



USAID
FROM THE AMERICAN PEOPLE

Conservation is **SCIENCE & TECHNOLOGY**



Remote camera traps assist with jaguar censuses in places such as the Amazon rainforest. For proper setup, a staff member must act like a jaguar to ensure the right height and settings for capturing images. Photo: Wildlife Conservation Society.

USAID is applying cutting-edge technologies and sound science to the world's most pressing conservation challenges. By partnering with universities, the private sector and other U.S. government agencies, USAID is fostering innovations that are being rigorously tested and applied in the field. It recognizes the vital role that science, technology, and innovation play in supporting global conservation and development and is committed to continuous learning for better results.

WHAT USAID IS DOING

- USAID has invested in mapping the DNA of important timber species and creating a technology that suppliers can use to ensure they are buying legally harvested wood.
- USAID has funded cell-phone technologies for community-based conservation monitoring and supported the creation of species-identification smartphone apps to enforce anti-poaching laws.
- USAID's Biodiversity and Development Research Framework will strengthen the evidence base for conservation and improve its capacity to integrate conservation with other development sectors.
- USAID supported the development of Global Forest Watch (GFW) interactive atlases in Central Africa, which help government ministries, logging companies, and civil society make informed, sustainable decisions about land and natural resources. The next generation GFW unites satellite technology, open data, and crowdsourcing to provide access to reliable and near-real-time information about forests and deforestation around the globe.
- USAID leverages in-house resources, such as its Center for the Application of Geospatial Analysis for Development, to support spatial analysis, strategic planning and monitoring, and evaluation of conservation projects.

DID YOU KNOW?



Every minute an area of tropical forest the size of about
**50 soccer fields
is destroyed.**

USAID'S WORK IN ACTION

LEVERAGING TECHNOLOGY TO STAMP OUT WILDLIFE TRAFFICKING

Through a new Wildlife Trafficking Technology Challenge, USAID will award prizes for the most promising technological solutions to wildlife crimes. By harnessing smartphone apps, DNA forensics, geographic information system (GIS) mapping tools, or entirely new technologies, USAID aims to disrupt trafficking networks, reduce consumer demand, and root-out corruption. The Challenge will attract software engineers, forensic scientists, and social media experts who will develop and test important tools for those on the front lines of the fight against wildlife trafficking.

DID YOU KNOW?

SMART (Spatial Monitoring And Reporting Tool) is a free set of software, training and tools for authorities and community groups to stop poachers and curb wildlife trafficking.

SMART is being piloted in more than 20 sites across Africa.

APPLYING GEOSPATIAL TOOLS FOR CONSERVATION MONITORING

In the Congo Basin, USAID is teaching local conservation partners to use GIS and remote-sensing technologies to monitor forest cover change. Because there are so few roads in this vast rainforest, these tools have enabled researchers to study previously inaccessible remote areas. USAID also supports academic partnerships, including one that led to the first publication on forest cover and loss in Central Africa from 2000 to 2010. USAID's work will ensure sustainable resource management in an area of extraordinary ecological value and on which more than 80 million people directly depend for their food, water, shelter, and medicine.

DID YOU KNOW?

With support from USAID, the Central African Forest Satellite Observatory initiative has trained more than **1,500 people** on GIS and Remote-Sensing.



A trainer from the Central African Forest Satellite Observatory demonstrates how to use a Global Information System (GIS) receiver to collect data for forest conservation in the Congo Basin. Photo: OSFAC