



WINROCK
INTERNATIONAL



Water, Energy & Infrastructure

Household Energy for Improved Health & Livelihoods

Some three billion people worldwide burn solid fuels for cooking and heating in open fires or traditional stoves. The resulting household air pollution causes over four million premature deaths annually and a range of chronic and acute health complications. Inefficient cookstoves also place pressures on ecosystems and forests, and contribute to climate change through greenhouse gas and black carbon emissions. For over 10 years, Winrock has worked with the U.S. Environmental Protection Agency (U.S. EPA), the U.S. Agency for International Development (USAID), the World Bank, the Global Alliance for Clean Cookstoves and others to increase the use of clean, efficient, affordable, reliable and safe home cooking and heating practices in developing countries around the world, though locally appropriate, comprehensive and scalable interventions.

Advancing Stove Design and Performance Testing

Winrock supports the advancement of technology design

and performance testing to achieve significant reductions in fuel use and emissions. In cooperation with the U.S. EPA, Winrock has supported or organized 13 technical capacitybuilding workshops on stove design and performance testing, with the goal of helping cookstove manufacturers and promoters design and build higher-quality, better-performing stoves.

In 2012-14 alone, Winrock held trainings in Benin, India, Mexico, Nepal, Rwanda, Uganda and Vietnam, which included 223 participants from 122 organizations in 24 countries.

Supporting Global Standards

Winrock has played a pioneering role in the develop-

ment of voluntary international performance standards for clean cooking solutions. In 2012, Winrock helped organize an International Standards Organization (ISO) International Workshop on Cookstoves in The Hague, Netherlands, which resulted in a unanimously affirmed International Workshop Agreement (IWA). The IWA formed the basis for ISO/Technical Committee 285 on Clean Cookstoves and Clean Cooking Solutions, and also established tiers of performance for cookstoves that serve as interim voluntary standards. Winrock serves on the TC 285 U.S. Technical Advisory Group, the Social Impacts Working Group and the Communications Task Force.

Developing Sustainable Cookstove Markets

Winrock's USAID-funded Developing a Sustainable Cookstove Sector (DSCS) program is contributing to the development of sustainable cookstove markets that will lead to wider adoption of clean, efficient cooking solutions. DSCS is strengthening private-sector distribution of high-quality stoves, increasing availability of local finance for cookstove distributors and end users, and expanding access to a broader consumer base.

In Nepal, Winrock has installed more than 15,000 improved cookstoves and over 12,000 household biogas systems, with support from the Putnam Foundation and other donors.

In Kenya, Winrock is supporting three grantees in developing new, innovative partnerships to overcome distribution and funding bottlenecks in the Kenyan cookstove sector. This includes developing a cookstove credit facility for savings and credit cooperatives to on-lend to individual members for purchase of cookstoves, and creating a



revolving fund for cookstove distributors to alleviate capital constraints.

Winrock has also pioneered the concept of clean energy services for poor households through access to microfinance in Nepal. Access to microfinance for lower-income purchasers has been extended for installation of biogas, solar home systems, smoke hoods, biofuels and improved cooking stoves, working through local finance institutions.

Promoting consistent, correct use

Successful cookstove interventions depend on identifying what families want and need from a cookstove and promoting stoves that they want to use and are willing to pay for. Winrock conducts comprehensive assessments to better understand consumer needs and preferences as they relate to increasing the uptake of improved cookstoves. Assessments in Bangladesh and Nepal under the USAID-funded WASHplus project include household trials of improved stoves, stove performance testing, fuel and stove use monitoring, and two innovative assessments of consumers' perceived value of, and willingness to purchase, improved cookstoves.

Sharing knowledge

Sharing knowledge is an important way Winrock supports the clean cooking sector. In partnership with U.S.

Participants in Winrock's eight 2013-2014 webinars included 446 individuals from 304 organizations and 55 countries.

EPA, Winrock has organized and hosted eight webinars from 2013-2014, on important tools and approaches for the sector. Winrock staff also co-author and publish peer-reviewed journal articles on clean cooking solutions, regularly moderate and present at global clean-cooking events,

and have provided testimony for the House of Representatives Committee on Energy and Commerce, "Accountability in Grants Act of 2012."

Winrock Clean Cooking project countries

Bangladesh, Benin, Brazil, Chad, China, Guatemala, India, Kenya, Laos, Mexico, Nepal, Nicaragua, Peru, Rwanda, Uganda, Vietnam.

"EPA and Winrock capacity building workshops and webinars have been critical to help organizations evaluate technologies they are developing and distributing, which is reflected in the high fraction of organizations who are now engaged in testing activities."

—Ranyee Chiang, Global Alliance for Clean Cookstoves Standards and Testing Manager

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.