Towards an agroecological transition in South East Asia

With a fast growing population, increased pressure on its natural resources and climate change impacts everyday more present, South East Asia is at a crossroads regarding its agriculture development, calling for an important shift towards an agroecological transition. ACTAE project has a regional focus and aims at building durable and effective networking mechanisms to facilitate synergies among agroecology initiatives. It intends at providing institutional and operational backstopping to the Conservation Agriculture Network in South East Asia (CANSEA), while at the same time enlarging the scope to cover the whole field of agroecology (emergence of an Agroecology Learning alliance in South East Asia, ALiSEA). CIRAD and GRET will promote agroecology practices towards small-holder farmers, consumers and policy makers.

Learning and Sharing Framework

ACTAE project intends enhancing action research, experience sharing and networking. It will facilitate concrete actions which will provide both institutional visibility and operational facilities, to member organizations.

Its framework of action will combine

- Diagnostic studies and knowledge capitalisation as part of an observatory of the agroecology transition,
- Participatory design of innovative systems,
- Experimentation, dissemination, publication

In addition, expected activities will include

- An agroecology e-portal that will provide updated news on agroecology, public minutes of workshops, studies carried out, data base on agroecology, virtual library...
- Join evaluations of agroecological practices and experiences, with analysis of the conditions for scaling-up
- National and regional multi-stakeholders' workshops for sharing experience, bridging gaps, stimulating synergies and building a common concept of "agroecological transition", and ensure media coverage
- Two "Competitive Grant Schemes" for promoting R&D projects with strong multi-stakeholders' involvement and training component (CANSEA) and for co-funding activities aiming at linking stakeholders, sharing experience, documenting case studies, building innovative concepts. (ALiSEA)

Contact
Philippe Cao-Van, Cirad
e-mail : caovan@cirad.fr

Project duration
36 months (July 2015- June 2018)

Geographic focus
- Cambodia
- Laos
- Myanmar
- Vietnam

Budget
2.7 millions EUR

Donors AFD, Cirad

For further information www.cirad.fr
www.gret.org
South East Asia at a crossroads: from agricultural intensification to ecological matters

- It is estimated that about 87 per cent of the world’s 500 million small farms (less than 2 ha) are in Asia and the Pacific region (IFPRI, 2007). In this region, the ecosystem provides jobs for 60% of the working population and generates a quarter of the region’s gross national product (ESCAP, 2008).
- In the Mekong region more especially, farmers have historically practiced subsistence-based integrated farming combining crops, livestock and trees in complex landscape mosaics. Paddy rice is main staple food all over South East Asia. Agricultural practices relied on strong ecological knowledge built over many generations by subsistence farmers, all based on agroecology principles.
- Over the last decades, population pressure combined with government policies for the conversion of temporary land use to permanent land use led to decrease of shifting cultivation. All countries in the South East Asia have engaged in a process of so-called ‘modernization’ of agriculture by applying the agricultural practices of the Green Revolution to export-led monocropping.
- Depending on their respective history, demographic changes, economic development patterns and agroecological potential of their landscapes, agriculture intensification has evolved at different pace and had variable ecological impacts throughout the region (land degradation and biodiversity depletion associated with the generalization of input-intensive cropping practices).

Agroecology: a modern solution for smallholders

- Agroecological practices can respond to different types of problems: wind or rain erosion; loss of organic fertility and/or soil minerals; poor water management; reduction of biodiversity; parasite attacks; frequent unforeseen weather occurrences and climate change; lack of farm autonomy (related to chemical inputs, animal feed, energy, etc.); mediocre food quality; contaminations of the environment, products and people; and price fluctuation, etc.
- By relying on production diversification, reducing use of external inputs and mobilizing labour and knowledge intensive practices, agroecology offers broad range of solutions to family farmers that:
  - improve nutritional and food quality,
  - increases incomes and creates employment,
  - helps reduce risks for the environment and the health of populations
- At territorial level, there are also indirect impacts on incomes and employment (industries created, local trade boosted, etc.).
- Agroecology methods are favourable to biodiversity and ensure soil fertility. This makes it possible to recover land that has become unproductive, improve resistance to climate incidents (diversity of activities, soil protection practices) and participate in the fight against climate change.
- Agroecology approaches are thus convincing and evidence-based alternatives to the current agrifood system. They aim at strengthening innovation capacity of family farms, as well as the recognition of their contribution to food sovereignty in the region.
- Across South East Asia, there is a strong shared interest for bridging and synergizing existing agroecology initiatives, in order to share and enrich experiences, to increase the visibility of the practices and scale up their adoption by farmers. Meanwhile, there is a need also to include such practices in public policies, and to increase main agroecology stakeholders’ capacity for fund raising in order to strengthen existing networks.

ACTAE Project

Two complementary components for synergistic results

- ACTAE project is implemented through a consortium formed by CIRAD and GRET, respectively in charge of one component.

CANSEA supported by CIRAD
(contact: Dr Frank Enjalric — frank.enjalric@cirad.fr)

- This component aims at strengthening and institutionalizing the existing Conservation Agriculture Network in South East Asia (CANSEA) in its function of promoting Conservation Agriculture effective adoption. It means involving a wider spectrum of stakeholders, building alliances with agroecological movement, and diversifying funding sources. CANSEA will provide a strategic platform to foster national and regional networking and to reinforce the capacities to research and develop Conservation Agriculture systems.
- CIRAD is a recognized leader in conservation agriculture. It has a long history of action-research in the region with offices and projects in Laos, Cambodia, Vietnam, and Thailand. Lastly, CIRAD is a founding member of CANSEA and is managing the network coordination unit since its creation in 2009.

ALISEA supported by GRE T
(contact: Pierre Ferrand — ferrand@gret.org)

- This component aims at promoting the emergence of a new regional Agroecological Learning Alliance in South East Asia (ALISEA) to strengthen knowledge and share experience among agroecological initiatives and actors. The agroecological movement will be promoted towards policy makers and consumers, and the development and adoption of agroecological practice among farmers will be scaled up.
- GRE T has recognized experience in network facilitation and mediation as well as in evaluation, capitalization, research and publication on development, rural and agriculture development in particular. GRE T has developed a pragmatic and integrated approach of agroecology in a perspective of agroecological transition, with projects active in the region (i.e. Laos, Cambodia, Vietnam and Myanmar). Lastly, it has a long term presence and offices in Laos, Cambodia, Vietnam and Myanmar, and has developed numerous partnerships with academic and research, civil society and government institutions.
- The experience of CANSEA will contribute to promote and shape the ALISEA, particularly through its scientific approach and capacities, needed for ensuring credibility of the innovative practices for all stakeholders.
- The development of ALISEA will contribute to strengthen the CANSEA and the conservation agriculture practices, through a wider visibility and higher influence on public policies on one side, through better adoption by farmers due to a wider offer of innovations on the other side.

ACTAE Project

Agroecology, a broad concept

Agroecology seeks to produce diversified and high-quality food, reproduce – or even improve – the ecosystem's fertility, limit the use of non-renewable resources, avoid contaminating the environment and people, and contribute to the fight against global warming. (Levard & Appollin, CIRAD, 2003).

To do so, agroecology enhances the potential of ecosystems to capture external natural resources (solar energy, atmospheric carbon and nitrogen, water) and uses the synergies and flows inherent in these ecosystems.

Within ACTAE project, agroecology is seen as an unifying concept of a wide "agroecology movement", to which several "schools" are contributing, representing a high social capital in terms of scientific knowledge, experience and knowledge.

<table>
<thead>
<tr>
<th>Agroforestry</th>
<th>System of Rice Intensification</th>
</tr>
</thead>
<tbody>
<tr>
<td>IFM / CM</td>
<td>Organic Agriculture</td>
</tr>
<tr>
<td>Conservation Agriculture</td>
<td>Integrated Farming</td>
</tr>
<tr>
<td>TAC / Integrated Farming</td>
<td></td>
</tr>
</tbody>
</table>