Linking sustainable production and enhanced landscape governance in the Amazon: towards territorial certification (TerraCert)

Pablo Pacheco¹, René Poccard-Chapuis², Isabel Garcia-Drigo³, Marie-Gabrielle Piketty⁴ and Marcelo Thalês⁵

Supporting summary

This project provides tools and knowledge to support local public and private actors in the transition towards more sustainable agricultural production (beef, milk, grains, timber, pepper, fruits, etc.), and natural resources conservation, through enhanced landscape governance in the “Green Municipality” of Paragominas, State of Pará, in the Brazilian Amazon. This research will foster innovative partnerships between the public and private spheres and help integrate production options within the cattle, timber and agricultural sectors, small and large farmers. Ultimately, this project aims to reduce deforestation and greenhouse gas emissions through the development of more intensive production and nutrient recycling.

This project supports multi-stakeholder dialogue at municipal and state levels, also leading to greater social inclusion. Local multi-stakeholder platforms will receive data, analysis and options needed for more informed policy decision-making. The research will also facilitate knowledge exchange between local stakeholders and public agencies at state and federal levels, as well as business platforms supporting sustainability in the Brazilian Amazon.

The project will:

• Assess the strengths and weaknesses of the “Green Municipality” to support low-carbon cattle ranching in the context of broader trends towards more sustainable agriculture.
• Conduct assessments of the economic and technical performance of different innovative production systems and their potential to support sustainable ranching and other systems and practices, which will help to realize food security and mitigation targets.
• Establish a monitoring system to analyse agriculture and landscape dynamics with a focus on land use change, production efficiency, eco-system services, and socio-economic benefits.

Expected Outputs

• Municipal multi-stakeholder platform
• Identification of low carbon cattle ranching practices with documentation based on literature review and field observations
• Experiments in demonstration farms and local dissemination actions
• Reference guidelines on best economic and technical production systems and practices
• Spatial database including biophysical and socio-economic information, and identification of missing information and strategy to complete and manage the dataset
• Monitoring system for assessing land use, production efficiency, eco-system services, and socio-economic benefits, and trade-offs

¹. CIFOR, Indonesia.
². CIRAD, UMR SELMET, F-34398 Montpellier, France.
³. University of Rio Grande do Sul, Program on Rural Development (PGDR), Brazil.
⁴. CIRAD, UPR GREEN, F-34398 Montpellier, France.
⁵. Museu Paraense Emílio Goeldi (MPEG), Brazil.
• Analysis on the “Green Municipality” model to support transitions to sustainable beef cattle and landscape management and ways forward

• Public-private arrangement to advance sustainable cattle beef and agricultural production under a territorial-based certification system

**Expected Outcomes**

• Develop improved technical and institutional options for the expansion of sustainable beef cattle ranching in the Eastern Amazon within a broader transition to more sustainable agriculture.

• Develop a monitoring system combining GIS tools and social control (peer to peer), like an alternative to the actual top-down system.

• Develop a multi-stakeholder platform in Paragominas agreement on a road map and common social, economic, and environmental targets to support sustainable beef production, within broader perspectives on agricultural development.

• Improved land-use and local development planning, thanks a higher integration between agricultural activities and environmental conservation, a better consensus between social groups.

**Expected Impacts**

• Increase the territorial security, and restore his attractivity for investors of private and public sectors. The direct and indirect benefits of this security and attractivity, are a new way to incentive local actors for improving their practices, in terms of production, conservation, governance.

• Direct engagement in participatory action research with municipalities’ agricultural and environmental decision makers, linked to state and federal level public agencies, will support adjustments of jurisdictional policy.

**Partners**

The Center for International Forestry Research (CIFOR) is leading the project. CIFOR is working with Agricultural Research for Development (CIRAD), Brazil’s Ministry of Agriculture, Livestock, and Food Supply (EMBRAPA), Museum Paraense Emilio Goeldi (MPEG) and public administration of the Municipality of Paragominas and Redenção in the South of Pará State.
Welcome to AC&SD 2016

On behalf of the Scientific and Organizing Committees, it is a great pleasure to welcome you to the International Conference on Agri-chains and Sustainable Development (AC&SD 2016). This conference aspires to widen the debate about the role of agricultural value chains towards sustainable development. Year 2015 was a critical political and diplomatic milestone: the member states of the United Nations signed a new agenda for development, with the 17 Sustainable Development Goals (SDGs) placing sustainability at the core of international efforts. Development and academic actors are since then exploring new avenues for translating the SDGs into reality and implementing global and local frameworks and partnerships. Our conference aims at joining these efforts, with the consideration that agricultural value chains form spaces where local and global challenges to sustainability connect and within which local and global actors experiment and negotiate innovative solutions.

The scientific committee has assembled a very attractive program for AC&SD 2016 that seeks to cover and confront the diversity of realities behind agri-chains, from localized chains, embedded in specific places, to global value chains. In the parallel sessions, transformations of these agri-chains and their connections to sustainable development will be discussed by speakers from the academia, the civil society, the private sector and decision makers. This multi-stakeholder perspective will also be brought about in the plenary sessions. Here, world renowned keynotes and panelists to three high level round tables will discuss about the role and importance of evaluation, public and private institutions and innovations at different scales for transforming agri-chains towards sustainability transitions.

This edition gathers about 250 participants from 39 countries. AC&SD 2016 owes a lot to the scientific and organizing committees for preparing the program, and particularly to Brigitte Cabantous, Chantal Carrasco and Nathalie Curiallet for all the logistics, as well as to our support team of Alpha Visa that we warmly thank for their help. We wish us all a fascinating, successful, inspiring and enjoyable AC&SD 2016 and we very much look forward to its result and to the strengthening of both a scientific community and a community of practice to implement the outcome!!
Scientific committee

- Estelle Bienabe, CIRAD, France**
- Julio Berdegué, RIMISP, Chile*
- Thierry Bonaudo, AgroParisTech, France
- Larry Busch, Michigan State University, USA
- Patrick Caron, CIRAD, France*
- François Côte, CIRAD, France
- Benoît Daviron, CIRAD, France
- Djiby Dia, ISRA, Senegal
- Flavia Fabiano, CIRAD, France**
- Pierre Fabre, European Commission EuropeAid, Belgium
- Bernard Hubert, Agropolis International, France*
- Patrice Levang, IRD, France
- Florence Palpacuer, Université de Montpellier, France
- Felicity Proctor, RIMISP, UK
- Ruerd Ruben, Wageningen UR, The Netherlands
- Nadia Scialabba, FAO, Italy
- Dao The Anh, CASRAD, Vietnam
- Alban Thomas, INRA, France*
- Jodie Thorpe, IDS, UK*
- Sophie Thoyer, Montpellier SupAgro, France
- Maximo Torero, IFPRI, USA

* Member of the international organising committee
** Member of the local organising committee

Organising committees

International organising committee
- Karen Brooks, IFPRI, USA
- Jean-Marc Chataigner, IRD, France
- Clement Chenost, Moringa Fund, France
- Thierry Doré, AgroParisTech, France
- Ronan Le Velly, Montpellier SupAgro, France
- Huub Loffler, Wageningen UR, The Netherlands
- Philippe Pipraud, French Ministry of Agriculture, France
- Lilian Puech, French Ministry of Foreign Affairs, France

Local organising committee
- Frédéric Bourg, CIRAD, France
- Brigitte Cabantous, CIRAD, France
- Chantal Carrasco, CIRAD, France
- Nathalie Curiallet, CIRAD, France
- Frédérique Causse, CIRAD, France
- Delphine Guard-Lavastre, CIRAD, France
- Nathalie Villeméjeanne, Agropolis International, France
Landscape factors influencing sustainable food agri-chain innovation:
The role of place in the Toronto experience of Local Food Plus ................................. 173
Wayne Roberts [et al.]

Are food losses and waste overestimated in developing countries? ............................... 176
Géraldine Chaboud

Vulnerability and resilience of the urban food system to extreme weather:
a case study of Colombo, Sri Lanka ............................................................................. 180
Christina Semasinghe [et al.]

Resilience of rural-urban food flows in West Africa ......................................................... 182
Pay Drechsel, Hanna Karg, Richard Kofi Appoh and Edmund Akoto-Danso

Session 10
Innovations in approaches and tools for inclusive and efficient value chain development

Commercial and inclusive value chains: doing good and doing well ............................. 184
Malcolm Harper, John Belt and Rajeev Roy

Factors influencing successful inclusion of small farmers in modern value chains in ACP countries ................................................................. 188
Andrew Shepherd

Cross-border trade and women in value chain development ............................................. 192
Florence Tartanac

Inclusive and efficient value chains ............................................................................... 195
Maximo Torero

Assessing equity in value chains through a participatory guide to business models that link smallholders to markets: insights from LINK application across diverse value chain settings ................................................................. 196
Mark Lundy [et al.]

Household asset endowments and implications for inclusive value chains ..................... 197
Jason Donovan

Gender equity in value chain and livelihoods development: innovative approaches and tools .... 198
Dietmar Stoian

Innovation for inclusive value-chain development, successes and challenges .................. 199
André Devaux

Measuring and simulating trust in value chain development ............................................ 200
Christine Plaisier

Session 11
Linking global value chains and territories: conceptual insights for understanding and ensuring sustainability at different scales

Agri-chains and territories “zero-deforestation”:
what role for the payments for environmental services? ................................................. 202
Alain Karsenty

Vulnerability and resilience modelling for sustainable food systems ............................ 205
Paolo Prosperi and Thomas Allen

Agri-chains and sustainable development