WINROCK INTERNATIONAL

ties through improved access to education and health services, skills training, economic strengthening/livelihoods opportunities, and addressing the needs and concerns of marginalized groups (e.g., youth and women).

Measurement and Monitoring Tools

Winrock has set the global standard for developing user-friendly tools and standardized procedures for carbon stock measurement and monitoring, based on sound science and approved methodologies for carbon project technical design:

- **The REDD+ Decision Support Toolbox (REDD+ DST)**
(www.forestcarbonpartnership.org/dst) is an interactive online tool that guides users through key decisions in designing a national or subnational REDD+ program. The REDD+ DST produces customized, geographically specific estimates of emissions and removals from an array of REDD+ activities, including deforestation, degradation from fire, timber harvesting, and/or fuelwood collection, and potential afforestation/reforestation enhancements.

- **The AFOLU Carbon Calculator**
(www.afolucarbon.org) is a set of user-friendly,

web-based calculation tools that estimate the greenhouse gas impacts from land use activities worldwide. These tools are used to estimate the future impact of current project activities, including forest protection, forest management, afforestation/reforestation, agroforestry, cropland management, grazing management, and forest degradation by fuelwood extraction.

- The **Standard Operating Procedures for Terrestrial Carbon Measurement** provide standardized field measurements for quantifying carbon emissions and removals from changes in the use and management of lands.

- The **Carbon Stock Calculation Tool** calculates carbon stocks based on field measurements taken on the five carbon pools.

For more information about the work of Winrock's Environment Group please contact:
carbonservices@winrock.org

Winrock's Environment Group fosters sustainable management and the use of natural resources that support the needs of growing populations and the health of the planet. The Environment Group includes Forestry & Natural Resource Management, Ecosystem Services and the American Carbon Registry. Winrock works with a range of partners including The United States Agency for International Development (USAID), The World Bank, The Asian Development Bank, the private sector, academia and numerous NGOs and foundations worldwide.

Forest and Natural Resource Management

Winrock's Forestry and Natural Resource Management (FNRM) unit promotes practical approaches to promote conservation, mitigate climate change, build resilience and support adaptation strategies. FNRM integrates good governance with applied science and effective capacity building to meet economic needs in developing countries. The group works with communities and governments to foster incentives for sustainable land use and alternative income strategies to reduce pressure on natural resources.

Ecosystem Services

Winrock's Ecosystem Services unit (ECO) develops, translates and applies the latest science to create methods that support the optimal sustainable use of natural resources. The team is composed of several internationally recognized leaders in ecosystem assessment, valuation and payments for ecosystem services, and is a trend set-

ter in greenhouse gas measurement and monitoring approaches. ECO provides scientific and analytic guidance to governments, businesses and other stakeholders in low emission development, climate resiliency, forest inventory systems, monitoring systems and REDD+ frameworks. ECO is a leader in the development of science-based, user-focused interactive decision support tools for sustainability assessment, measurement and monitoring in the land use and forestry sector. ECO has earned a reputation for using cutting edge, scientifically robust geospatial and remote-sensing so-

lutions, as well as a proven record of successful technical assistance to projects focused on afforestation, REDD+, avoided peat emissions, agriculture commodity (e.g., palm oil), and improved forest and watershed management.
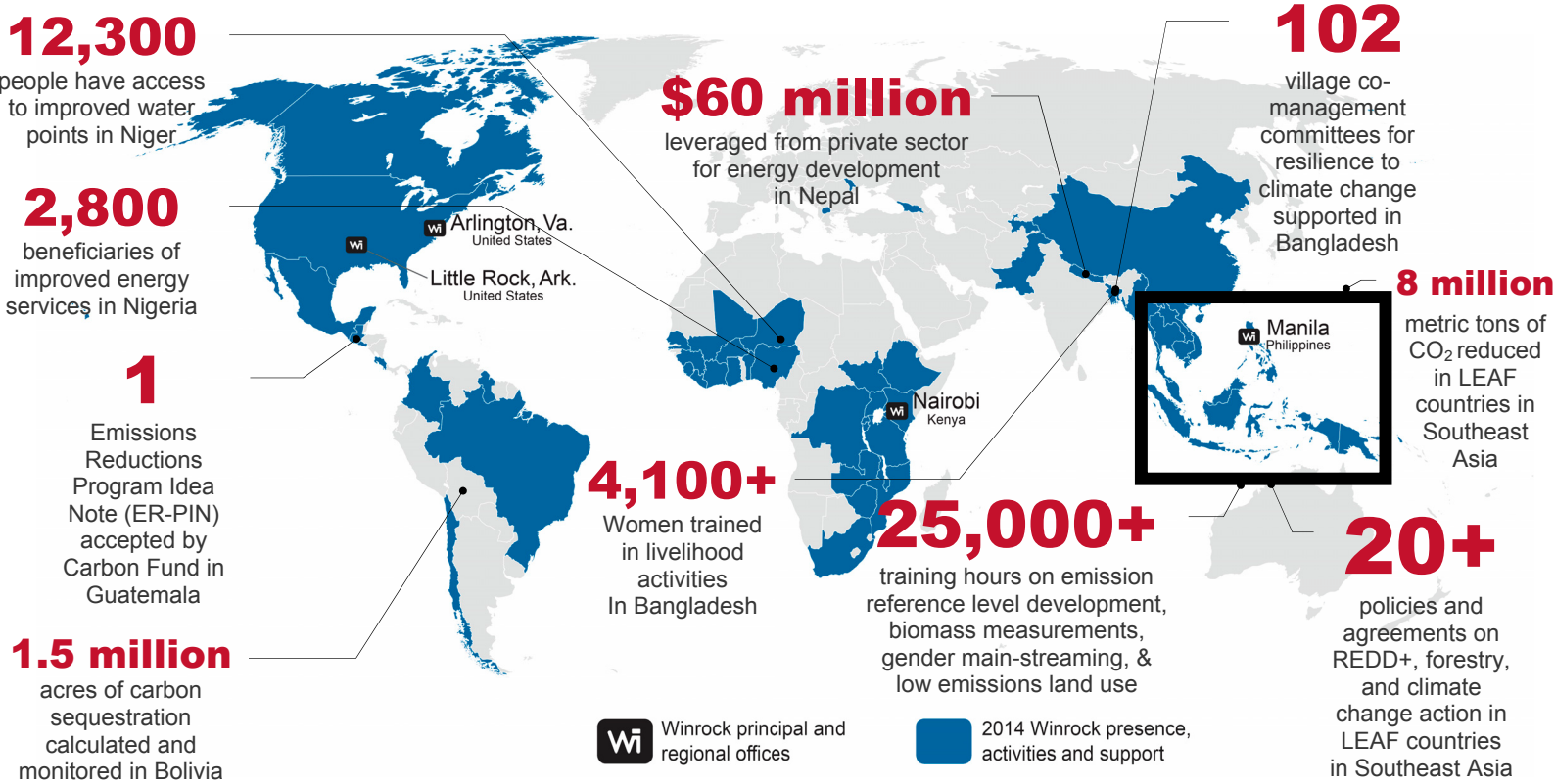
American Carbon Registry

Winrock's American Carbon Registry (ACR) is a leading nonprofit carbon offset program recognized for its high environmental integrity standards and a quest to innovate. Founded in 1996 as the world's first private voluntary offset program, ACR has 18 years of experience developing rigorous, science-based carbon offset standards and methodologies. ACR also offers operational experience in carbon offset project registration, verification oversight and offset issuance. ACR is an approved Offset Project Registry (OPR) and Early Action Offset Program for the California carbon market, the first economy-wide cap-and-trade program in the U.S. and one of the largest carbon markets in the world. ACR enhances confidence in carbon markets and catalyzes transformational emissions reduction opportunities.

Promoting Community Development, Good Governance & Environmental Sustainability

Winrock empowers civil society to adopt democratic self-governance and participate in natural resource decision making. In partnership with lo-

Snapshot of Winrock's Latest Global Impact and Flagship Work

12,300 people have access to improved water points in Niger

2,800 beneficiaries of improved energy services in Nigeria

1 Emissions Reductions Program Idea Note (ER-PIN) accepted by Carbon Fund in Guatemala

1.5 million acres of carbon sequestration calculated and monitored in Bolivia

$60 million leveraged from private sector for energy development in Nepal

4,100+ Women trained in livelihood activities In Bangladesh

25,000+ training hours on emission reference level development, biomass measurements, gender main-streaming, & low emissions land use

102 village co-management committees for resilience to climate change supported in Bangladesh

8 million metric tons of CO_2 reduced in LEAF countries in Southeast Asia

20+ policies and agreements on REDD+, forestry, and climate change action in LEAF countries in Southeast Asia

Arlington, Va. United States
Little Rock, Ark. United States
Nairobi Kenya
Manila Philippines

Wi Winrock principal and regional offices

  2014 Winrock presence, activities and support

cal governments, communities and other stakeholders, Winrock increases environmental sustainability by using innovative tools and approaches to maximize transparency and efficiency in resource management. Winrock's methods have been adopted by policymakers who develop international protocols and standards for the design and monitoring of climate change mitigation projects. For example:

- In the Republic of Congo, Winrock worked with the Ministry of Forest Economy to adopt illegal logging monitoring systems using transparent and low-cost remote sensing methods.
- In South Sudan, Winrock built the capacity of Forest Department personnel to develop and implement transparent procedures for management of forests and regulation of timber trade.

Low Emission Development Strategies (LEDS)

Low Emissions Developments Strategies (LEDS) involve an inclusive process of collecting information on current sources of emissions, and then identifying, analyzing and prioritizing opportunities to reduce emissions — followed by implementation and ongoing adaptive management.

Winrock's Environment Group and Clean Energy Unit has been involved in each step of the LEDS process, working with governments, local stakeholders, donors, the private sector and other financial institutions. The group co-chairs the LEDS Global Partnership's Agriculture, Forestry and Other Land Use (AFOLU) Working Group; and acts as the working group's Technical Support Unit, providing analysis and thought leadership on AFOLU LEDS.

Winrock has worked on national energy and provincial land use LEDS in Vietnam, national and municipal energy LEDS in Georgia, national energy LEDS in Macedonia, and provincial land use LEDS in Papua New Guinea. Our experience with issues related to gender, youth, and people with disabilities is integrated fully into LEDS — our work in Georgia and Southeast Asia, for example, has specific engagement and promotion components for these stakeholders.

Learning By Doing, Building Capacity

Capacity building in the agriculture and forestry sectors has been a recognized strength of Winrock for more than 25 years. With partners and programs in over 70 countries, we seek opportunities to build the skills of local people and institutions. We build and transfer capacity by working directly with our partners to carry out analyses, develop and implement plans and monitor results. Winrock has developed university-level curricula and trained more than 700 local professionals over the past 10 years.

Remote Sensing and Geographic Information System

Winrock provides cutting edge, scientifically robust geospatial solutions for REDD+ from the ground-up construction of reference levels to the design and implementation of monitoring systems. Our geospatial team uses land-cover data, spatial modeling and spatial distribution of forest carbon stocks to identify forests under threat of deforestation, including high carbon stocks. Winrock has conducted national and subnational forest threat analyses for Cambodia, Belize and Indonesia (Kalimantan). We have successfully designed, implemented and built capacity to support Forest Carbon Monitoring Systems, a key step in REDD+ Monitoring Reporting and Verification, and applied spatial analysis outlined in voluntary REDD+ methodologies. Winrock provides specialized analysis, technical support and training to meet the growing demand for spatially explicit results.

Supply Chain Sustainability

Winrock works on supply chain sustainability and sustainable sourcing. We help palm oil and pulp and paper businesses with their deforestation-free and corporate sustainability commitments in Southeast Asia by helping develop accounting systems and best practices to reduce emissions. In the cocoa, tobacco, rubber and tea sectors, we work to ensure supply chains are free of child labor, as well as hazardous or exploitative labor. This includes programs that empower communi-