Workshop in Colombia (29 May - 2 June 2017)

The OPAL team in Colombia organized a workshop in the Llanos region to advance the development of the ComMod game in the country and share experiences of the process so far. The whole OPAL team in Colombia was present as well as Jaboury Ghazoul, Claude Garcia and John Garcia Ulloa from ETH.

The main objectives of the workshop were (i) to play the game that has been developed by Maria Fernanda Pereira and Daniel Castillo (Universidad Javeriana), (ii) to further understand the ComMod process in Colombia, (iii) to play the game with local producers, and (iv) to discuss how to move forward with the activities of OPAL in Colombia.

We conducted two game sessions: one with the research team and one with local producers. Both sessions were fun and engaging and provided valuable feedback to further advance the game in the country. The producers invited to the session had a very positive reaction to the game, and we were able to engage in interesting discussions about the sector. They remarked how well the game captured many real situations and how interesting the methodology was to understand the system from other people’s perspectives.

During the workshop we also had the opportunity to visit one of the plantations in the region called Hacienda La Cabaña, where we witness first-hand various management processes, such as manual pollination, harvesting, selective breeding and biodiversity monitoring.

More photos [here](#).
**News from the EPFL Team**

**First insights on savanna conversion to oil palm in Colombia**

**Master Thesis**
As time is passing by, the EPFL team starts to get the benefits of its field campaign conducted in Colombia in 2016. The first achievement was reached by Johanna Ruegg who successfully finished her Master thesis entitled “Oil palm plantations in savannas: impacts on biomass carbon stocks and soil organic carbon dynamics”. It quantifies the increase of aboveground and belowground biomass C stocks over a full cycle of plantations. Additionally, it investigates effects of management practices within the different operating zones of a plantation on soil organic carbon (SOC) stabilization. In particular, it focuses on the influences of root density and soil microbial decomposing activity, which strongly depends on management zones. Because of the high quality of her work, we decided to keep Johanna in our group for a few months to write an article on her findings. This process is still ongoing and we aim at submitting an article by the end of the summer.

**Rotation cycles**
While the work of Johanna on soil was focusing mainly on a 9 years old plantation, the work of Juan Quezada (PhD candidate) encompasses the impact of oil palm cultivation on soil over one rotation cycle (25-30 years) on one site, and even two rotation cycles in another site. It addresses the topics of soil carbon sequestration and soil degradation.

**Environmental impacts of oil palm cultivation**
Since we made enough progress in this work, preliminary results were presented in April 2017 at the European Geosciences Union annual meeting in Vienna. Johanna presented her work in a session dedicated on soil processes and attended mostly by soil scientists working in various ecosystems. Since Juan couldn’t join the meeting, Thomas Guillaume (postdoc) presented his work in a full day session dedicated to biogeochemistry and ecohydrology in tropical ecosystems. The community of natural scientists working on oil palm plantations was well represented with scientists from the EF-ForTS project from Germany, the SAFE project from the UK, French groups working on peatsoils, etc. About a third of the presentations addressed the environmental impacts of oil palm cultivation.

**Highly sensitive topic**
It is important to mention that all these studies were conducted exclusively in Indonesia or Malaysia. It was a good opportunity to present for the first time the message that oil palm cultivation in savanna grassland could be an alternative that substantially reduces environmental costs of future oil palm expansion, at least in terms of ecosystem C storage. However, we realized that associating oil palm with less negative environmental impacts was seen by many participants as a way to minimize impacts of oil palm cultivation and to encourage the transformation of natural ecosystems into agroecosystems. This feedback clearly shows that we need to improve our narrative and strongly back our work, the topic being highly sensitive!

---

Oil palm in the well drained savanna. Photo: Thomas Guillaume.
CoPalCam Game - Crash Test Session at WWF

On 16 May 2017, the OPAL Cameroon Team had a test game session with staff members of WWF Cameroon. This gave them an opportunity to witness the dynamics of the palm oil sector in Cameroon. During the game, the players explored options of maximizing profits by working in cooperatives. Unfortunately due to time constraints only two years could be played during the session.

Game Session with stakeholders in Cameroon

On 1 and 2 June 2017, a game session was organized with participants from the Government (Ministry of Environment, Nature Protection and Sustainable Development, Ministry of Forestry and Wildlife, Ministry of Mines and Technological Development, Ministry of Commerce, Ministry of Agriculture smallholders, agro-industry (SOCAPALM), Second transformation (ASROC, AZUR), Institute of Agricultural Research for Development (IRAD) and smallholders. The participants played till the eighth year.

The game gave an unprecedented opportunity for exchanges and discussions between the various actors in the sector: and raise a call for cooperation between the various players in the sector. The game session brought out some of the challenges hampering increase in palm oil production like (i) the inadequate collaboration between smallholders and agro industries, (ii) the lack of new production techniques causing low output leading to high importation of palm oil in order to meet up with the high demand in the local market, and (iii) the gradual extension of smallholder’s plantations which causes an unforeseen progressive loss of forest.

At the end, all the participants were very satisfied and solicited the game for the establishment of viable cooperatives of palm oil production in Cameroon.

New study commissioned

OPAL Cameroon commissioned a new study entitled “Environmental impact of smallholders and elites palm oil plantations on deforestation in the Sanaga Maritime and Ndian landscapes: case study of Ngwéi and Ekondo Titi Subdivisions”. Or in French « Étude sur l’impact environnemental des palmeraies villageoises/élitistes sur la déforestation dans les paysages de la Sanaga Maritime et du bassin du Ndian : cas des arrondissements de Ngwéi et d’Ékondo Titi ».

Participants to the game session.

Delivery of fresh fruit bunches (FFB) at the artisanal mill.

Bookkeeping at the industrial mill.

Photos: WWF Cameroon.
Other news from OPAL in Switzerland

OPAL in the Swiss newspaper

On 7 May 2017, an article about palm oil titled “Schmiermittel der Welt” (in English: The world’s lubricant) was published in the NZZ am Sonntag, a reputable weekly magazine from Zurich. The article was written by a freelance journalist who contacted Natalia Ocampo-Peñuela (postdoc, ETH) and Jaboury Ghazoul for an interview. The name of the OPAL project has unfortunately been removed by the editor, but findings and the use of role-playing games of our project are being mentioned in the article.

The article was obviously read by a large audience and very quickly local stakeholders contacted us for further exchange. As a result, the OPAL ETH Team met in June the sustainability team from Migros, a leading supermarket in Switzerland and also a founding member of RSPO. The fruitful discussion lead to a willingness to collaborate in the future.

In July, Jaboury also met the CEO of RepRisk, a company based in Zurich that does information analysis for banks that allows those banks to judge whether they are lending money to, for example, reputable palm oil companies.

Finally end of August, a meeting with PanEco, a Swiss conservation NGO with activities in Indonesia, is planned.

OPAL in the IUCN task force on oil palm

OPAL Team member John Garcia Ulloa (postdoc, ETH) was invited to attended a meeting with the International Union for Conservation of Nature (IUCN) with the purpose of creating a task force on oil palm and biodiversity. The creation of this task force is a mandate given by a resolution passed by last year’s Conservation Congress in Hawaii.

The task force, which is composed of researchers and stakeholders from the palm oil sector, should become the reference point within the Union for issues around oil palm. The IUCN is a union of conservation organizations, NGOs, scientists and governments, and thus has a very good convening power and can engage in high level discussions.

Rather than reinventing the wheel, the IUCN wants to understand the current policy landscape and figure out how they can support current sustainability efforts in the sector. To accomplish this, the first task of the task force is to develop a situation analysis on oil palm and biodiversity, which should show: (i) the current situation of the oil palm sector, (ii) the state of knowledge about impacts and benefits, (iii) the configuration of the policy landscape, and (iv) an outlook of the issue.

This is a good opportunity for OPAL to participate in this process and disseminate our work and research. The situation analysis will be completed by January 2018.

Roundtables for sustainable palm oil

On 20 April 2017, Claude Garcia (ForDev Group leader, ETH) attended a meeting in Paris organized by the Alliance française pour une huile de palme durable, an alliance by French companies for sustainable palm oil.

There were four roundtables, organized around the following topics: (1) Zero deforestation and landscape approaches, (2) cooperation between consuming and producing countries, (3) helping producers move towards NDPE (No Deforestation, No Peat, No Exploitation), and (4) working conditions in plantations.

The discussion highlighted two major bottlenecks looming ahead of the oil palm sector: labor shortage, already happening in peninsular Malaysia, poised to happen elsewhere and the fact that 90% of the production is concentrated in both sides of the strait of Malacca – making possible outbreaks potentially devastating.

The conclusions of the workshop are the following: (i) need for more clarity on the term landscape approach; (ii) understanding the need to de-emphasize common objectives and to favor common entry points; (iii) the need for alliances between sectors (oil palm, timber, hevea, cacao) and (iv) need to include human rights that have been neglected so far by the Alliance.

The proposed next steps of the Alliance include a training session using the role playing games developed by OPAL to foster strategic thinking, and the identification of 3 landscapes, one in Indonesia, one in central Africa, one in Latin America where members of the alliance can start implementing landscape approaches. OPAL activities and study sites can act as proof of concept in this respect and we will continue the discussion with this boundary partner.
OPAL in Indonesia

GLF Forum
On 18 May 2017 the Global Landscapes Forum (GLF): Peatlands Matter, organized by CIFOR and partners, took place in Jakarta. CIFOR invited two people from Kutai Kartanegara where OPAL works. One smallholder working closely with PhD student Bayu Eka Yulian (IPB CARDS), and a head of another village. One of them presented in the Forum the community perceptions on how they protect peatland in Kutai Kartanegara. This is a great way to bring attention to landscapes issues where OPAL is present and will be continued during the next GLF seasons and other international events.


CoMoDo Game (COmpanion MOdelling in InDOnesia)
PhD Student Nur Hasanah (ETH Zurich) is about to bring her game to the fields. After crash testing it in Zurich, she is now presenting it to our partners in Indonesia (CIFOR, IPB, Univ. Of Islam As-Syafiiyjakarta), where she will again collect feedback and refine the game and its rules. Her game touches the ecosystem services in landscapes where oil palm plantations are expanding. Her game seeks to explore the choices local people make: are they fishing, hunting, logging or planting oil palms? What is best? Be in the short term and in the long term? And how do those choices affect the available resources? She is also interested at observing how players interact with each other.

The game will be played with local stakeholders in Kutai Kartanegara from August to October 2017.

---

Upcoming publications

- Garcia C, P Levang, E Fauvelle, E Ngom, A Dray, L Miaro, D Halleson, J Ghazoul (2017) Playing games with the palm oil supply chain in Cameroon. To be submitted to Ecology and Society