REDD-ALERT 2nd Annual Project meeting

October 13-16, 2010

Peru

REDD-ALERT

EU-FP7 Project
REDD-ALERT

Reducing Emissions from Deforestation and Degradation through Alternative Landuses in Rainforests of the Tropics

- Macaulay Land Use Research Institute, United Kingdom
- Université Catholique de Louvain, Belgium
- Vrije Universiteit Amsterdam, Netherlands
- Georg August University of Göttingen, Germany
- World Agroforestry Centre, Kenya
- Centre for International Forestry Research, Indonesia
- International Institute of Tropical Agriculture, Nigeria
- Centro Internacional de Agricultura Tropical, Columbia
- Indonesian Soils Research Institute, Indonesia
- Research Centre for Forest Ecology and Environment, Vietnam
- Institut de Recherche Agricole pour le Développement, Cameroon
- Instituto Nacional de Investigacion y Extension Agraria, Peru

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Linking global agreements to local action

<u>Overall goal</u>: To contribute to the development and evaluation of mechanisms and the institutions needed at multiple levels for influencing stakeholder behaviour to slow tropical deforestation rates and hence reduce GHG emissions

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Project objectives

- Documenting the diversity in **social, cultural, economic and ecological drivers of forest transition** and conservation, and the consequences, in the contexts of selected case study areas in Indonesia, Vietnam, Cameroon, and Peru as representative of different stages of forest transition in Southeast Asia, Africa and South America.
- Quantifying **rates of forest conversion and change in forest carbon stocks** using improved methods.
- Improving accounting (methods, default values) of the **consequences of land use change for GHG emissions** in tropical forest margins including peatlands.
- **Identifying and assessing viable policy options** addressing the drivers of deforestation and their consistency with policy approaches on avoided deforestation currently being discussed in UNFCCC and other relevant international processes.
- Analysing scenarios in selected case study areas of the **local impacts of potential international climate change policies** on GHG emission reductions, land use and livelihoods.
- **Developing new negotiation support tools** and using these with stakeholders at international, national and local scales to explore a basket of options for incorporating REDD into post-2012 climate agreements.

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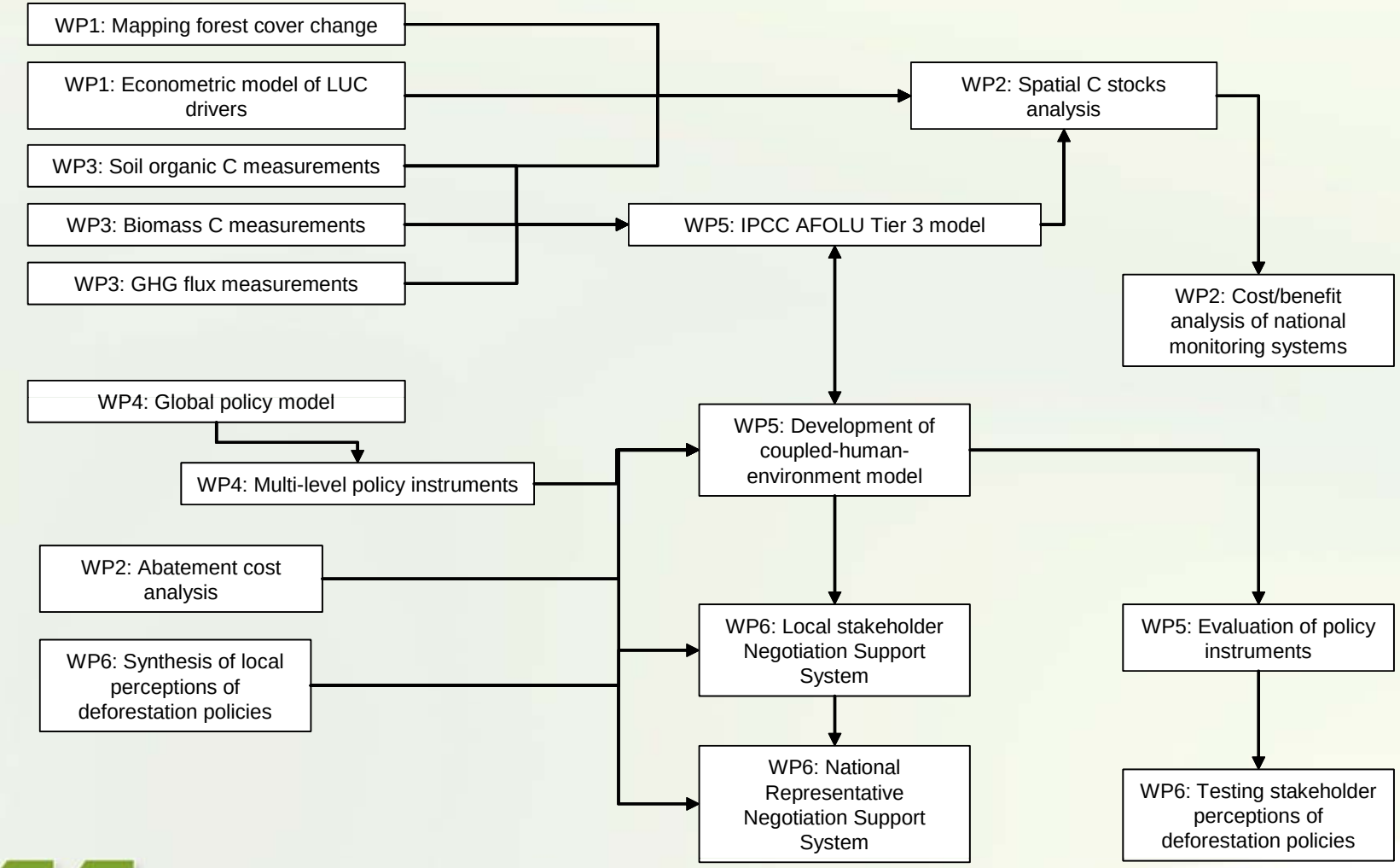
Pert diagram



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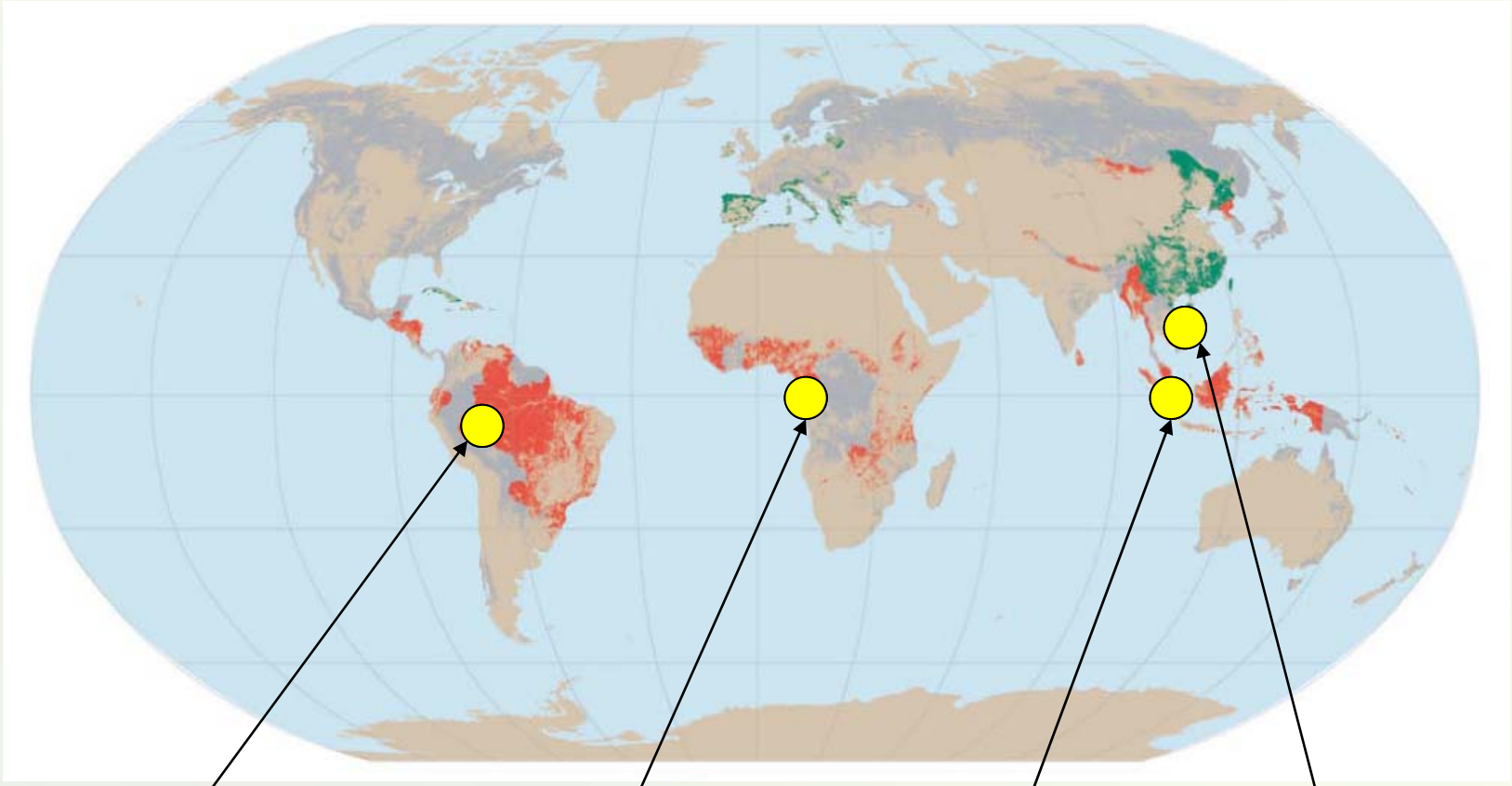
Site locations



Ucayali, Peru *Southern Cameroon* *Indonesia* *Vietnam*

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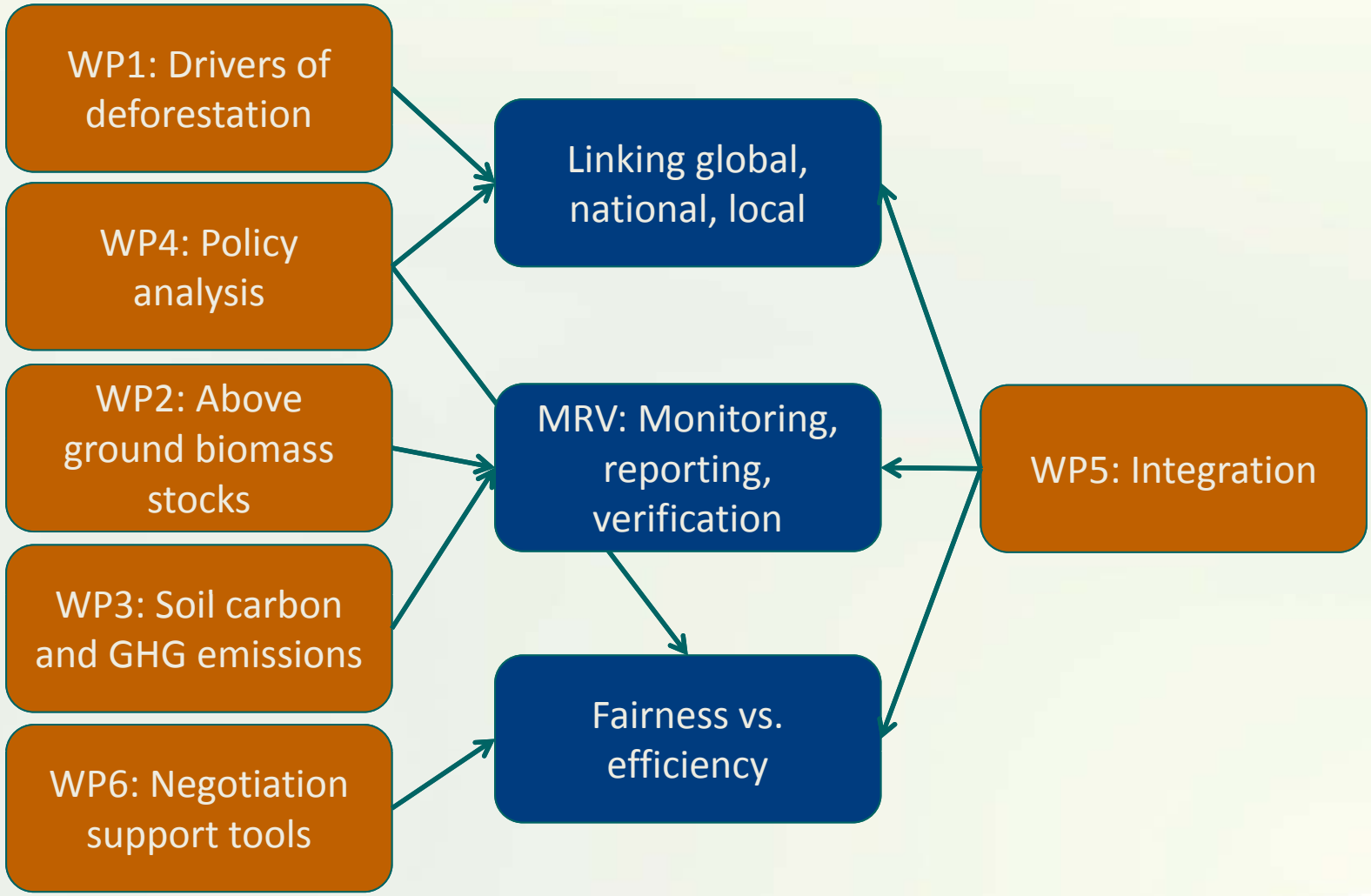
Mapping onto REDD debates



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Further information at www.redd-alert.eu

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Work-package 5: Integration and modelling

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Activities: Year 1

- Agent-based model has been developed for Jambi, Indonesia
- Review of land use dynamics in Cameroon completed
- Development of a prototype agent-based model of land use change at forest/agriculture interface in Cameroon
- Review of tropical and temperate peatland models completed
- Review of LULUCF Tier 3 modelling approaches in progress
- Field measurements started for PhD modelling work of Jenny Farmer on carbon dynamics and GHG emissions following land use change on tropical peatlands in Sumatra, Indonesia

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Agent-based modelling: Jambi

Herry Purnomo:

1. Generic REDD+ model at landscape level has been developed
2. Field study has been conducted (in Jambi dan Tanjung Jabung Barat) and stakeholders analysis has been conducted
3. Preliminary model of Jambi has been developed
4. Presentations has been made in Jakarta
5. Abstracts have been submitted to Association for Tropical Biology and Conservation (ATBC) 2010 in Bali, and International Association for the Study of the Commons (IASC) 2011 conference in Hyderabad
6. A postgraduate student from Bogor Agricultural University working in Jambi to develop STELLA-based modelling

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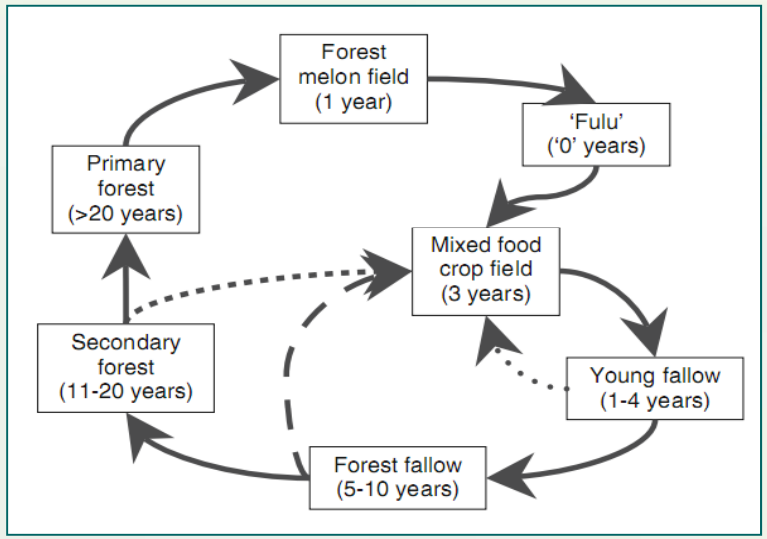
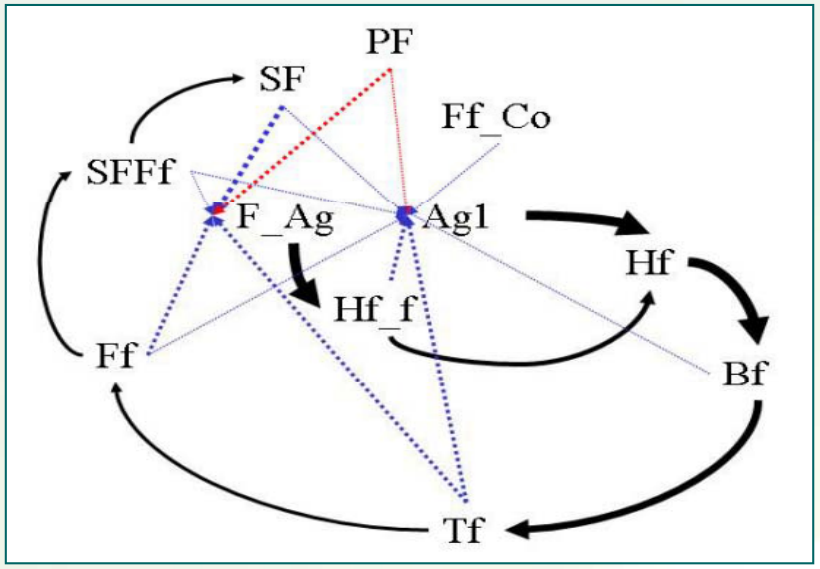
Land use dynamics in Cameroon





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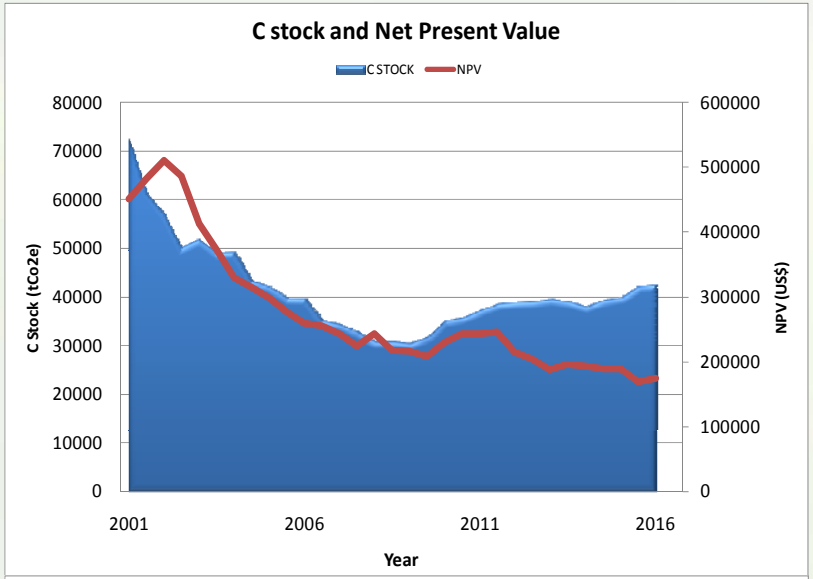
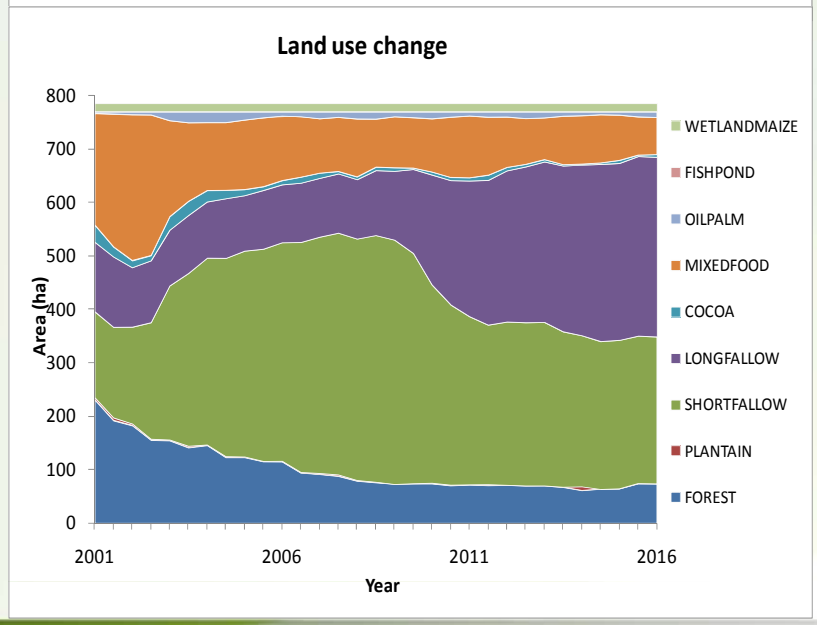
Decision-making rules

- Decisions
  - transition from one land use to a different land use
  - whether or not to clear land – if yes, where and how much
- van Vugt, 2009: 4Is framework: institutions, incentives, identity, information
- Household data from Awae village, collected in 2001-2003: 49 households, 1978 fields
- Further data collection currently underway

REDD-PALM model initial results

- Household decisions
  - Based on past land use transition data
  - Will be based on field data being collected
- Effectiveness
  - Change in C stock is simulated
  - Will be compared with BAU estimates
- Efficiency
  - Change in Net Present Value is simulated
  - Will be based on assumptions on REDD payments
- Equity
  - Will be based on the selected fairness criteria: Compensation, Actual provision, Expected provision, Status quo, Egalitarian, Common-goods, Maxi-min (1)





(1) U. Pascual et al. / Ecological Economics 69 (2010) 1237–1244

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REDD benefit chains

Trust, fairness

National governments

National /regional institutions

District governments

Local/village governments

Farmer groups

Households/farms

Efficiency, effectiveness

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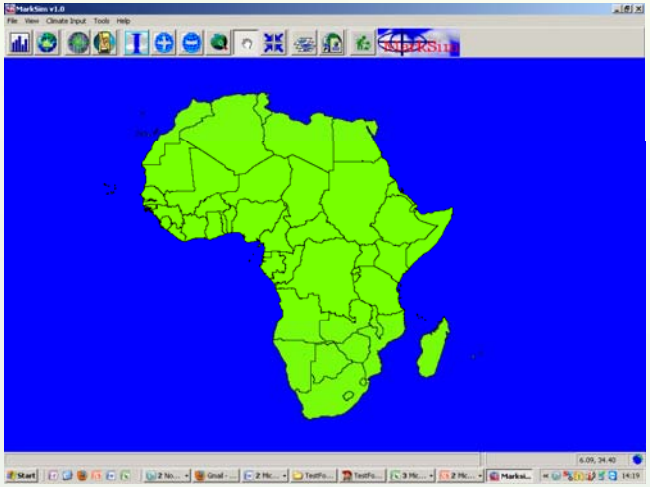
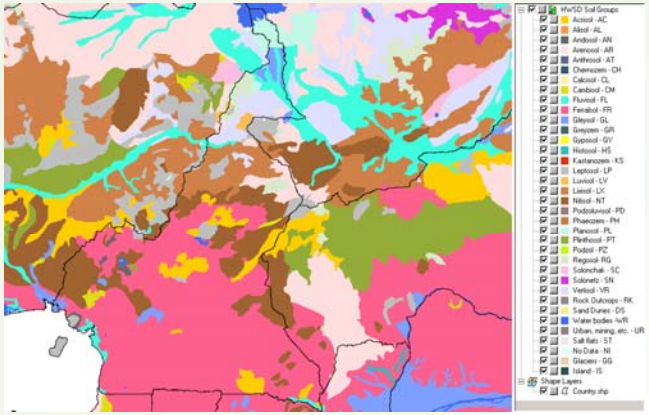
Study sites - data sources

Clusters/ region	Tmean (°C)	Av. RF (mm)	Soil group	SOC (%)
Ebolowa	23.3	1243	Ferralsol	3.7
Nanga Eboko	23.4	1571	Ferralsol	1.6
Meyomessala	23.7	1626	Ferralsol	1.0

Weather-MARKSIM (Jones and Thornton, 1993)



Soil-HWSD (FAO,IIASA, ISRIC, JRC)



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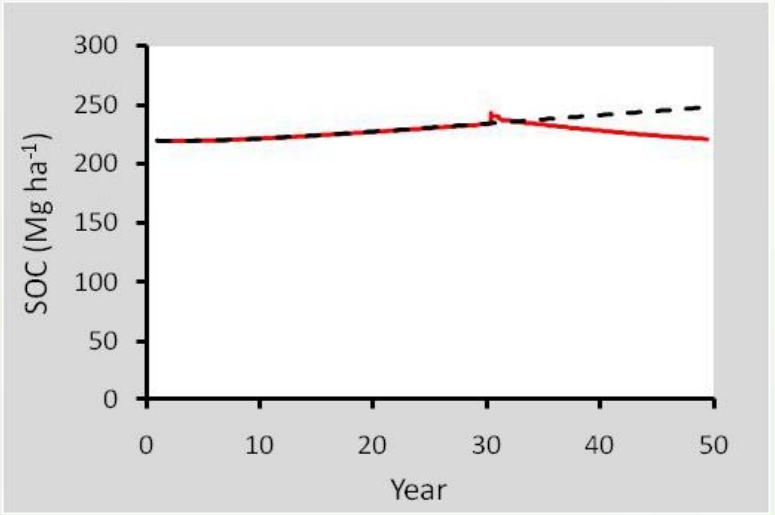
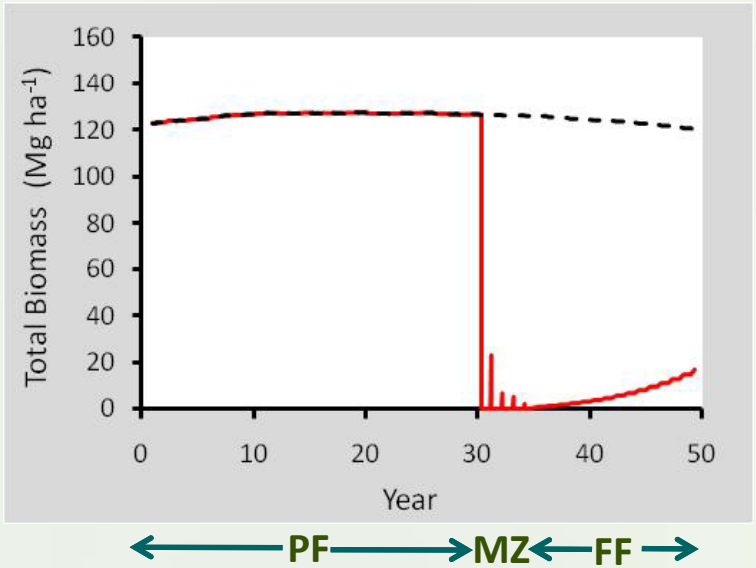
Ebolowa

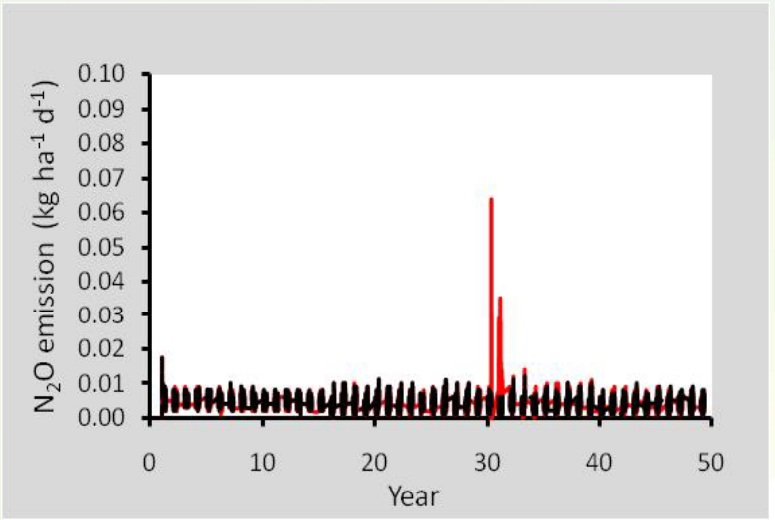
Soil organic carbon



Total biomass



N_2O emission rate



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Comparison of sites

Village	Total biomass-C (Mg ha^{-1})		Maize yield (Mg ha-1)	Soil carbon stock change (Mg ha^{-1})	Cum.N_2O emission (kg ha^{-1})
	P.Forest	S.Forest			
Ebolowa	64	8.5	3.2	1.0(38)	83 (81)
Nanga Eboko	36	2.4	2.4	10.7(27)	36 (34)
Meyomessala	36	2.4	2.6	10.4(26)	36(34)

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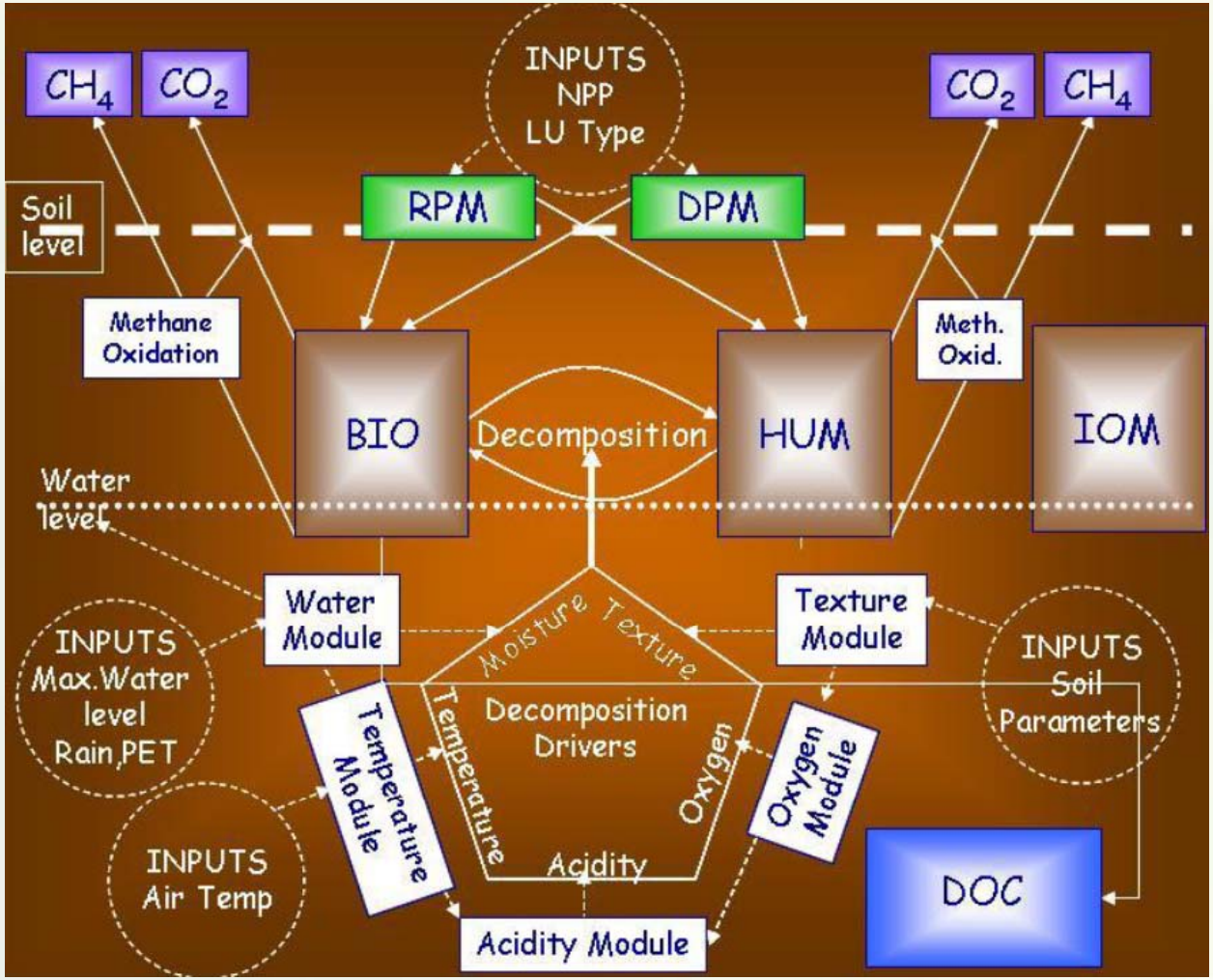
ECOSSE organic soil model



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Activities: Year 2

1. Focus group studies and questionnaires in selected villages in study area in Cameroon (Bakam, Robiglio, Tchienkoua)
2. Scaling up from study areas to humid forest zone (Poggio, Robiglio)
3. Econometric modelling of influence of REDD benefits on households in Peru and Vietnam (Dyer)
4. Agent-based modelling of land use transitions and REDD benefit chains (Bakam)
5. Q-methodology work in association with WP4 (Nijnik)
6. Modelling of carbon stock changes and GHG emissions from land use change at the forest/agriculture interface (Muhammed, Matthews)
7. Completion of field measurements by Jenny Farmer, beginning of modelling work with ECOSSE peat soils model at University of Aberdeen (Farmer, Matthews, Jo Smith, Pete Smith)

Work-package 7: Project management

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Activities: Year 1

1. Grant agreement prepared and completed
2. Consortium agreement prepared and completed
3. Disbursement of first instalment of Project fund completed
4. Project website has been created. The website is managed and updated regularly
5. Kick-off meeting of the project was organised in Indonesia from 23-31 May 2009
6. Dr Madhu Subedi started as Project Administrator on January 18, 2010
7. Day-to-day management of the Project

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Deliverables

- Deliverable D.4.1("Graphical overview of the global forest governance architecture") has been prepared and submitted to EU.
- Deliverable D.7.2 ("Annual Project Meetings" (Kickoff workshop)) has been prepared and submitted to EU.
- Deliverable D.7.3 ("Website, information sheets, technical reports, scientific papers") has been prepared and submitted to EU.

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Visits

- K23-31 May 2009: kick-off meeting in Indonesia
- 25-30 Sept 2009: Robin Matthews to Washington for ASB Global Steering Group meeting: REDD-ALERT planning mtg
- 9-10 March 2010: WP4 &WP5 workplan development meeting MLURI
- 7-21 April 2010: Robin Matthews and Peter Minang to Peru – 2 workshops in Lima, 1 in Pucallpa on REDD-ALERT/REALU

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Outputs

- Project brochure in English and Spanish
- Project website (http://www.redd-alert.eu/) launched and regularly updated

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Activities: Year 2

1. 13-16 Oct 2010: 2nd Annual Project meeting in Peru
2. Preparation and submission of following reports:
    1. First Periodic Activity Report
    2. First Periodic Financial Report
    3. Deliverables Reports
3. Nov 2010: Mid-project review
4. Organise Project Advisory Committee Meeting
5. Plan for 3rd Annual Project meeting
6. Maintain and update Project website

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WP5 activities

1. Focus group studies and questionnaires in selected villages in study area in Cameroon
2. Collection and collation of household survey data for econometric modelling of influence of REDD benefits on households in Peru and Vietnam
3. Collection and collation of weather, above/below-ground biomass and soils data for modelling of carbon stock changes and GHG emissions from at least three countries
4. Q-methodology work in association with WP4

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