Oil palm: Landscapes, market chains and investment flows

An issue bounded Sentinel Landscape

Sentinel Landscape Workshop
March, 2014

Justification

- Oil palm development is one of the main drives that contributes to shape landscape change in the tropics primarily linked to globalized markets and transnational and domestic investment flows
- The sentinel landscape on oil palm (SLOP) focuses on assessing the functioning of the global value chain and investment flows and networks associated with a set of different landscapes where oil palm is developed
- The main focus is to explore the socio-economic and ecological transformations underway in these specific landscapes influenced by oil palm development through connecting financial flows with main production zones and processing and consumption centers

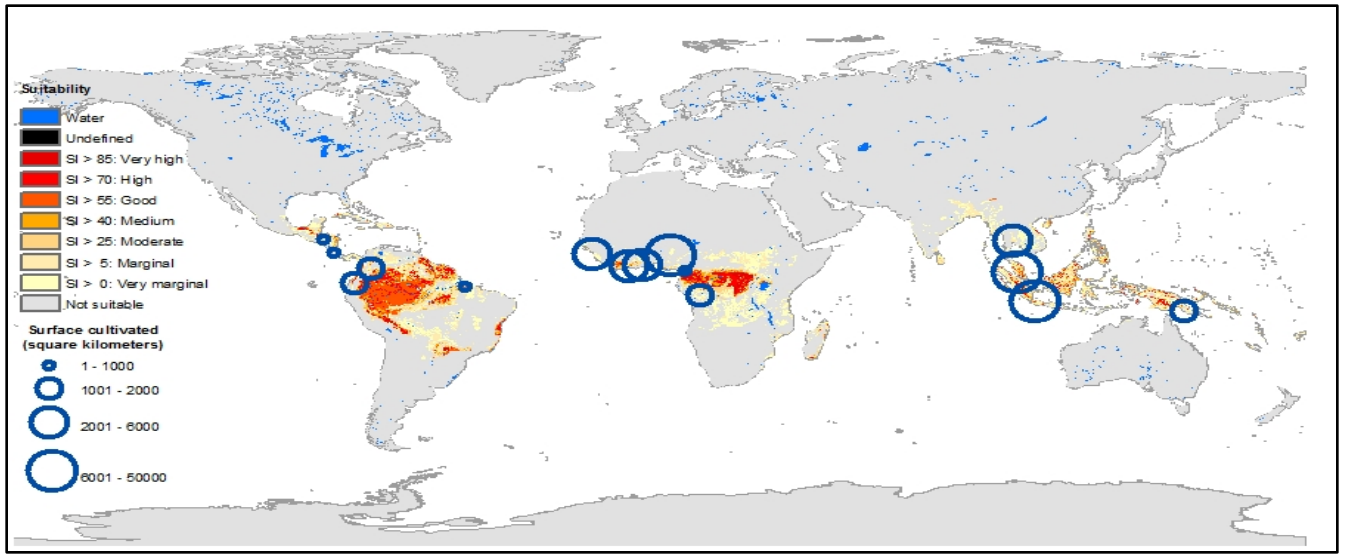
Questions to address

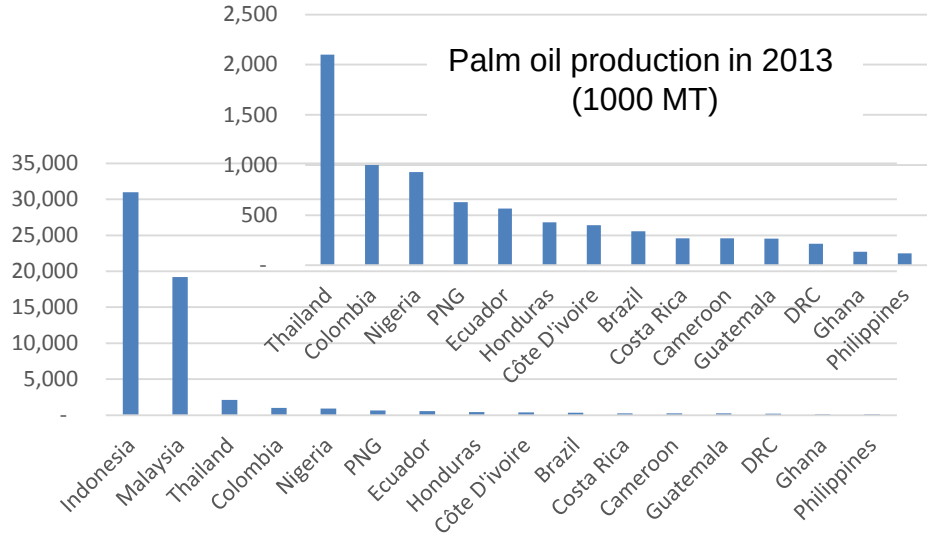
- What is the role that oil palm expansion has on shaping local and national models of economic development and what is its associated impacts on land use change trajectories over time?
- What is the role of state policies vis-à-vis corporate strategies in the adoption of disparate production systems and business models under diverse socio-political and economical contexts across regions?
- Under what business models can oil palm development contribute to achieve better social impacts in poverty reduction while simultaneously result in lower impacts on forest conservation?
- What policy frameworks and governance mechanisms are more effective to reduce the negative impacts, and to promote more sustainable and inclusive business models of oil palm production?

Our team

- **Coordinator**: Pablo Pacheco (CIFOR)
- **Brazil:** Frederico Brandão (CIFOR), in negotiation links with EMBRAPA
- **Cameroon:** Patrice Levang (IRD/CIFOR), Laurene Feintrenie (CIRAD), links with WWF, Ministry of Agriculture and UNEXPALM
- **Colombia:** Alejandra Rueda (NES Naturaleza) links with Universidad Javeriana, Ministry of Agriculture and FEDEPALMA
- **Indonesia:** Krystof Obidzinski (CIFOR), Heru Komarudin (CIFOR), links with Bogor Agricultural University, IPB
- **Malaysia:** Faisal Noor (consultant) – links with SLDB in Sabah
- **Nigeria:** George Schoneveld (CIFOR), no links in place
- **Peru:** Ayme Muzo (CIFOR), Jason Donovan (ICRAF), Valentina Robiglio (ICRAF), Claudia Silva (ICRAF) links with University of Ucayali
- **Others:** Lesley Potter (ANU), Suseno Budidarsono (ICRAF)

The geography of oil palm





- The growth in the sector is due to two Southeast Asian countries, followed by other countries in sub Saharan Africa and Latin America

Source: http://www.indexmundi.com/

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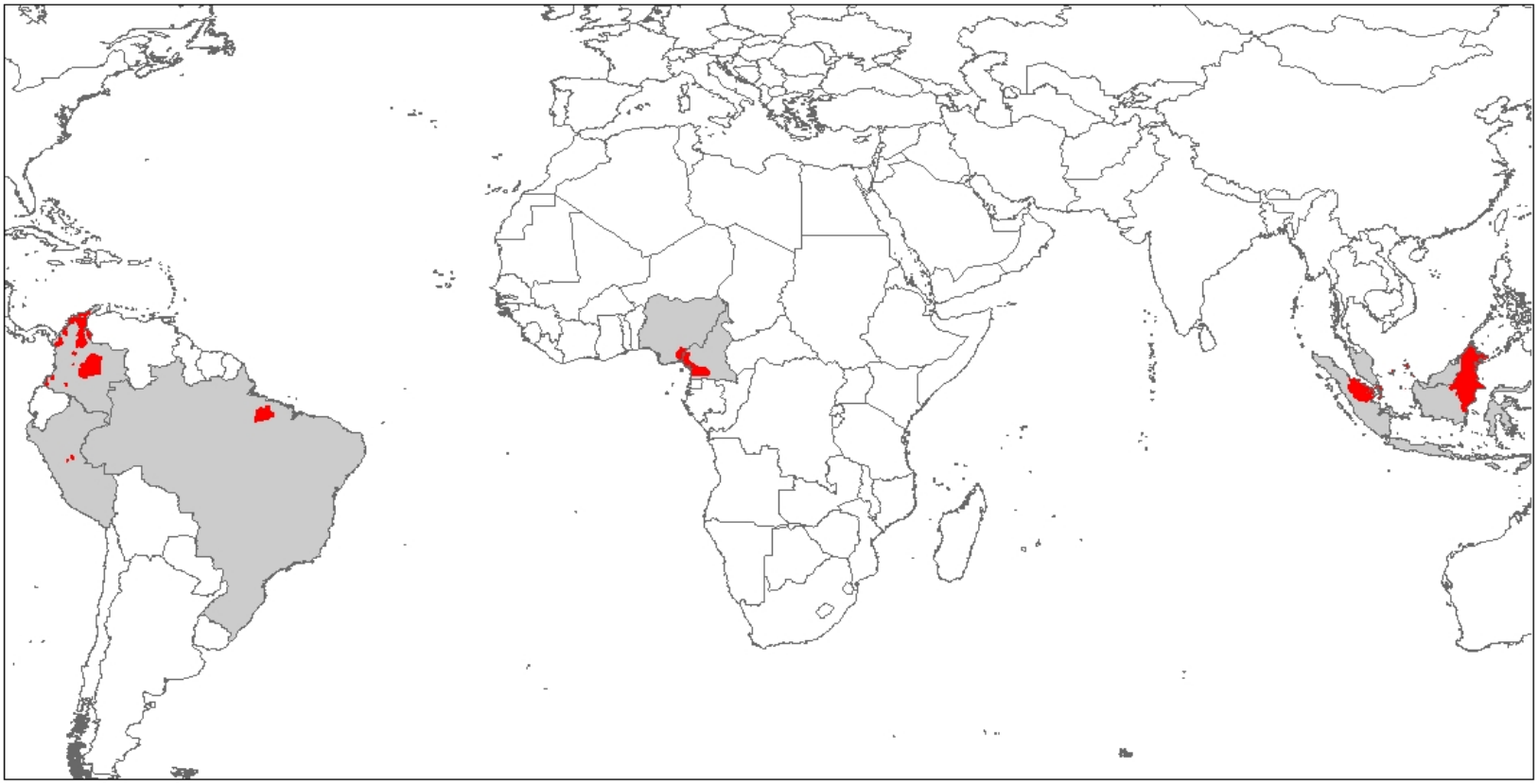
Selected landscapes



Landscapes in 7 countries: Cameroon and Nigeria in sub-Saharan Africa, Malaysia and Indonesia in Southeast Asia and Colombia, Peru, and Brazil in South America

Secondary data collection

Main Cateroy	Type of data	Code	Brazil	Indonesia	Cameroon	Colombia	Peru	Malaysia
Land-use trajectories	Total areas planted	1.1_ST						
	Total area s harvested	1.2_ST						
	Age of oil palm plantations	1.3_ST						
	Estimates of change and land use transitions over time	1.4_ST						
	Inventory of plantations	1.5_ST						
Tenure regimes	Tenure regime of oil palm planted area	2.1_ST						
	Inventory of plantations (or classification by size) – includes for each: year of establishment, investment, production, area certified, number of employees, etc.	2.2_ST						
Production and production systems	Oil palm production	3.1_ST						
	Installed capacity of palm oil production	3.2_ST						
	Oil palm exports/imports by type of sub-product and destination markets	3.3_ST						
	Incomes/profits obtained from oil palm production	3.4_ST						
	Prices of oil palm over time	3.5_ST						
	Cost structures by actor type	3.6_ST						
	Employment generated by each production system type	3.7_ST						
	Investment in production by year and location	3.8_ST						
Infrastructure and processing facilities	Inventory of processing facilities (mill) by year of establishment-includes for each plant/mill : size of investment, processing capacity, labor employed	4.1_ST						
	Investment series in processing facilities by year and location (national and foreign by source of origin)	4.2_ST						
	Investment series in processing facilities by year and location (national and foreign by source of origin)	4.2_ST						
Others	Profile of main companies investing on oil palm (owners, sources of investment, other investments)	5.1_ST						

Available Not available In process

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Difficulties encountered with secondary data collection

- Not an easy process to bring different people/institutions on board
- Some data cannot be accessed while it should be publicly available
- Many data is available but quite scattered and fragmented
- Difficult to keep track of work of national partners in some cases
- Some data (e.g. mill operations, investment, yields) are classified
- National agencies skeptical about sharing data with international organizations on oil palm and natural resource management

Primary data collection

	Colombia	Peru	Malaysia	Cameroon	Indonesia	Nigeria	Brazil
Land use change analysis	Updating a map of oil palm areas available to 2008 for 3 periods	Mapping oil palm areas in 3 periods based on LANDSAT	Mapping oil palm and other crops in 3 periods based on LANDSAT and time series	Mapping oil palm areas in 3 periods based on LANDSAT and SPOT images	Undertaking a land use assessment based on LANDSAT	Completed LUC analysis in 2 periods based on LANDSAT	Updating a map of oil palm areas available to 2008 for 3 periods based on LANDSAT
Survey to smallolders	Carried out HH survey to144 smallholders in 3 different zones	Carried out HH survey to 230 smallholders in 2 different zones	Carried out HH survey to 104 of three different types of smallholder grower	Contribute to complete a census of oil palm small-holders and planters	To be carried out a HH survey in East Kalimantan during March - July 2014	No carried out	In process of negotiation and definition
Interviews to planters and oil palm mills	5 companies interviewed	5 companies interviewed	2 planters interviewed and 124 total Geo coded locality CPO mills were obtained	Completed interviews to artisanal oil palm millers	To be carried out interviews to 8 companies during March–July 2014	Completed interviews to 9 oil palm plantations	In process of negotiation and definition
Interviews to key informants	15 key stakeholders interviewed	5 key stakeholders interviewed	7 directors from 7 state agency were interviewed	Conducted interviews to key actors in the oil palm sector	Planned interviews to stakeholders March – July 2014	Completed interviews and focus groups in each plantation	In process of negotiation and definition

Outputs planned by 2014

Global	Colombia	Peru	Malaysia	Cameroon	Indonesia	Brazil	Nigeria
Mapping of oil palm areas of smallholders and agro-industries	An updated map with oil palm plantation areas In 4 zones	An updated map with oil plantation areas in 2 zones	An updated map with oil palm planted areas by actor in Sabah	An updated map with oil palm planted areas by actor in the oil palm belt – one related WP	An updated map with oil palm planted areas by actor in East Kalimantan	An updated map with oil palm planted areas in northeastern Para	Completed a map completed on oil palm areas and concessions
With regard to the analysis of oil palm dynamics of expansion	1 WP (in process, close to completion)	1 WP (in process, close to completion)	1 JA (draft expected in 30th April)	1 WP (completed, with emphasis on a historical perspective)	1 WP	1 JA	1 JA (completed)
With regard to outcomes associated to different business models	1 JA (draft expected in August)	1 JA (draft expected in August)	1 JA (draft expected in 30th April)	1-2 JA, with gender explicit analysis	1 JA (likely to be produced in 2015)	Not defined yet	Not planned

Notes: WP = Working Paper, OP = Occasional Paper, JA = Journal article

Difficulties encountered with primary data collection

- Negotiation with national organizations tends to take time
- There is no openness of companies to provide information
- Resources for conducting fieldwork are relatively limited
- Difficult process to adapt questionnaires across countries
- Need to build trust with local organizations with takes time

Fundraising efforts

- Attempts to build a joint proposal between CIFOR and ICRAF in 2013, and ICRAF in 2014, for the BMZ GIZ BEAF call for proposals – yet the CNs submitted were rejected during the internal selection process
- We made the first round of CN approvals by the Swiss National Science Foundation for a proposal led by ETH Zurich and CIFOR. Invited to submit a full proposal (under development) by March 2014 for a total of 3M CHF on a period of 6 years.
- Obtained a research grant from IRD (GEOFORAFRI) for capacity building at the Geography Dept. of Yaoundé 1 for mapping oil palm smallholdings.
- The team in Cameroon are planning to compete for a grant offered by the EU in collaboration with WWF and CIRAD to contribute to the drafting of a national strategy for the sustainable development of oil palm.

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Livelihoods, Landscapes and Governance

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The CGIAR Research Program on Forests, Trees and Agroforestry is a collaborative program aims to enhance the management and use of forests, agroforestry and tree genetic resources across the landscape from forests to farms. CIFOR leads the program in partnership with Bioversity International, CIRAD (Centre de coopération internationale en recherche agronomique pour le développement), the International Center for Tropical Agriculture and the World Agroforestry Centre.

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