



Using satellite images to map and monitor Congo Basin rainforests

Highlights

S&T Innovation: Satellite images monitor globally critical tropical rainforests

Sector: Natural Resources Management

Program: Central Africa Region Program for the Environment (CARPE)

Development Challenges: Climate Change

Location: Central Africa (Cameroon, Central African Republic, Republic of Congo, Democratic Republic of Congo, Equatorial Guinea, and Gabon)

Potential for Replication: Already Regional.

Implementing Partners: Satellite Observatory for the Forests of Central Africa (OSFAC)

Host Country Counterpart: La Commission des Forêts d'Afrique Centrale (COMIFAC)

Other Donors: UN-REDD (United Nations Collaborative Programme on Reducing Emissions from Deforestation and Forest Degradation in Developing Countries), the World Bank, Government of Norway, the European Union.

Other Partners/Affiliates: NASA, L'Observatoire des Forêts d'Afrique Centrale, World Resource Institute, The Regional Post-graduate Training School on Integrated Management of Tropical Forests and Lands, International Union for Conservation of Nature, World Wildlife Fund, Wildlife Conservation Society, Conservation International, African Wildlife Foundation, UNICEF, UNESCO, Mapping Africa for Africa, Nature+, University of Kinshasa, University of Maryland, South Dakota State University; Congo Basin Forest Partnership (CBFP), USFS, USGS

The Congo Basin's rainforest covers a land area as large as Mexico and is the second largest and among the most important forests in the world for absorbing climate-related greenhouse gases.

The Central African tropical rainforest and its globally outstanding biodiversity is the source of food, medicines, and firewood for 80 million people in six countries. In fact, so critical is the forest that it has attracted an impressive list of partners eager to help protect and maintain it.

A decade ago, USAID's Central Africa Region Program for the Environment (CARPE) sponsored the creation of what is now a world-class scientific non-government research organization to provide state-of-the art remote sensing data and products for monitoring forest cover.. The Satellite Observatory for the Forests of Central Africa (French acronym OSFAC) has embarked on a number of projects, including creating digital atlases for the countries of the region that provide baseline data for establishing forest monitoring programs as mandated by the UNFCCC.

Through 2018, the organization will continue to assist USAID in their regional development objective to "maintain the ecological integrity of the humid forest ecosystem of the Congo Basin," by helping monitor the forests through their expertise in remote sensing, geographic information system (GIS), and geospatial data collection and dissemination.

Partnering with NASA, the USFS, the USGS, which provide satellite imagery free of charge, and with several US universities that provide technical support and backstopping, OSFAC is now considered a "regional center of excellence" and, thanks to USAID mentorship and careful handing over of responsibilities, is stepping towards full operational and financial independence.