



Photo by Emilie Smith Dumont/CRAF

Forests and Climate Change in the Congo (FCCC)

The context

The vast and varied forests of the Democratic Republic of Congo (DRC) are unique, with a value that extends far beyond the country's national borders. They harbor an immense wealth of biodiversity, constitute a genetic treasure trove, and contribute to the environmental stability of the entire planet.

More than half of the DRC – approximately 125 million hectares – is covered by forests that provide livelihoods for about two-thirds of the population. The forests represent four main ecosystems, including 100 million hectares of dense humid forest in three provinces in the Congo Basin, montane forests in the heavily populated eastern Kivu and

Ituri Provinces, savannah and gallery forest mosaics, and open woodland systems such as the Miombo in Katanga Province.

The country is also home to the spectacular Virunga National Park, one of the most biologically diverse areas on the planet, home to the endangered mountain gorillas.

For many years, political instability and conflict impeded efforts to harness the potential of these forest resources to contribute to sustainable development and natural resource management in the DRC. Since 2001, the country has been making important progress, supported by significant sectoral reforms. But it still faces enormous challenges when it comes to promoting forest management and conservation, particularly in the context of climate change.

The project

The Forests and Climate Change in the Congo (FCCC) project has been designed to help address some of those challenges. With funding from the European Union's Global Climate Change Alliance (GCCA), the Center for International Forestry Research (CIFOR), in collaboration with the DRC Ministry of Environment, Conservation of Nature and Tourism (MECNT), is working with the University of Kisangani (UNIKIS) and a host of other international and national partners to implement FCCC. The partners include Resources and Synergies Development (RSD), which coordinates the project, as well as The Virunga Foundation, the World Agroforestry Centre (ICRAF), WWF, University of Gembloux and the Jardin Botanique de Meise. The 47-month project was launched in February 2013.

The main goal is to support the DRC's capacity-building and applied research efforts to reduce deforestation and forest degradation and thereby mitigate climate change. The FCCC project comprises both academic and applied components. Specifically it is working to:

1. build capacity for addressing climate change and for forestry research at UNIKIS in the Oriental Province, the University of Goma and the Catholic University of Graben in Butembo, North Kivu, and the University of Bukavu in South Kivu Province.
2. promote the development of plantations and agroforestry systems outside Virunga National Park and the restoration of degraded lands and forests inside its boundaries, thereby reducing pressure on the Park itself.

1. Building academic and research capacity in forestry

A survey of forestry research capacity in the DRC in 2005 revealed a striking shortage of professionally qualified staff in a country that depends so much on its forest resources. There were very few active scientists, MSc and PhD holders, either in MECNT or other institutions in the DRC, including *L'institut pour l'étude et la recherche agronomiques* (INERA). Clearly there was a need to increase research capacity if the forest resources of the country were to be conserved and sustainably managed in the future. Since 2009, with funding from the European Union, CIFOR has managed the REFORCO project (*Appui à la recherche forestière au Congo*), which included support for dozens of MSc and PhD forestry students at UNIKIS.

FCCC expands on the success of REFORCO, by providing support for an additional 42 MSc and 11 PhD Congolese students focusing on issues of climate change, sustainable forest management and governance at - and in collaboration with - the Universities of Kisangani, Goma, Graben and Bukavu. The project also offers continued support for 13 doctoral students from REFORCO. Research projects relate to the DRC's National Program for Forestry Research Priorities and curricula are aligned to the government's plans to harmonize tertiary education across the country.

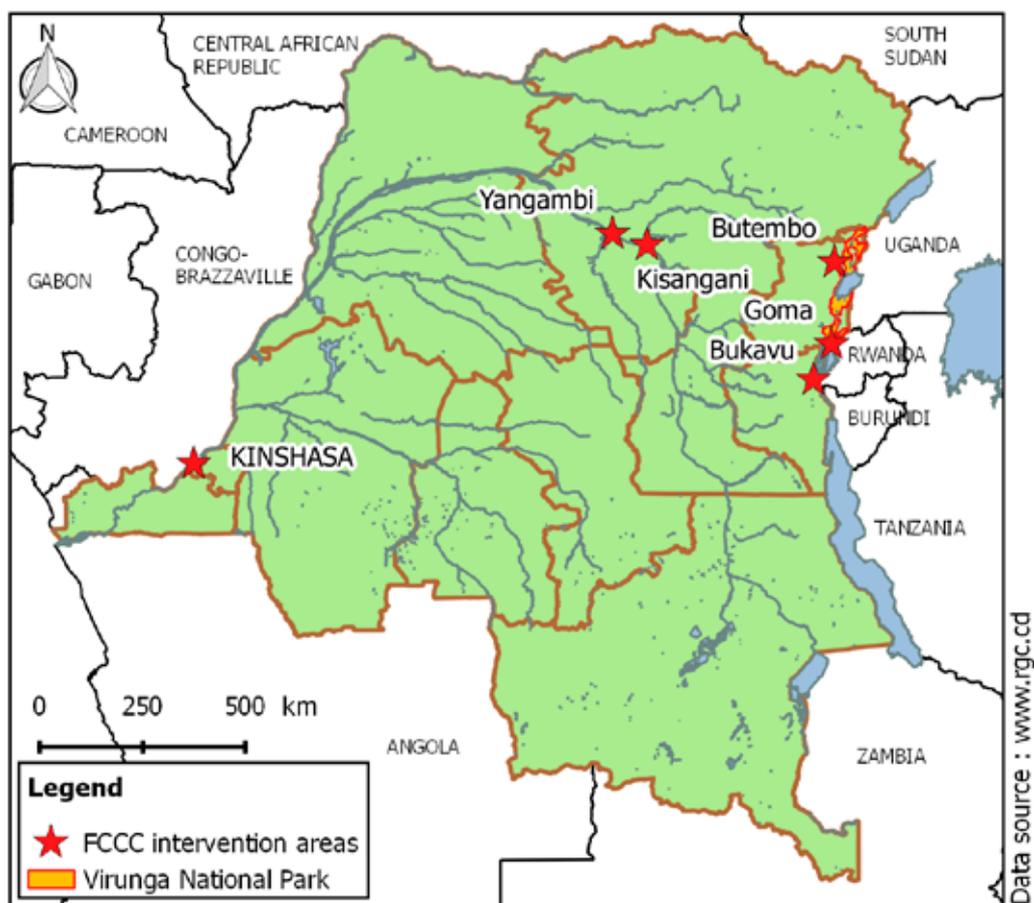
The FCCC project has coordination units led by RSD in Kinshasa, Kisangani and Goma, as well as two full-time CIFOR scientists working with the project, one at the University of Kisangani and one based in Goma to support all partners working in eastern DRC.



Increasing forestry research capacity in the DRC is important for forest users in the country. Photo by Ollivier Girard/CIFOR



Forestry students at the University of Kisangani gather at the "blue building" on campus, renovated under the CIFOR-led REFORCO project, for a CIFOR side event to the 1st International Conference on biodiversity in the Congo Basin. Photo by Joan Baxter/CIFOR



Democratic Republic of Congo

In addition to this investment in human resource development, the project also provides extensive infrastructural support for UNIKIS itself. This has included support for renovations of classrooms, lecture halls and offices, audio-visual and IT materials, field and forest survey

equipment, and bringing Internet access to campuses. CIFOR scientists, both those based in DRC and others visiting from other regions, have developed forest-related curricula and are teaching university courses.

2. Reducing pressure on Virunga National Park with trees in landscapes

The second major focus of the FCCC project is to support the sustainable management and integrity of the spectacularly biodiverse Virunga National Park landscape in North Kivu Province. Virunga, Africa's oldest national park and a World Heritage site, is under enormous pressure. Civil conflicts and the Rwandan genocide have caused an influx of refugees, which in turn has led to a substantial increase in the demand for firewood and charcoal, the main source of household energy in the region. Much of this is being sourced from the forested hills inside and on the boundaries of the Park, leading to deforestation and environmental degradation.

In an effort to counter this and to reduce pressure on the Park, CIFOR has partnered with WWF to develop tree-planting programs with local farmers to meet subsistence needs and reduce agricultural pressures on the forests of the Park. ICRAF is supporting research to design customized agroforestry options that increase the delivery of multiple ecosystem services, including increasing biodiversity and market access for local farmers. CIFOR is coordinating research on issues such as biomass estimation at the landscape scale, carbon finance, improving rural livelihoods and forest governance. The project also aims to establish and improve agroforestry practices and plantations on 3,000 hectares outside Virunga National Park, and also, in collaboration with the African Conservation Fund / *Institut Congolais pour la Conservation de la Nature* (ICCN), to restore 5,000 hectares of degraded lands inside the Park.



Baby gorilla in Virunga National Park. Photo by Emilie Smith Dumont/ICRAF

From outcomes to impact

The FCCC project views communication of its research findings as a key component. To this end, it will be producing documentary films intended for broadcast, guidebooks and technical manuals, and will ensure that its research outputs, including scientific articles, MSc theses and PhD dissertations, will be translated into factsheets, policy briefs and disseminated widely at workshops and conferences and through local and international media. CIFOR's Communications Group works closely with the project to ensure outcomes lead to impact with policymakers, forest users and other partners.

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RESEARCH
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Center for International Forestry Research (CIFOR)

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