



**Open Science conference on  
“Africa and Carbon Cycle: the CarboAfrica project”**  
Accra (Ghana) 25-27 November 2008

**Draft Agenda**

**Day 1**

*Registration*  
8.00-8.30

*Welcome address*

*(Chair Anastasios Kentarchos)*

- 08.30 – Welcome from European Commission (A. Kentarchos)
- 08.45 – Welcome from Ghana (Ministry?)
- 09.00 – Welcome from FAO (Regional Office Representative)
- 09.15 – Welcome from the CarboAfrica Project (R. Valentini)

09.30 – Coffee Break

*Key note speeches on Africa and Global Carbon Cycle*

*(Chair Robert Scholes)*

- 09.45 – Dynamics of the African carbon cycle: a continent of flux and variation (R. Scholes)
- 10.15 – Title to be decided (M. Diouf Sarr)
- 10.45 – Greenhouse gas inventories in Africa: constraints and perspectives (M. Khouma)

*11.15 - Round Table on Africa and Global Change*

*(Chair Riccardo Valentini)*

Participants: M. Diouf Sarr, A. Kentarchos, J. Nkem, R. Scholes, FAO Representative, Ghanaian Representative? WorldBank Representative?)

12.30 Lunch

*CarboAfrica – first 2 years results*

*(Chair Riccardo Valentini)*

- 14.00 – The CarboAfrica Project (R. Valentini)
- 14.30 – Terrestrial Carbon Network and Database in Africa (D. Papale)
- 14.50 – Different Ecosystem Processes in Africa (W. Kutsch)

15.10 – Coffee Break

- 15.30 – Biogeochemical modelling (M. Reichstein)
- 15.50 – Fires and GHG emissions in Africa: why do we care and what do we know (A. Arneth)
- 16.10 – CDM and REDD potentialities in Africa (L. Saint-André)
- 16.30 – Communications and capacity development in Africa (J.S. Latham)
- 17.00 – Close of the first day

19.00 – Conference Dinner

## Day 2

### *Terrestrial Carbon Observations in Africa and Ecosystem fluxes*

(Chair D. Papale)

- 08.00 – Ecosystem heterogeneity, does it matter? (L. Merbold)
- 08.20 – Estimation of Net Ecosystem Exchange at the Skukuza Flux Site, Kruger National Park, South Africa (A. Kirton)
- 08.40 – Effect of burning on soil-atmosphere greenhouse gas exchange in African grassland savanna in Congo Brazzaville (A. de Grandcourt)
- 09.00 – Semi-arid afforestation and its effect on land-atmosphere interactions (E. Rotenberg)
- 09.20 – LAMTO, Ivory Coast: A new station for monitoring CO<sub>2</sub> and CH<sub>4</sub> in the atmosphere (M. Ramonet)
- 09.40 – Ground-based remote sensing of atmospheric trace gases in the tropics (L. Amekudzi)

10.00 – Coffee Break

### *Biogeochemical Modelling*

(Chair N. Hanan)

- 10.15 – The CA model intercomparison - review and outlooks (U. Weber)
- 10.35 – African Carbon Exchange II: A systems approach (N. Hanan)
- 10.55 – Towards an African carbon budget from data-oriented modelling (M. Jung)
- 11.15 – Land cover change, biogeochemical modeling of carbon stocks, and climate change in the Sahel/West Africa (L. Tieszen)
- 11.35 – Assimilation of land-surface temperature in the land surface model JULES over Africa (D. Ghent)
- 11.55 – Evaluation and improvement of the representation of Sahelian savannah in the vegetation model ORCHIDEE (P. Brender)

12.15 – Lunch

### *Soil and Vegetation: Carbon and GHG emissions in Africa*

(Chair M. Bonsu)

- 13.30 – Seasonal and inter-annual variations of LAI in a Sahelian environment, Gourma, Mali (E. Mougin)
- 13.50 – West Africa's savannahs under change: a holistic synthesis of positive and negative effects of agriculture and land cover changes on carbon cycling and trace gas emission. (H. Nacro)
- 14.10 – Understanding soil carbon dynamics for sustainable land management (E. Yeboah)
- 14.30 – Seasonal dynamics of soil carbon dioxide efflux in a restored young mangrove plantation at Gazi bay, Kenya (B. Yebei)
- 14.50 – Estimates of CO<sub>2</sub> emissions from soil organic carbon for different land uses (M. Bonsu)

15.10 – Coffee Break

*Soil and Vegetation: Carbon and GHG emissions in Africa (continuation)*

- 15.30 – Soil respiration in a semi-arid ecosystem in Mali (V. Le Dantec)
- 15.50 – The effect of cattle manure and nitrogen fertilizer amended wetland cropping on nitrous oxide emissions into the atmosphere (J. Masaka)
- 16.10 – Estimation des facteurs d'émission locaux de méthane (CH<sub>4</sub>) imputable à la gestion du fumier chez les ovins au Bénin (E. Dossa)

*Impact of vegetation fires on African GHG budget*  
(Chair H. Balzter)

- 16.30 – Remote sensing methods for monitoring fire related biophysical parameters (H. Balzter)
- 16.50 – Analysis of satellite imagery to map burned areas in Sub-Saharan Africa (I. Palumbo)

17.10 – Close of the second day

### Day 3

*Impact of vegetation fires on African GHG budget (continuation)*

- 08.00 – The influence of wildfires on African vegetation and trace gas emissions (V. Lehsten)
- 08.20 – An enhanced estimate of pyrogenic carbon emissions from Africa using a synthesis of polar orbiting and geostationary active fire products (P. Freeborn)
- 08.40 – Synchronizing Fire Emission Measurements with Land Use Patterns in Zambia (B. Mhango)

*Carbon sequestration and reduced emissions potentialities in Africa*  
(Chair S. Adu-Bredu)

- 09.00 – Ghana as a case study for CDM and REDD Africa's potential (M. Henry)
- 09.20 – Carbon stock under four land-use systems in three varied ecological zones in Ghana (S. Adu-Bredu)
- 09.40 – Carbon storage and the health of cocoa agroforestry ecosystems in Ghana (A. Asase)

10.00 – Coffee Break

*Carbon sequestration and reduced emissions potentialities in Africa (continuation)*

- 10.20 – Above-ground biomass in Gabon (D. Maniatis)
- 10.40 – Carbon fluxes and deforestation (W. Kutsch)
- 11.00 – Potential for Carbon Sequestration in Terrestrial Forests of Zambia (A. Siampale)
- 11.20 – Helping small scale tree farmers in Africa participate in carbon trading: a case in central Kenya highlands (J. Kungu)
- 11.40 – Promoting carbon sequestration through participatory land use planning by poor resource farmers in arid communal areas of Zimbabwe: a case study (R. Mugandani)
- 12.00 – Finding on Integrated Land use Assessment Project (ILUA), Biomass and Carbon stocks (J. M. Mukosha)

12.20 – Lunch

*Demonstration projects and developing capacities in Africa*

*(Chair L. Thiombiano)*

- 13.30 – Tropical Forests and Climate Change Adaptation (J. Nkem)
- 13.50 – SHARE: Soil Moisture for Hydrometeorologic applications in the SADC (Southern African Development Community) region (C. Pathe)
- 14.10 – TerrAfrica partnership; potential for climate change adaptation and mitigation in Sub-Saharan Africa (L. Thiombiano)
- 14.30 – Sustainable Production Intensification in Africa - a climate change perspective. T. Friedrich)

14.50 – Coffee Break

*Demonstration projects and developing capacities in Africa (continuation)*

- 15.10 – Fostering shifts from existing fire behaviour patterns to more environmentally-friendly ones: challenges and approaches (L. Mammino)
- 15.30 – Cooperative Community Carbon Offsetting with Biodiversity and Social Co-Benefits: a case study of trees for global benefits programme in Uganda (P. Mwima)
- 15.50 – Perceptions et stratégies locales adaptation aux changements climatiques: cas de six villages du Burkina Faso dans le secteur de la bioénergie (F. Bationo)

16.10 – Final remarks

16.30 – Conference closure

*Poster session*

Students will be invited and supported to present their works (relevant to the conference) on posters. Posters will be hanged up and showed during the 3 days of the conference.