

# The 3<sup>rd</sup> International Conference on Conservation Agriculture in Southeast Asia

Hanoi, Vietnam, 10<sup>th</sup> - 15<sup>th</sup> December 2012

## Conservation Agriculture and Sustainable Upland Livelihoods

*Innovations for, with and by Farmers to Adapt to Local and Global Changes*

*Background of conservation agriculture in Southeast Asia and prospect for the future*

[www.conservation-agriculture2012.org](http://www.conservation-agriculture2012.org)

### 1. Call for papers – 1<sup>st</sup> Announcement

- In recent decades, demographic pressure, rapid market integration with the reinforcement of contract-farming relationships, and a cap on agronomic progress in lowland areas have been key drivers in Southeast Asia of agrarian system dynamics, which mainly involve small-scale family farmers who are subject to numerous constraints. These dynamics have been notably characterized by various forms of agricultural intensification in upland areas alongside the emergence of critical sustainability issues.
- In the near future, agricultural production is expected to be further intensified to meet rising demand for agricultural products linked to demographic transitions and changes in consumption habits. This intensification will bring with it greater tension between the productive dimensions of agricultural ecosystems and long-term sustainability attributes (efficiency, self-reliance, resilience, stability, autonomy, equity, etc.).
- Small-scale farmers will necessarily have to adapt to those local and global changes. However, the adaptation process has to deal with constraints that are mainly environmental (water, soil and food pollution, soil fertility, etc.) but also social (competition for land use, safety of agricultural products) and economic, while in some cases possibly being associated with opportunities for change (carbon market, added-value for organic products, orientation of development funds towards adaptation to climate change, etc.).
- This also creates needs for innovations enabling stakeholders to better keep abreast with on-going dynamics, adapt to local and global changes and drive ecosystem sustainability. Methods and tools for designing relevant innovations, the kinds of innovations to be proposed, and the agricultural models to be promoted are concerns widely shared by diverse countries, irrespective of local conditions.
- Conservation agriculture has proved to have potential for increasing production and reducing the environmental impacts of agriculture in several countries, including Argentina, Brazil, China, India, the USA, Australia, totalizing more than 100 million hectares worldwide. However, most of this area remains farmed by large-scale farmers, while the dissemination of conservation agriculture within small-scale family farming systems remains a major development challenge, with a need to enlarge the scope of the technological, organizational, economic and social innovations to be designed to solve the adaptation issues faced by small-scale farmers.

- This particularly calls for coordinated action involving public research, development organizations, the private sector and donors to remove structural constraints for up-scaling (training - farmers, extension workers, engineers - supply chains for specific inputs - seeds, equipment -, provision of services, recognition of a specific quality for agricultural products derived from conservation agriculture, etc.).
- Within this context, this call for papers aims to:
  - characterize drivers of agrarian / farming system changes in Southeast Asia
  - analyse the impact of those changes on the sustainability of agricultural ecosystems
  - identify, assess and design innovations related to conservation agriculture that provide possibilities for small-scale family farmers to sustainably intensify agricultural production while improving their ability to adapt to local and global changes.
  - discuss conditions and strategies to widely extend conservation agriculture with small-scale farmers
- The Conference is supported by ACIAR and PAMPA (AFD, MAEE, FFEM), and is being jointly organized by CIRAD, NOMAFSI and the University of Queensland. It involves scientists from several institutes working on research for development, including the North Carolina Agricultural and Technical State University, IRD, CNRS, Hanoi University of Agriculture and the Vietnamese Academy for Agricultural Sciences.
- The Conference will seek to build interdisciplinary scientific knowledge through contributions from the agricultural, economic and social sciences, and will place non-exhaustive emphasis on upland livelihoods and conservation agriculture in Southeast Asia. Studies that analyses farming system changes and deals with innovations related to conservation agriculture likely to contribute to the sustainable intensification of uplands are more specifically expected.

## 2. Hot topics

Conference will place non-exhaustive focus on:

### 1. Characterization of farming system dynamics in uplands and highlands

In Southeast Asia, what were dynamics of agrarian system changes in recent decades and drivers of those dynamics (markets, policies, innovation process, etc.)? Which new tensions and opportunities are brought by those changes? What are the current land uses and upland cropping and livestock systems?

*Expected contributions: studies that describe recent agrarian system dynamics (land use, farmer practices, cropping and animal systems, etc.) in relation to major local and global drivers of change (markets, policies, technical information, innovation process etc.).*

### 2. Impact of conventional agriculture on agricultural ecosystem sustainability

How do agrarian system dynamics affect the sustainability attributes of ecosystems (e.g. productivity / efficiency, stability, resilience, reliability, adaptability, equity, self-reliance (dependence / autonomy)? What are the main critical sustainability issues and rooms for change in the short and long-terms? Do we need a new paradigm to orient agricultural systems?

*Expected contributions: Studies that critically assess the impacts of conventional agriculture on the environment and the economy in the short and long terms, look into the causes, and discuss how to deal with them.*

### **3. Farming and cropping system design to sustainably intensify production on uplands and/or to restore degraded soils**

Which methods and tools to design relevant technical alternatives for farmers taking into account diversity of farm types, potential, constraints and strategies both in the short and long-terms? How to carry out adaptive and participative research for development allowing identification and assessment in real time of alternative farming practices adapted to rapid changes of economic contexts? How can different kinds of knowledge be combined to create innovation? What alternative cropping, livestock and farming systems can be designed for farmers to sustainably intensify agricultural production in specific economic and biophysical contexts (e.g. slopes, degraded soils, etc)?

*Expected contributions: studies that report on methods for designing innovations with and/or for farmers, with specific emphasis on innovations related to conservation agriculture, adaptive and participatory designing, for both annual and perennial cropping systems and animal systems, targeting the sustainable intensification of agriculture in uplands and highlands....*

### **4. Potential and constraints of conservation agriculture for rural development**

Can conservation agriculture reconcile production and sustainability? What are the social and economic potential / constraints of innovations related to conservation agriculture to empower natural resource management systems? In which extent ecosystem services (e.g. carbon sequestration, recycling nutrients, etc.) can be strengthened by conservation agriculture? Does conservation agriculture bring opportunities to mitigate climate change?

*Sub-topic 1: Social and economic analysis of innovations related to conservation agriculture*  
*Expected contributions: Studies that deal with the social and economic potential / constraints of innovations related to conservation agriculture for sustainable development, using both quantitative and/or modelling approaches. Studies related to economics applied to management of natural resources.*

*Sub-topic 2: Conservation agriculture and natural capital*  
*Studies that analyse the impacts of innovations related to conservation agriculture on natural capital (plant-soil system, carbon sequestration, environmental vulnerability, stability, resilience, etc.).*

### **5. Conditions, strategies, barriers and opportunities for scaling-up conservation agriculture**

What kinds of rural policies, forms of governance can support extension of conservation agriculture? Given the need to reconcile production and protection of environment, what can be the role of local and community-based knowledge in the construction of sustainable development? How can public policies, regulatory frameworks and international agreements affect extension of conservation agriculture? How can sustainable innovation systems promoted for pro-poor development? What are the roles of consumers, standards and certification? How can we improve multi-actor innovation processes that include public and private stakeholders at a territorial level?

*Expected contributions: studies that analyse constraints for the extension of CA-related innovations and development, identify the underlying causes of those constraints, and discuss how to operationally go about extending conservation agriculture and sustainable upland development, including policy design, payments for environmental services, and participation of the poor.*

### 3. Expected participants

- Researchers from institutions in Northern and Southern countries dealing with sustainable development
- MSc and PhD students involved in any scientific field related to development
- To widen the scientific debate, we also invite policy-makers, development stakeholders and other non-academics interested in conservation agriculture and ecological intensification of upland agricultural systems to contribute to the conference.

### 4. Organization

To encourage exchange and debate, the conference will include different sessions:

- Key note lectures: Recognized personalities will present their views on the different hot topics in plenary sessions.
- Round table sessions: key stakeholders will share during some thematic session their practices and reflections on the challenges agronomic research for development is currently facing.
- Parallel working thematic sessions will enable discussion on specific issues around the hot topics.

The working sessions will take place from 10<sup>th</sup>–12<sup>th</sup> December and 14<sup>th</sup> December 2012. On 13<sup>th</sup> December, [a field trip](#) will be organized to enable discussions to continue through concrete examples.

[Working language will be English.](#) Simultaneous translation from/to Vietnamese will be available during all plenary sessions.

#### Side events

On Friday 14<sup>th</sup> December (afternoon) and Saturday 15<sup>th</sup> (morning), side-events may be organized by institutions or networks who wish to continue specific discussions or hold their annual meeting. We will provide required logistical support for these side events.

### 5. Expected contributions

Abstracts and papers should address one or more of the conference hot topics that allow several fields of application: farming systems, management of natural resources, agronomy, social and technical innovations design for rural development, rural policies, etc.

Conference [focus on conservation agriculture and sustainable upland livelihoods](#) in Southeast Asia, but [welcome any paper sharing knowledge from other regions](#). Reflections in all disciplines are welcome, including agronomy, geography, anthropology, economics, animal and crop sciences, sociology, land planning, modeling, engineering sciences, educational sciences, political sciences.

Papers can discuss theoretical and methodological aspects or present case studies as a basis for reflection. As this is an international scientific conference, the scientific quality of papers is a precondition. Nonetheless, we would like to encourage presentations based on exchange, especially interdisciplinary papers crossing life sciences and social sciences, and papers involving researchers and stakeholders. [Two-voice presentations are welcome.](#)



## 6. Submit an abstract

Abstract submission will be open from April 1<sup>st</sup> to July 1<sup>st</sup>, 2012. To submit an abstract, please follow the instructions available on the website: <http://www.conservation-agriculture2012.org>.

All abstracts will be reviewed by an international panel formed by members of the scientific committee, then selected either for full paper and / or poster according to their relevance regarding one or more of the hot topics.

To avoid limiting the time for oral presentations and to leave as much time as possible for real debate and exchange, the scientific committee will invite authors to submit either papers or posters. Posters will be included in workshop discussions. Both abstracts of papers and posters will appear in the book of abstracts. The conference proceedings with full papers and posters will be published on a CDROM and posted on-line.

## 7. Guidelines for abstracts

**Important notice: Abstracts that are not formatted according to our guidelines will not be considered for selection. Abstracts must all be submitted in English.**

The abstract (2 pages, not more than 1000 words) should be clear as a stand-alone statement, and should be organized as follows:

- Title
- Author's name and affiliation
- 5 key words
- Hot topic(s) that is (are) addressed
- Objective of the paper
- Originality and main contribution
- Method
- Results

Paper: Times New Roman 12 should be used, single spaced with 2.5 cm margins on all sides.

Guidelines for full papers will be provided to authors once their abstracts have been selected.

When writing both abstract and full paper, please try to bring insight on the following questions:

- How is this issue original with respect to innovation design and sustainable development?
- What does this issue bring to the overall reflection on ecological intensification and innovation design?
- What has changed in the way of dealing with this issue over the past 15 years?
- What perspectives can be identified in terms of future research and action?

## 8. Diffusion and impact

Papers will be published on a [CD-Rom](#) which will be distributed during the conference and then posted on-line as the conference proceedings. Agreements will be engaged to publish special issues in [international journal](#). Authors are encouraged to produce papers of the usual quality standards so that they can be submitted for publication in these reviews.

A [special book](#) will also be published to present a global view of issues dealing with upland livelihoods, innovation and sustainable development, including key note lectures and the syntheses of round tables and parallel workshops.

We will invite representatives of the general press as well as of professional reviews dealing with political issues or with advisory and support services. The results of the conference might also be used in training workshops and research schools to feed reflection on research methods and practices in Northern and Southern countries.

## 9. Key dates

Abstract submission and registration for the conference are to be done using the conference website: [www.conservation-agriculture2012.org](http://www.conservation-agriculture2012.org)

### Abstract and papers

- Abstract due date : 1<sup>st</sup> July 2012
- 1<sup>st</sup> July – 15<sup>th</sup> August 2012 : Review process by the scientific committee
- 15 August 2012 : Notification to authors
- 30<sup>th</sup> October 2012 : dead line for full papers

### Registration

- Registration opening: 10 April 2012
- Early bird registration: 10 June 2012
- Standard registration: 15 October 2012

### Formalities for visa upon arrival

- Contact organizing committee with all necessary documents by 10<sup>th</sup> November 2012

For more information, contact us at: [conference@conservation-agriculture2012.org](mailto:conference@conservation-agriculture2012.org)