Program Specialist, USFS; sbgottlieb@fs.fed.us
 - **Moses Jackson**, Communication Specialist, USFS; mosesm.jackson@fs.fed.us
- Website: www.silvacarbon.org | E-Newsletter: <http://goo.gl/SSGDFL>

