VIRUNGA LANDSCAPE

DEMOCRATIC REPUBLIC OF THE CONGO (DRC) – 2013: USAID's interventions in and around Virunga National Park are helping to protect the dwindling hippo populations.
Photo by © Brent Stirton/Reportage for Getty Images/WWF-Canon

THE LANDSCAPE

Virunga, the smallest and easternmost of the nine USAID-supported landscapes lies along the northeast border of the DRC, extending into northwest Rwanda and southwest Uganda.

The landscape lies within the Albertine Rift, a crescent-shaped collection of mountains covering parts of Uganda, DRC, Rwanda, Burundi and Tanzania, forming the western branch of the East African Rift. The rifts, caused by the slow separation of two tectonic plates, have also created the major lakes in the region, including Lake Edward, which nearly cuts the landscape in half and has some of the most productive fisheries in Africa.

A little more than 300 kilometers long and just 60 kilometers wide, Virunga contains an incredible diversity of habitats, from the glaciers and active volcanoes of the Rwenzori Massif, with altitudes of more than 5,000 meters, to the steamy papyrus swamps in the lowland forests of Semuliki. At the heart of the landscape is Virunga National Park. Established in 1925, the park is the oldest and most biodiverse national park in Africa.

The landscape contains greater species diversity than any other landscape in Africa. It has the last remaining wild populations of mountain gorillas and more primate species than anywhere in the world. It is home to forest and savanna elephants, hippos, lions, nearly 80 species of amphibians and more than 700 species of birds and 200 other types of mammals.

Area: 19,939 km²

Protected areas:
- Virunga National Park
- Mount Hoyo Nature Reserve
- Rutshuru Hunting Reserve
- Sarambwe Nature Reserve
- Green Lake Botanical and Zoological Garden
- Volcanoes National Park

Main biodiversity threats:
- Demographic pressure on natural resources
- Ongoing conflict and insecurity in certain areas
- Poaching of large mammals and bushmeat
- Overfishing in Lake Edward
- Charcoal and fuelwood collection
- Shifting cultivation and illegal human settlement in the Park
- Oil exploration oil permits in the Park

Intervention strategies:
- Strengthen protected area (PA) management capacity;
- Strengthen the implementation of land use management plans;
- Enhance law enforcement and prosecution;
- Promote sustainable livelihood alternatives as a substitute for unsustainable practices; and
- Facilitate access to family planning and health services in communities where health sector partners are active.
- Integrate REDD+ into the overall landscape strategy

Partners:
World Wildlife Fund (lead), Wildlife Conservation Society, International Gorilla Conservation Program, World Resources Institute, Virunga National Park, local non-governmental organizations, government partners

*Reducing Emissions from Deforestation and Forest Degradation, plus conservation, sustainable management of forests and enhancement of forest carbon stocks

THREATS

The richness of Virunga has created an array of problems affecting both the people and animals living there. The region surrounding Virunga has one of the highest human population densities in Africa, with as many as 1,000 people per square kilometer living in the southern sections of the Landscape.

The population depends on the land around them for firewood, food, farming, livestock grazing, medicinal plants and clean water. Deforestation and forest degradation are growing problems, and simmering conflicts between competing resource users often result in raids on crops or livestock. More recently, more than 20,000 people and 30,000 cattle have settled within the boundaries of Virunga National Park, increasing the pressure on this delicate ecosystem. Poaching of large mammals is a serious threat, with many of these populations experiencing dramatic declines. Overfishing in Lake Edward and intensive deforestation due to slash and burn agriculture and demand for fuel wood and charcoal have also contributed to the decline of many species.

Population pressure is not the only problem facing the landscape. Virunga has had a long history of violent conflict and instability. For decades, different areas of the landscape have been occupied by national forces and numerous rebel groups' intent on controlling the area's rich mineral resources, including gold, diamonds, tin and coltan. These protracted conflicts have led to steep declines in key species as animals are killed for food or sale, and have generated massive and unpredictable movements of refugees.

Although mountain gorilla tourism is slowly returning, some parts of Virunga National Park still contain armed rebels, posing a threat to park staff and conservation efforts.

A recent move to pursue oil prospecting within the landscape brings new threats of significant environmental damage along with possibilities of opening up new sections of the protected area.
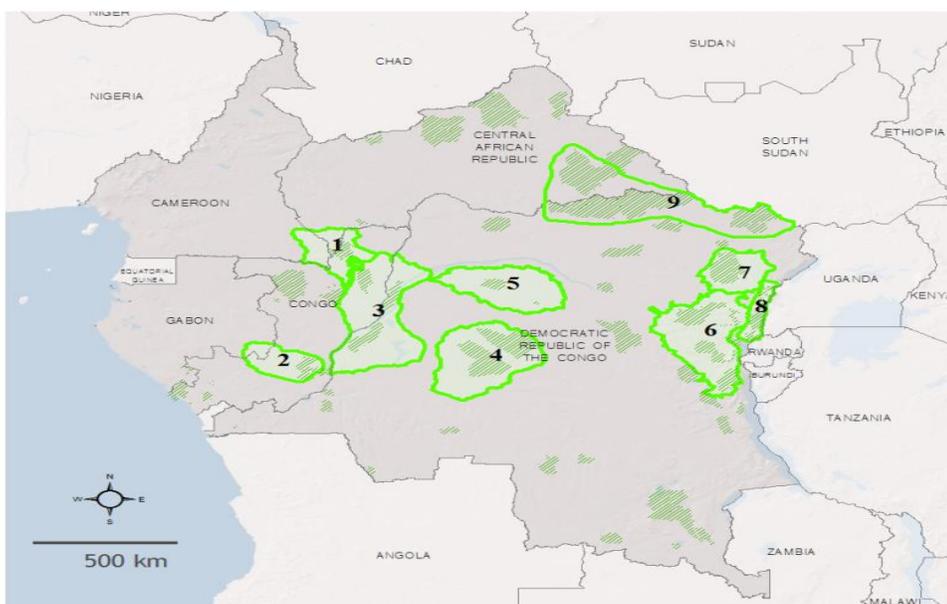
Finally, oil companies have been drilling in Virunga and the surrounding area. If the prospect oil exploitation comes into effect in the future, this will certainly damage the rich ecosystem of the Virunga.

CAFEC at a glance

USAID's Central Africa Forest Ecosystems Conservation (CAFEC) program focuses on sustainable forest management, wildlife conservation and REDD+ activities in nine carbons rich, biologically sensitive and diverse natural forest landscapes covering 32 million hectares of land; spread of covering four countries, especially the Democratic Republic of the Congo, the Republic of Congo, the Central Africa Republic and the Rwanda.

CAFEC and the Environmental Monitoring and Policy Support (EMAPS) program, which improves environmental policies and regulations, builds capacity of public and private institutions to support conservation of forest and biodiversity, and boosts the quality and scope of conservation management, climate change mitigation efforts, and data collection to maintain the ecological integrity of the humid forest ecosystem of the Congo Basin.

The CAFEC and EMAPS program are interdependent. The information collected and shared through the local efforts of CAFEC informs national and regional policy work, while improved policies supported under EMAPS allows for better conservation efforts and land use management at the local landscape level. These programs align with and contribute to the US National Strategy for Combatting Wildlife Trafficking (CWT).

MAP KEY
- Protected Area
- CARPE Priority Area

USAID Supported Landscapes
1 - Tri-National Sangha
2 - Léconi-Batéké-Léfini
3 - Lac Télé-Lac Tumba
4 - Salonga-Lukenie-Sankuru
5 - Maringa-Lopori-Wamba
6 - Maiko-Tayna-Kahuzi-Biega
7 - Ituri-Epulu-Aru
8 - Virunga
9 - Garamba-Chinko

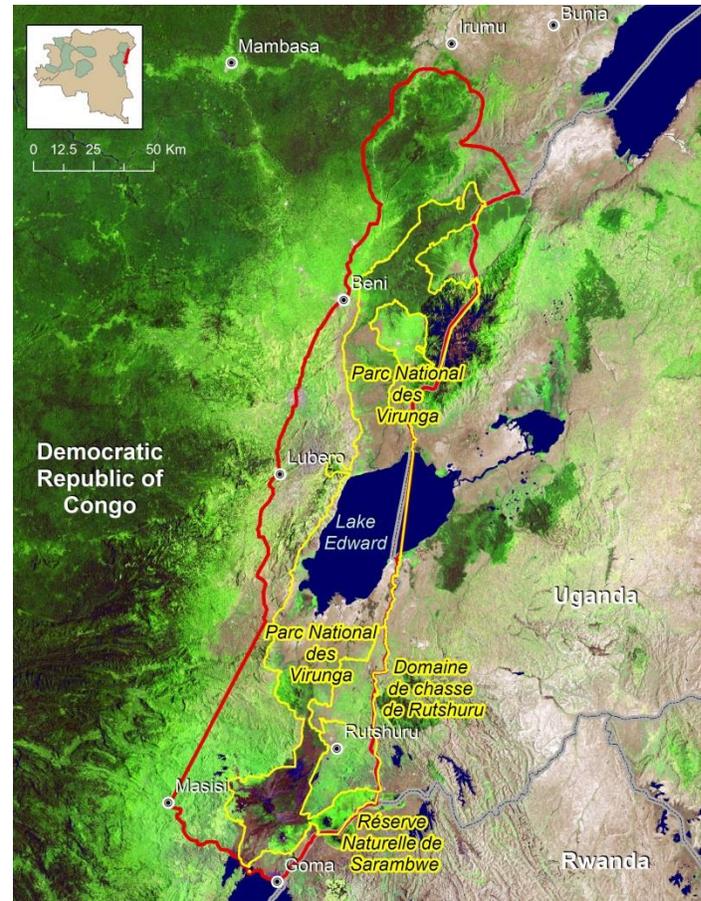USAID DRC, Sep. 2017 / Map Reference: RDRC-CP004-0248

INTERVENTION STRATEGIES

USAID's CARPE implementing partners are working with the governments of the DRC, Uganda and Rwanda to develop a strategic plan for conserving Virunga's unique landscape through trans-border collaboration and local community involvement.

Economic activities are focusing on reducing the demand for fuelwood by promoting fuel-efficient stoves. The new stoves are 50 percent more efficient than older models, and thus have the potential to reduce deforestation and cut greenhouse gas emissions. They help conserve scarce financial resources by significantly reducing the amount families need to spend on charcoal. Production and distribution of the stoves are also addressing gender inequities, with local women encouraged and trained to take active leadership roles in the growing industry, providing them with an independent source of revenue.

The use of the improved stoves is complemented by the establishment of tree plantations for charcoal production as elements of a REDD+ pilot activity in the Mont Hoyo Corridor. These plantations are generating sustainable supplies of wood for communities in the landscape. They are also generating jobs and income, while at the same time reducing the impact on natural forests.

The use of SMART[1] technology is improving patrol efficiency, allowing wildlife managers to identify key areas for enhanced monitoring. Eco-guards and magistrates are being trained and supported to apply environmental laws, allowing for more rigorous enforcement and boosting environmental governance.

Landsat composite image courtesy of the University of Maryland

Potential flashpoints for conflict are reduced by working with local communities to demarcate agreed boundaries. This participatory process, which has been in effect since 2003, is helping to resolve potential disagreements before they start by clearly differentiating between protected areas, community managed land and other land.

DEMOCRATIC REPUBLIC OF THE CONGO – 2013: View of a volcano in the Virunga landscape.
Photo by Martin Harvey for USAID

1 Spatial Monitoring and Reporting Tool

DEMOCRATIC REPUBLIC OF THE CONGO – 2013: A new member of the Bageni family in the gorilla sector of Virunga National Park.
Photo by © Brent Stirton/Reportage for Getty Images/WWF-Canon

Select FY 2017 Accomplishments

- More than 1,825 ha of trees planted in the Virunga Landscape to address deforestation and degradation of natural forests producing an estimated 15,000 tons of charcoal per year.
- The improved stoves have reduced by half the charcoal consumption and level of emissions, and dramatically decreasing the pressure on natural forests.
- More than 7,000 people trained in natural resources management, REDD+, and climate change mitigation.
- Increase of surveillance patrol coverage (area covered by patrols of ecoguards in 2016: 50.8 % in ViNP and 68,9% in Mont Hoyo Reserve) through law enforcement in PAs and combating wildlife trafficking.
- 34 772 kilometers patrolled and 646 snares destroyed.
- More than 4023 households adopting alternative sustainable practices that were demonstrated including 3,863 for cook stoves and 160 for agriculture.

DEMOCRATIC REPUBLIC OF THE CONGO – 2008: Woman selling charcoal in market near Virunga National Park. Photo by © Kate Holt/WWF-UK

For more information:

www.usaid.gov/central-africa-regional

cod.forest-atlas.org

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