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Forestry is a major driver of change in the Congo Basin. New roads are drawn every day, facilitating access and exploitation of the forests. 25 million km of new roads are planned to be built by 2050 [1]. This will lead to further fragmentation of the last great forests, with consequences both environmental and social [2]. Yet logged forests retain much of their diversity and ecosystem services associated with it, and their role in the conservation probably deserves to be rethought and extended [3, 4]. This is precisely one of the objectives that the CoForTips Project has set: understanding the drivers of change in the forests of the Congo Basin, and explore response scenarios that are satisfactory for both human development and conservation of these ecosystems.

Project launch in Montpellier:

March 11-14, 2013

All partners in the CoForTips project met for the first time in Montpellier. Project governance has been established, with the constitution of a steering committee (see opposite). The concepts underlying the project were discussed and shared in a common glossary (see p4). Each WP ('Working Package') was introduced, and the visions of each discipline represented in the project were integrated into a common conceptual model draft. The glossary and the conceptual model will continue to evolve. In order to set up a science / policy makers interface for the project the relevant actors at the regional level were identified. Two of the three study sites were selected (Makokou and Mindourou see p3), and the third was discussed. Finally, the project has a Dataverse hosted at CIRAD and the address www.cofortips.org was reserved.



The human spectrograph CoForTips represented on two axes: (white) When is the person effective (from early birds to night owls) and (black) How much does the person respect deadlines (from "finished three weeks ago" to "which deadline?"). The photographer is also in a position ...

Project launch in Libreville:

March 24, 2013

The project was presented at the workshop Biodiversity Scenarios for Sub-Saharan Africa organized by the FRB (Foundation for Biodiversity Research) and the Gabonese government. To support CoForTips and the participation of African partners, another project will be submitted to the FRB call Scenarios of Biodiversity 2013.

Concurrently to regional approaches, three sites were selected for in depth study: Makokou, Mindourou, and Guéfigué. They are located on a gradient of human intervention on forests (forest transition curve against) and are subject to detailed socio-economic and / or ecological studies.

Makokou

(Gabon, province of Ogooue-Invindo, department of Ivindo): Located in dense forest, this site has undergone little deforestation, and human density is low (1.33 / km²).



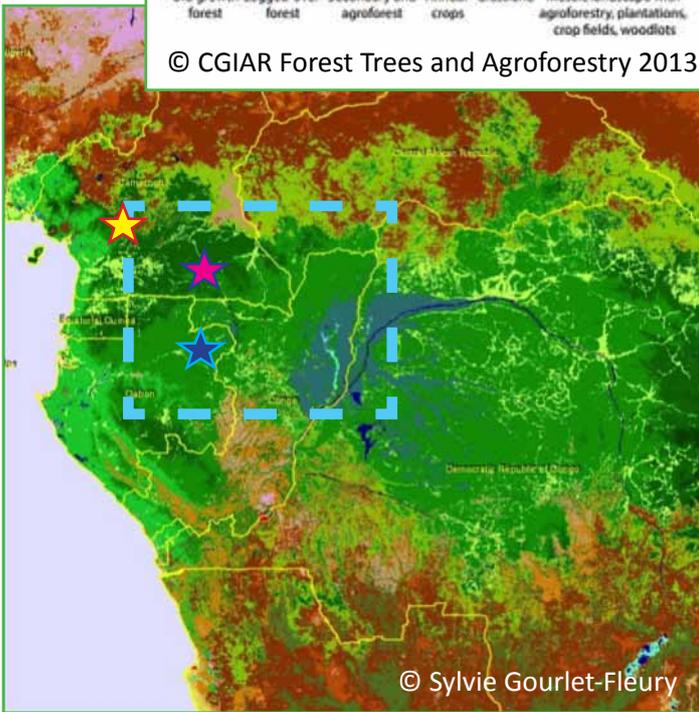
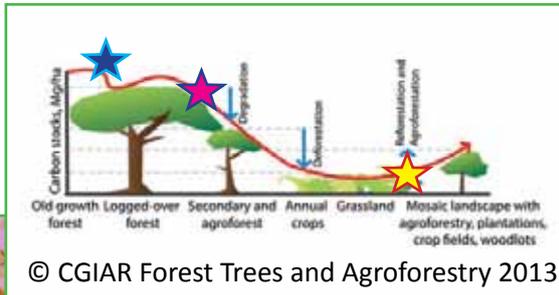
Some processes are yet emerging, such as the development of a mining concession (Bellinga) and logging and poaching that encourage the elephants to come closer to the villages. This site is part of the action area of the DACEFI project, it is the research site of the FORENET network (African-Caribbean-Pacific Forest Research Network) as well as the study area of CoForChange (blue rectangle on the map against).

Mindourou

(Cameroon, East region, Upper Nyong department, Borough of Dja): Located on the periphery of the Dja Wildlife Reserve, this is a site in transition with important



development issues. The human population is more substantial than in Makokou (3.33 / km²), and it is growing. 50% of the population is of foreign origin, and works as labourers for the PALLISCO, the industrial forester. Like Makokou, this site is part of the action zone of DAFECI (Community Alternatives of Development at Illegal Logging) led by WWF, the Nature + NGO and BIOSE Department (University of Liège, Faculty of Gembloux) and the study area of CoForChange.



Guefigue

(Cameroon, Mbam and Inoubou department, Borough of Bokito): The inflection point of the forest transition is gone in this region where forest cover is being renewed. Located on the edge of the CoForChange zone, it is a study site from CIRAD that has conducted research on agricultural activities and especially on cocoa for 15 years.



The Steering Committee:

June 27, 2014

The committee met to review progress on the project, deliverables, and goals left to achieve. Communication between the different working groups sets up within the project. However, the establishment of dialogue with regional authorities remains difficult, and additional efforts are required to communicate around the project. This will be the central theme of the mid-term workshop planned in Gembloux in October that will be attended by the advisory group. Members of this group will advise the project for its communication to the media and the relevance of the questions raised by CoForTips. This workshop will be an opportunity to launch the CoForSet project, which we will discuss in a future edition.

The logo

CoFor in green refers to the Forests of the Congo Basin, and Tips in pink, to change, emergence, and surprise. In the background, a Moabi sheet, heritage of CoForChange, and pixelated to represent spatial models used in the project.



Moabi (*Baillonella toxisperma*), from the Sapotaceae family, is a canopy tree. Its wood is highly coveted and exported. Its fleshy fruits and seeds with high lipid content find multiple uses, as food and cosmetics, and are enjoyed by men as well as by other mammals such as elephants.

The definitions corner

Socio-economic system (SES)

A socio-economic system is an integrated and complex mix of ecosystems and social systems. This concept is based on the assumption that these systems are inseparable. SES is an intellectual construct determined by: (i) the constituents, (ii) their mutual interactions and interactions with external elements, and (iii) limitations. As an SES depends on the observer, its limits are based on the issue at hand and can change as knowledge and understanding of the system evolve. The spatial and temporal scales are related to the processes studied and we examine as many scales as seem relevant, given the question explored in this SES.

Biodiversity

The term “biodiversity” is used broadly, as the Convention on Biological Diversity describes it. It is “the variability among living organisms from all sources including, among others, terrestrial, marine and freshwater ecosystems, and the ecological complexes to which they belong; this includes diversity within species, between species and of ecosystems”. To what we have added that biodiversity is defined here as one of the attributes of the SES to be described.

[1] Laurance, W. F., Clements, G. R., Sloan, S., O’Connell, C. S., Mueller, N. D., Goosem, M., ... & Arrea, I. B. (2014). A global strategy for road building. *Nature*.

[2] Garcia, C. A., Feintrenie, L. (2014). Beyond the Mirror: Tropical Forest Fragmentation and its Impact on Rural Livelihoods. In *Global Forest Fragmentation*, Kettle, C. J., & Koh, L. P. Eds, 115

[3] Edwards, D. P., Tobias, J. A., Sheil, D., Meijaard, E., & Laurance, W. F. (2014). Maintaining ecosystem function and services in logged tropical forests. *Trends in ecology & evolution*, 29(9), 511-520.

[4] Gourlet-Fleury, S., Mortier, F., Fayolle, A., Baya, F., Ouédraogo, D., Bénédet, F., & Picard, N. (2013). Tropical forest recovery from logging: a 24 year silvicultural experiment from Central Africa. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 368(1625), 20120302.

Project donors



Project partners



Associated partners



Contact

Dr. Claude Garcia

Forest Management and Development
Group, ETH

Universitaetstrasse 16
8092 Zurich, Switzerland

Email : claudio.garcia@usys.ethz.ch

Email : claudio.garcia@cirad.fr

Phone : +41 (0)44 632 32 14

www.fordev.ethz.ch