

## What is SilvaCarbon?

<u>SilvaCarbon</u> is an interagency technical cooperation program of the United States government to enhance the capacity of tropical forested countries to monitor, measure, and report carbon in their forests and other lands. Reducing tropical forest loss and mitigating global climate change requires credible, transparent information about when and where forest loss is occurring and how much carbon is being released, stored, or sequestered through land use change.

# Why Forest Monitoring?

- Measuring and monitoring terrestrial and blue carbon are essential for understanding the role of forests in mitigating climate change, promoting sustainable forest management practices, and tracking progress toward climate goals at local, national, and global levels.
- By comparing emission levels over time, countries can assess if their actions are supporting carbon-emission-reduction goals, as outlined in the Paris Agreement<sup>1</sup>.
- 109 countries include forests in their Nationally Determined Contributions to the Paris Agreement.
  Adequate support in forest monitoring and reporting is essential to redeeming the potential of carbon-rich countries in climate action.

#### **CLIMATE OUTLOOK**



According to the Intergovernmental Panel on Climate change (IPCC), all pathways to keep global temperatures below 1.5 degrees Celsius require reforestation, afforestation, and reduced deforestation.

Reducing deforestation and forest degradation can provide up to 5.8 gigatonnes of CO2 annually – equivalent to around 13 percent of annual global CO2 emissions.

Citation: 2019 IPCC Special Report on Climate Change and Land: Summary for Policy Makers.

## **How Does SilvaCarbon Work?**

SilvaCarbon draws on the expertise of multiple U.S. government agencies and partners to advance the development and use of improved information related to forest and terrestrial carbon. We collaborate with technical teams from national and subnational offices to develop and operationalize forest monitoring systems and advance measurement, reporting and verification (MRV) through workshops, trainings, seminars, consultations, and training-of-trainer courses. We offer long-term, step-by-step support that yields accurate and sustainable national forest inventory systems; upgraded, cost-efficient remote sensing tools; and enhanced greenhouse gas reporting capabilities.



SilvaCarbon is a member of the Global Forest Observation Initiative, an informal partnership of countries and institutions that assist countries with forest monitoring and associated GHG accounting systems, national GHG inventories and related capacity-building support.

<sup>&</sup>lt;sup>1</sup>The Paris Agreement is a legally binding international treaty on climate change. Its overarching goals include holding the increase in global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the increase in temperature to no more than 1.5°C above pre-industrial levels.

SilvaCarbon is currently active in 29 countries and has advanced forest monitoring through learning collaborations in 40 countries since 2011.





# **Areas of Technical Support with Illustrative Results**

We focus on improving, enhancing, and consolidating three critical elements of forest monitoring:



#### NATIONAL FOREST INVENTORY

Ground-based forest inventories are essential for tracking forest resources and assessing forest carbon stocks. SilvaCarbon assists partners to design and implement transparent forest inventory systems that are accurate, sustainable, and tailored to meet national needs. SilvaCarbon has helped more than 25 countries implement accurate and sustainable national forest inventory methods.



#### **REMOTE SENSING**

Remote sensing technologies are essential for systematically monitoring forests and land use change over time. SilvaCarbon helps countries adopt appropriate tools and methods to integrate satellite data with field data to improve monitoring and measurement over larger scales. SilvaCarbon has collaborated around the world to facilitate uptake of modern, cost-efficient remote sensing technologies and promote the use of open source data and data analysis platforms.



#### **GREENHOUSE GAS INVENTORY**

SilvaCarbon assists countries in the development of accurate, robust GHG inventories that meet international standards and reporting requirements. SilvaCarbon has helped partner countries enhance their international GHG reporting capabilities (including moving from IPCC Tier 1 to Tier 2), develop and submit forest GHG baselines such as REDD+ forest reference emission levels, and meet transparency and reporting requirements for accessing results-based payments.



Without SilvaCarbon, we would be two years behind. SilvaCarbon has been like a bridge, helping us find the right experts. Without it we would only have research papers to guide us, and those aren't enough to implement anything.



—Gustavo Galindo, Remote Sensing Coordinator Institute of Hydrology, Environmental Sciences, and Meteorology, Colombia

### **Partners**

The SilvaCarbon program is jointly implemented by the U.S. Forest Service and the U.S. Geological Survey. It is funded by the U.S. Department of State and the U.S. Agency for International Development. It collaborates closely with other USG Agencies, including but not limited to the National Aeronautics and Space Administration and the Environmental Protection Agency.













#### FOR MORE INFORMATION ABOUT SILVACARBON, CONTACT: