ACTAE project
Brief overview of main achievements

Towards an agroecological transition in South East Asia

A regional platform which aims at creating an enabling environment promoting agroecological practices and bringing together Civil Society Organizations (including farmers' and consumers' associations), Academia & Researchers, Development Practitionners, , Policy Makers and Private Sector

ACTAE
Towards an agroecological transition in South East Asia

Focusing on five Asian countries (Cambodia, Lao PDR, Myanmar, Thailand, Vietnam)
Funded by AFD (Agence Française de Développement)


GRET Cambodia ©

Key products and lessons learned from ACTAE

A reinforced **Research for Development Network** to foster national and regional capacities addressing different dimensions of an agroecological transition (**CANSEA**). The network has supported 18 thematic studies and several participatory research platforms in Cambodia (Kampong Cham), Lao PDR (Xieng Khouang) and Vietnam (Moc Chau, Son La, Yen Bai and Phu Tho).

An **Agroecology Learning Alliance in South-East Asia (ALiSEA)** which **aims at** i) **Strengthening knowledge and experience sharing among agroecological initiatives and actors,** ii) **Increasing visibility and credibility of the agroecological movement towards policy makers and consumers**, and iii) **Scaling up the development and adoption of agroecological practice among farmers**. To date, ALiSEA gathers 115 members from **5 countries of the Mekong Region (Cambodia, Laos, Myanmar, Thailand, Vietnam)** and has organized 18 **national and regional level workshops bringing together about 1,000 participants from over 120 organizations. It also facilitated a Small Grant Facility which awarded 26 initiatives in 5 countries, implemented by a broad range of local and international organizations (NGOs, Universities, Private sector…)**

The **LICA initiative** (https://bit.ly/2P0BLnJ), facilitated by Lao PDR, that was endorsed by ASEAN secretariat to develop a common policy dialogue within ASEAN institutions and respective ministers to foster an agroecological transition of farming systems.

A large range of studies and local initiatives have been conducted addressing six key dimensions of an agroecological transition, in diverse agricultural contexts. Many of them, implemented and supported in the framework of ALiSEA have been compiled in a capitalization publication, *Agroecology Futures: Inspiring and innovating stories from the Agroecology Learning Alliance in South East Asia*, (Ferrand & Le Jeune, 2018) which will be soon available to download on ALiSEA online library (*https://bit.ly/2OW-6PVF*).

1. The participatory **design of new AE systems:** Knowledge, tools and practices

- Co-designing agroecological cropping systems for annual field crops like rice, maize, pulse, cassava and perennial (e.g. tea-based systems) have mobilized support to R&D platforms that sustain medium to long-term iterative interactions with farmers. They also allow maintaining and assessing genetic banks for staple, cash and fodder/cover crops.
https://bit.ly/2P0B65T
https://bit.ly/2yHiH3y
https://bit.ly/2JsNsxj

- On-farm assessment of appropriate-scale mechanization (https://bit.ly/2Jt0sTS).

- Preserving and sharing plant biodiversity: using underutilized and cover/relay crops (https://bit.ly/2OeIzsN), testing plant diversity under different management using intercropping with legumes (https://bit.ly/2F2zMdQ).

- Diversifying rice-based farming systems around the Tonle Sap lake (https://bit.ly/2CS2Baj) and species diversity within coffee plantation (https://bit.ly/2OaV2O5).

- Increasing or maintaining soil fertility: Testing the impact of organic amendments for the benefit of market gardening farmers (https://bit.ly/2ACoqsU).

- An "adaptive Research on Rice/Potato Rotation Model in Paddy Land of Phu Binh district, Thai Nguyen Province", Thai Nguyen University, Vietnam (*https://bit.ly/2SsHDEd*).

- An ecosystem approach for drought resistant home gardening in Central Dy Zone, Myanmar, Terre des Hommes Italia & Yezin University, Myanmar (*https://bit.ly/2C-Qoc3X*).

- Sharing experience on recycling of rice plant residues for enriching lands with organic matters and in-time cultivation of next crop, NOMAFSI, Vietnam (*https://bit.ly/2ysC3cC*).

- Sharing research findings about conservation of floating rice-based agroecological farming systems in the Mekong Delta, Vietnam, RCRD & An Giang University (*https://bit.ly/2R8jdP4*).

- Sharing experience and replication of closed loop agicultural model adapted to climate change for women and local key persons in Nghia Hung District, Nam Dinh province, CGFED, Vietnam (*https://bit.ly/2yrszhY*).

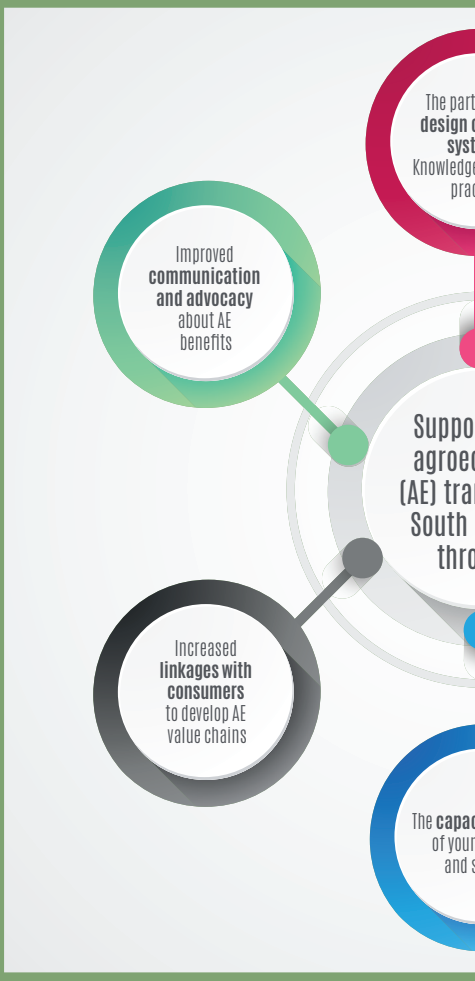
2. The assessment of AE systems **performances, impacts and ecological processes**

Assessment of the agroecological systems recovers complementary directions with (i) the performances i.e. the productivity of the mobilized production factors, (ii) the impacts or externalities of the practises and (iii) the progressive comprehension of the mobilized ecological processes.

- Assessing ecosystem services of agroforestry systems (https://bit.ly/2OaV2O5) and soil health under Conservation Agriculture at Bos Khnor, Cambodia (https://bit.ly/2P0B65T).

- Screening soil functional diversity (https://bit.ly/2Oh9QdY), and soil ecosystem services (https://bit.ly/2Rqe3Om) for contrasted annual cropping systems (https://bit.ly/2SDovUm).

- Assessing a diversity of mixed crop-livestock systems and promoting crop-livestock integration (https://bit.ly/2ESwBpd).



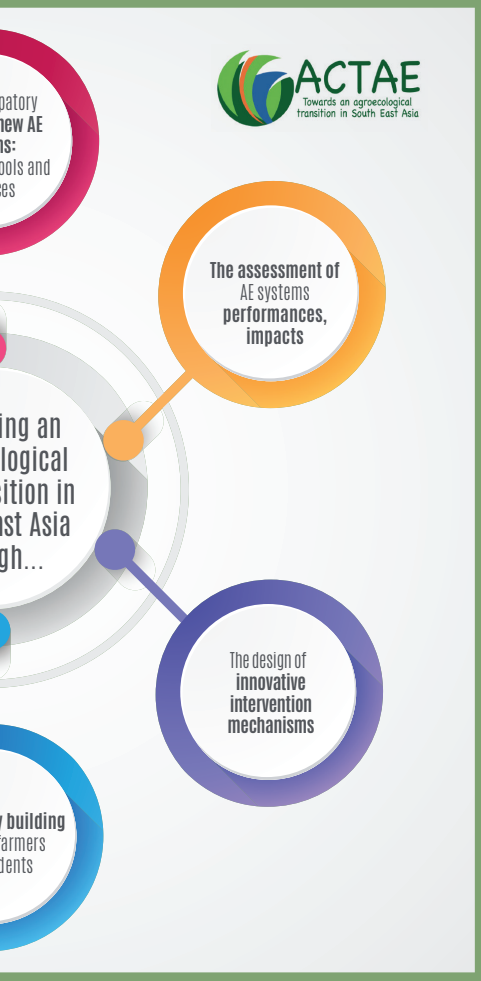
- Isolating native rhizobia strains and assessing their efficiency on cowpea intercropped with cassava (https://bit.ly/2F2zMdQ).

- A **thematic workshop in Laos to initiate co-evaluations of agroecological practices and experiences**, (*https://bit.ly/2z8dXDx*) followed by a **MSc thesis to engage a collective action and test the framework developed:** *Co-evaluation of an agroecological practice: the case of Sustainable Rice System (SRS), in Xieng Khouang Provinces, Lao PDR* (Mathilde Bourjac, 2017, *https://bit.ly/2PtjbEf*).

Several initiatives funded under the Small Grant Facility:

- Agroecology for resilient and sustainable livelihoods of natural disaster affected groups: Co-evaluation and research in development with smallholders of Tonzang, Tedim and Kale townships in north-western Myanmar, Chalmers University (*https://bit.ly/2ypCZPl*)- Filmed Evaluation of Impacts of Integrated Agriculture on Local People's Livelihood and Environment, ARMI, Laos (*https://bit.ly/2OaLwuf*).

- Economic, Health and Ecological Benefits of Organic Vegetable Production through Introduction of Net House and Organic Fertilizers, Svay Rieng University (SRU) &



Royal University of Agriculture (RUA), Cambodia (*https://bit.ly/2pXIX57*).

- Identifying Barriers in the Adoption of Agroecological Practices in Rural Laos, Huam Jai Asasamak Association (*https://bit.ly/2OXIXlu*).

3. The design of new collective intervention mechanisms

- Understanding the trajectories of farming systems, land use and land cover changes, decision-making process at farm level and identifying innovative mechanisms to foster the agro ecological transition (https://bit.ly/2RrucDn).

- Engaging smallholder farmers into collective landscape management for rice-based cropping systems around the Tonle Sap lake (https://bit.ly/2CS2Baj).

- Empowering smallholder farmers into seed production of under-utilized species and cover/relay crops and ALiSEA Small Grant addressing "Saving seeds, securing biodiversity, and sustaining rural livelihoods in the Irrawaddy Delta, Myanmar" (*https://bit.ly/2q0CMgN*).

- Engaging with service providers (https://bit.ly/2qkR8Zj) and medium entrepreneurs giving access to appropriate-scale machinery (https://bit.ly/2Jt0sTS).

- Promoting agroecology transition via enhancing farmers' analytical and decision-making capacity through application of simulation games (*https://bit.ly/2CpeS61*).

- Developing innovative business model for Agricultural Cooperative to produce and collectively supply natural fertilizer to local producers Cambodia, ADG (*https://bit.ly/2P9faVg*).

4. The capacity building of young farmers and students

- Developing higher capacities of farmers and technicians, lecturers by collective learning on assessment, communicating, making decision (https://bit.ly/2OaV2O5), advocacy (https://bit.ly/2ACoqsU, https://bit.ly/2JsNsxj), applying new practices (https://bit.ly/2P0B65T, https://bit.ly/2yHiH3y), producing and preserving seed (https://bit.ly/2OeIzsN), using simulation game (https://bit.ly/2CS2Baj, https://bit.ly/2RrucDn).

- Providing education and training for young students (http://e-learning.rua.edu.kh/) on agroecology (https://bit.ly/2P0B65T, https://bit.ly/2yHiH3y) developing pedagogical tools (https://bit.ly/2qiYGf5) and supporting masters and PhD (https://bit.ly/2SDovUm).

- Experience sharing workshop on Review of existing pedagogical materials and initiatives for mainstreaming agroecology practices in Laos (*https://bit.ly/2yDrOCk*) and in the Mekong Region (*https://bit.ly/2qdPsAV*).

- 1st Regional Academic Conference about Agroecology, Yezin Agriculture University, Myanmar (*https://bit.ly/2JoaYM3*).

- Regional Symposium on "mapping and assessing University based farmner extension services in ASEAN through an agroecological lens, Chulalongkorn University, Thailand (*https://bit.ly/2yCeSfZ*).

- Developing of Teaching & Learning Materials in Agroecology at University Level in the Lao PDR, Faculty of Agriculture, National University of Laos (*https://bit.ly/2Ai49ZD*).

- The development of the Khmer Online Meta-Network Agroecological Training, Vivre de sa Terre, Cambodia (*https://bit.ly/2Ai-W1D*).

- Assessing youth led organic farm sustainability in the Mekong Region: from the concept to case studies (*https://bit.ly/2yt6saY*).

- Short film contest about Youth & Agroecology (*https://bit.ly/2CzuMqV*) and side event in the framework of the Luang Prabang Film Festival addressing Sustainable Farming and Agroecology (*https://bit.ly/2R/-N/9I*)- Video documentation of Young Organic Farmers across the Mekong Region: Young Organic Farmers: The Journey of Hope, Towards Organic Asia (*https://bit.ly/2QYgg3m*).

5. Increased linkages with consumers to develop AE value chains

- Opportunities for a successful mung bean value-chain in the Lao PDR (https://bit.ly/2qixqxo).

- Thematic workshop on Bringing Agroecology to the Market: Innovative Market Approaches and Institutional Settings to accompany the agroecological transition, GRET & CIRAD, Laos (*https://bit.ly/2PqDwtO*).

- Regional experience sharing workshop about Participatory Guarantee Systems (PGS) to promote Agroecology in the Mekong Region (*https://bit.ly/2PO86ub*).

- Capitalization of Participatory Guarantee System experiences for upscaling & institutionalization in Vietnam, RIKOLTO and VNUA (*https://bit.ly/2CTD9SS*).

- Improvement of Organic – PGS Certification Awareness in Myamnar, MOGPA (https://bit.ly/2SrvwaE).

- Promoting Organic Vegetable through customer engagement in Participatory Guarantee Systems (PGS) in Cambodia, NAV (*https://bit.ly/2pWmDZI*).

6. Improved communication and advocacy about AE benefits

- Building advocacy to support agricultural policies to identify mechanisms to enhance the production of innovations and to support effective implementation of an agroecology transition based on a territorial approach (LICA Initiative, https://bit.ly/2P0BLnJ). Contribute to the design and the implementation of an ASEAN policy framework to foster the dissemination of agroecology.

- Development of several communication and knowledge management tools such as an online knowledge sharing platform on agroecology giving access to more than 630 resources & 60 case studies (*https://alisea.org*), **5 different Facebook Pages** (EN / VN / Lao / Khmer / Burmese languages) with over 8600 followers, a **YouTube channel** with 84 videos (*https://bit.ly/2AZ0DEE*), a quarterly newsletter (with over 1700 subscribers). A **YouTube channel 'Soil is Life'** with over 330 videos and e-learning resources covering 4 dimensions of an agroecological transition (*https://bit.ly/2Ssw93C*).

- **Participation to regional events in order to contribute to public debates & advocacy:** FAO regional workshops on agroecology, Bangkok, Thailand, Nov 2015 (*https://bit.ly/2Job3iS*) & Kunming, China, August 2016 (*https://bit.ly/2qeaFdQ*); 2nd GMS Agriculture Minister Meeting, Siem Reap, Cambodia, Sept 2017; Mountain Futures International Conference, Kunming, China, June 2018 (*https://bit.ly/2KLkKI1*).

Context of the Action

In the Mekong region farmers have historically practiced subsistence-based integrated farming combining crops, livestock and trees in complex landscape mosaic with paddy rice as a main staple food. However, over the last decades, agriculture has drastically changed toward intensive and mono-cropping practices with negative impacts on food safety, food security, employment of women and young people, depletion of the soil quality and productivity, biodiversity and also on wellbeing of the population. A lot of traditional knowledge has been lost or underutilized. The global market and policies are looking for more safety and sustainable agriculture with increasing demands for standards. There is a need to reconnect people back to the food they produce, process and consume. By relying on diversified and integrated farming systems, reducing the use of chemical inputs, mobilizing labour and producing knowledge on good practices, agroecology improve the nutritive status of food and food quality, increase incomes and create jobs, help to reduce risks for the environment and the health of populations. However, not enough people in Southeast Asia are practicing agroecology. The main reason are: lack of know-how, the difficulty of circulating useful information, the degraded quality of soils, the low availability of quality seeds, the difficulty of involving producers in the implementation of innovations, the cost of foodstuffs and inputs, the scarcity of impact assessment analyses to demonstrate the value of agroecological practices, the difficulty of increasing the scale of intervention, the insufficient involvement of small and medium-sized enterprises, the low level of mechanization related to agroecology and the low availability of working force.

Objectives of the ACTAE Project

(i) To promote agroecology practices towards small-holder farmers, consumers and policy makers (ii) to strengthen the R&D network on agroecology transition in South East Asia (CANSEA) in its function of research and promoting agroecology practices adoption. (iii) To develop a regional Agroecology Learning Alliance in Southeast Asia (ALiSEA) to strengthen knowledge and share experience among agroecological initiatives and actors.

Partnership

ACTAE project is coordinated by CIRAD and implemented through two components. One is in charge of Agroecological R&D (CANSEA) led by CIRAD and the second, in charge of collective knowledge management and networking (ALiSEA) led by GRET.

Location and description of the Action

ACTAE project is located in Lao PDR under the umbrella of the DALaM (Ministry of Agriculture in LAO PDR). It started in July 2015 and will be finished in June 2019.

ACTAE activities are located in Lao PDR, Vietnam, Myanmar, Cambodia,. They are deployed in 47 initiatives funded under Small Grant Facilities, the organization of multi stakeholders & thematic workshops, the implementation of studies & co-research process and the development of knowledge management & communication tools.

Budget: 2, 7 Millions €

Expected impacts and prospects

The ACTAE project has created the conditions for the emergence of a regional network supporting the agroecological transition in Southeast Asia. However, it will require a long-term process to consolidate this regional network and guarantee its autonomy and sustainability. A second phase of ACTAE project will likely be implemented with the aim to strengthen and structure an autonomous regional network on agroecology, enlarging ALiSEA membership and multi-stakeholder's coalition, combining R&D and knowledge management with governance and funding mechanisms.

Useful links and contacts

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This document is a summary of the actions undertaken by the ACTAE project funded by AFD. The ideas and the opinions presented in this document are the ones of its authors and do not represent necessarily those of the AFD.