



PROCEEDINGS OF THE EXPERIENCE SHARING WORKSHOP:

REVIEW OF EXISTING PEDAGOGICAL MATERIALS AND INITIATIVES FOR MAINSTREAMING AGROECOLOGY PRACTICES IN LAOS

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INTRODUCTION

Few words about ACTAE and ALiSEA

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 (Towards an Agroecological Transition in the Mekong Region) is a program funded by the French Agency for Development (AFD) with a regional focus (Cambodia, Laos, Myanmar and Vietnam). It aims at enhancing and 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).

This experience sharing workshop is part of the activities implemented by the **Agroecology Learning alliance in South East Asia** (ALiSEA) to foster multi stakeholder collaborations in regards to promoting an agroecological transition. It is more especially embodied in the support provided to the Faculty of Agriculture from the National University of Laos through the ALiSEA Small Grant Facility to develop new AE pedagogical material. Their project aims at both producing an updated learning and teaching manual for Agroecology with the collaboration of the Departments of Agriculture from three other universities (Souphanouvong, Savannakhet and Champhasak) as well as revising the syllabus for agroecology courses in order to harmonize them at national level.

It was expected in particular to provide an opportunity for synergizing one another's activities. This was a great opportunity for the different participants to present and confront the outcomes of their respective projects with other initiatives in Laos and learn from their previous experiences. In addition, it was expected to establish a framework for future Agroecology trainings and pedagogical material production.

It was anticipated that this workshop would provide the opportunity to the participants to increase communication between the project teams and develop a concrete collaboration.

Why agroecology and how to address it?

Agroecological (AE) approaches are seen as convincing and evidence-based alternatives towards sustainable agriculture. They clearly aim at strengthening innovation capacity of family farms, as well as the recognition of their contribution to food sovereignty in the region. They cover technical, economic, societal and policy dimensions of agricultural production respectful of environment. They also contribute to poverty alleviation, food security, climate change mitigation and adaptation.

“Agroecology is the answer to how to transform and repair our material reality in a food system and rural world that has been devastated by industrial food production and its so-called Green and Blue Revolutions. [...] Our diverse forms of smallholder food production based on Agroecology generate local knowledge, promote social justice, nurture identity and culture, and strengthen the economic viability of rural areas. As smallholders, we defend our dignity when we choose to produce in an agroecological way.”¹

¹ Declaration of the International Forum for Agroecology, 2015

Upscaling agroecology with the intention of building food sovereignty is a complex process, which requires different strategies. Beyond the technical entry point of Agroecology that gathers a set of practices such as the System of Rice Intensification (SRI), Integrated Pest Management (IPM) or Organic Agriculture (OA), Agroecology is also an alternative way of thinking agriculture. Engaging with Agroecology requires developing innovative and critical skills in order to understand and deal with the ecosystems, to experiment new practices.

“There should no longer be a top-down approach with farmers as passive recipients of information, but farmers should exchange information within farmer networks, supported by organizations ready to commit to the agenda of farmers.”²

Agroecology is a promising movement to inspire again farmers and youth farmers and reverse urban migration. Agroecology training and learning material should therefore be designed according to this objective of developing a critical mind towards conventional agriculture.

“The Lao experience shows that strategic communication can support empowerment through the systematic development of materials that aim to change the ability of farmers to make informed choices. Success can be measured in terms of farmers’ achievement of their own livelihood goals, rather than adoption rates. A key feature of this process has been the involvement of farmers in the planning and development of the informational materials, and in the analysis of their impact³.”

The Nyéléni Declaration claims agroecology as a bottom up movement and practice that needs to be supported, rather than led, by science and policy. However, Agroecology is a complex discipline that requires good knowledge of its principles and of the ecosystems. Therefore, working for fostering the Agroecological transition require the education and training of farmers and relevant stakeholders to Agroecology concepts, principles and practices.

How can stakeholders enhance/facilitate Agroecology education and training in Laos?

With the growing list of organizations involved in Agroecology training in Laos, a coherent communication strategy is more and more needed to strengthen the impact of one’s another initiative. This workshop will contribute at setting the stage for further Agroecology training and learning material production in Laos. Here are some of the questions that were raised during this meeting:

- **Who are the people we want to engage with?** (students, farmers, policy makers etc).
- **What objectives do we have with each group?** (change practices, improve analytical skills, build networks etc.)?
- **What learning approaches and channels are being used to achieve these objectives** (classroom training, action research, MOOCs / E-learning, agitprop etc.)?
- **Who will implement these approaches, and what do they already know/have?** (College / University teachers, NGO field workers, Government extension workers, researchers etc.)

And then, what additional teaching materials are needed for those agents to be more effective? (medium, content, form, quantity etc.)

² Third World Network (TWN) and the Latin American Society of Agroecology (SOCLA), Agroecology: Key Concepts, Principles and Practices, 2015

³ NAFES and NAFRI, *Think Before You Print: Strategic Communications in Agricultural Extension*

Workshop objectives:

The overall objectives of the workshop were three folded:

- To share experiences on past and ongoing projects aiming at developing Agroecology teaching and learning materials
- To enhance networking between the different stakeholders involved in the production of AE teaching and learning materials at national levels in Laos
- To initiate a reflexion about how to facilitate the improvement of Agroecology teaching and learning materials production in Laos

A Prezi presentation about the workshop objectives and expected outcome can be seen here: <http://bit.ly/2sf1l9d>

WORKSHOP WRAP UP

All the presentations that have supported the discussions during the workshop are available for download on ALiSEA website (<http://ali-sea.org/alisea-experience-sharing-workshop-review-of-existing-pedagogical-materials-and-initiatives-for-mainstreaming-agroecology-practices-in-laos-june-2017/>)

Past initiatives

The first part of the workshop was dedicated to present some past outstanding initiatives that have supported elaboration of AE pedagogical materials. Our initial assumption was that a lot has been done already but has not always been used extensively.

Thus, this non-exhaustive and very partial review of past initiatives was meant to highlight the existence of materials that could be brought back into the development of new teaching support. It is worth pointing out that the 3 experiences have been implemented under 3 different set up and targeting different audiences:

- International Research Center (CIRAD) & MAF
- Government led initiative (NAFRI / NAFES / NUoL) with international consultants
- INGO (AgriSud)

CIRAD-MAF experience in developing AE-CA pedagogical materials in Laos – Pascal Lienhard

This presentation highlighted 2 main experiences addressing 2 different audiences:

- ❖ Project for Integration of Agroecology in Programmes of Agricultural Education for Faculties & Colleges of Agriculture in Laos (PIAPAE), 2009 (→ BSc, MSc students/ Teachers)
- ❖ Elaboration of manuals (→ Extension Agents and Development Practitioners) on
 - Conservation Agriculture experiences and methods in Lao PDR
 - Guide to safe and effective use of pesticides

In the framework of these actions, a lot of support materials have been produced and collected such as drawings/ sketches/ photos, farmers' testimonies, Practical "To do & not-to-do". However, most of

it is not available anymore. It would be important to locate the drawing “data base” on various topics (crops, livestock, farmers practices, cropping systems & impacts etc.) and to make it available again online through different channel so that it can be used by different stakeholders involved in designing teaching and training materials on AE/CA.

Developing materials for learning & extension: The Lao Uplands Sourcebook – Michael Victor

This presentation focused on the first attempt, before the emergence of internet and availability of online resources, to make available to extension workers and more broadly development practitioners, a diversity of best practices, methods and tools related to Laos uplands.

The sourcebook gathered 72 articles, highlighting key messages and being illustrated with the support of Art school students. It was built on existing material to create something new, user-friendly and relevant.

The sourcebook was meant to be a complementary resource for teaching. It was considered that this approach would be more effective than changing the curriculum since curriculum are not changed very often and required approval from the Ministry of education (time-consuming process).

A lot of work has been done and a lot of support material has been created for the elaboration of the sourcebook. Unfortunately, most of the data were located on NAFRI website which ended up by collapsing and leading to a huge data loss.

Development of an Agroecology practices guidebook in Lao language - Claire Kieffer

This presentation aimed at highlighting the way to use a guidebook for Agroecological practices developed by Agrisud (and under translation in lao language). The presentation insisted on the fact that the guidebook is only a tool, and that needs to be completed with several other training and facilitation actions.

⇒ A manual is not sufficient to fulfil the objectives of promoting agroecology

On-going initiatives

This part of the workshop aimed at presenting on going initiative addressing different target audience (Technical college, University students) and through different means (field research, teaching manuals, e-learning). This was also the opportunity to share experiences from Cambodia where the use of e-learning has been quite developed.

LURAS support to technical college in Luang Prabang - Andrew Bartlett

Agroecology is a reaction to conventional agriculture. Consequently, teaching agroecology should also be a reaction to conventional education. This was the starting point of LURAS project on updating booklet about best agroecological practices.

The main purpose of its action is to encourage development workers to do thing differently. This directly tackle the core issue of the workshop: how to facilitate the learning process with farmers?

The presentation insisted on a 3 steps approach and ended up by the display of a short film to illustrate a concrete action.

Step 1: Facilitate learning process

This is different from teaching: it is about helping farmers to discover about agroecology. Farmers are not responsive to theory, to general concepts. They need to try things out on-farm. It is especially true with agroecology which is essentially context-specific.

“You can transfer information but you cannot transfer knowledge”

⇒ To construct knowledge based on experience

Step 2: Facilitate experimental learning

The focus of the action is on the Northern Agricultural and Forestry College, which gathers a representative sample of future agricultural workers.

Step 3: Improve the learning process

This is important because this is how the existing curriculum becomes meaningful. At this stage, there is a need to make connections between disciplines and topics, to deconstruct the silos where knowledge on different topics are stored.

⇒ Here again, the conclusion is that changing curriculum is a very long process so it is more efficient to focus on alternative solutions

One of the conclusion of the presentation was about the importance to learn from the farmers to best adapt the pedagogical material and methods

Agroforestry Education Initiative in Lao PDR & Developing of Teaching and Learning Materials in Agroecology at University Level in the Lao PDR – Dr Somphanh Pasouvang

This presentation aimed mostly at presenting an existing national network on agroforestry and introducing work being conducted by different universities across Laos to revise the teaching materials with the support of a small grant from ALiSEA.

This process will take up to one year and will address 4 main fields: agroforestry, organic agriculture, agroecology and integrated farming.

Pedagogical resources in Agroecology & Conservation Agriculture - Dok Pheakdey (RUA)

This presentation was meant to introduce all the work that is being conducted in Cambodia, mostly at the Royal University of Agriculture in Phnom Penh, to develop e-learning material to support the teaching of agroecology and conservation agriculture.

All pedagogical material that has been developed so far is available on the e-learning platform of IPERCA: <http://www.iperca.org/>

E-Learning Model in Cambodia’s Higher Education Case Study in 4 Universities - Mr. OUK Mithona

This presentation aimed at highlighting the process for the development of e-learning at ITC in Cambodia and their ambition to become a e-learning HUB and gateway for Cambodia

Few overall comments

Overall the main message that can be drawn from the different presentations is that there is a **lot of content and material already available in Laos addressing agroecology that could be used for supporting teaching and training actions.**

One of the critical issue is to **gather and re-package the already existing knowledge.**

Presentation from Cambodia about e-learning experiences were very interesting. One of the big question that came to mind was how to reach the audience with e-learning material? The dissemination and communication strategy is a major stake of e-learning.

Lastly, it was emphasized that **CRITICAL THINKING** is key for promoting agroecology and should be enhanced, fostered and prioritized in Laos' education.

World café

In the afternoon session, a world café was organized in order to jointly brainstorm about a set of 3 overall questions:

- What are the priorities in Laos for curriculum development aiming at promoting agroecology?
- What are the gaps in current curriculum addressing agroecology?
- How can collaboration between University and Development Practitioners can be improved?

This approach relies on the power of conversation to foster discussion, confront point of views, and support the emergence of ideas & recommendations.

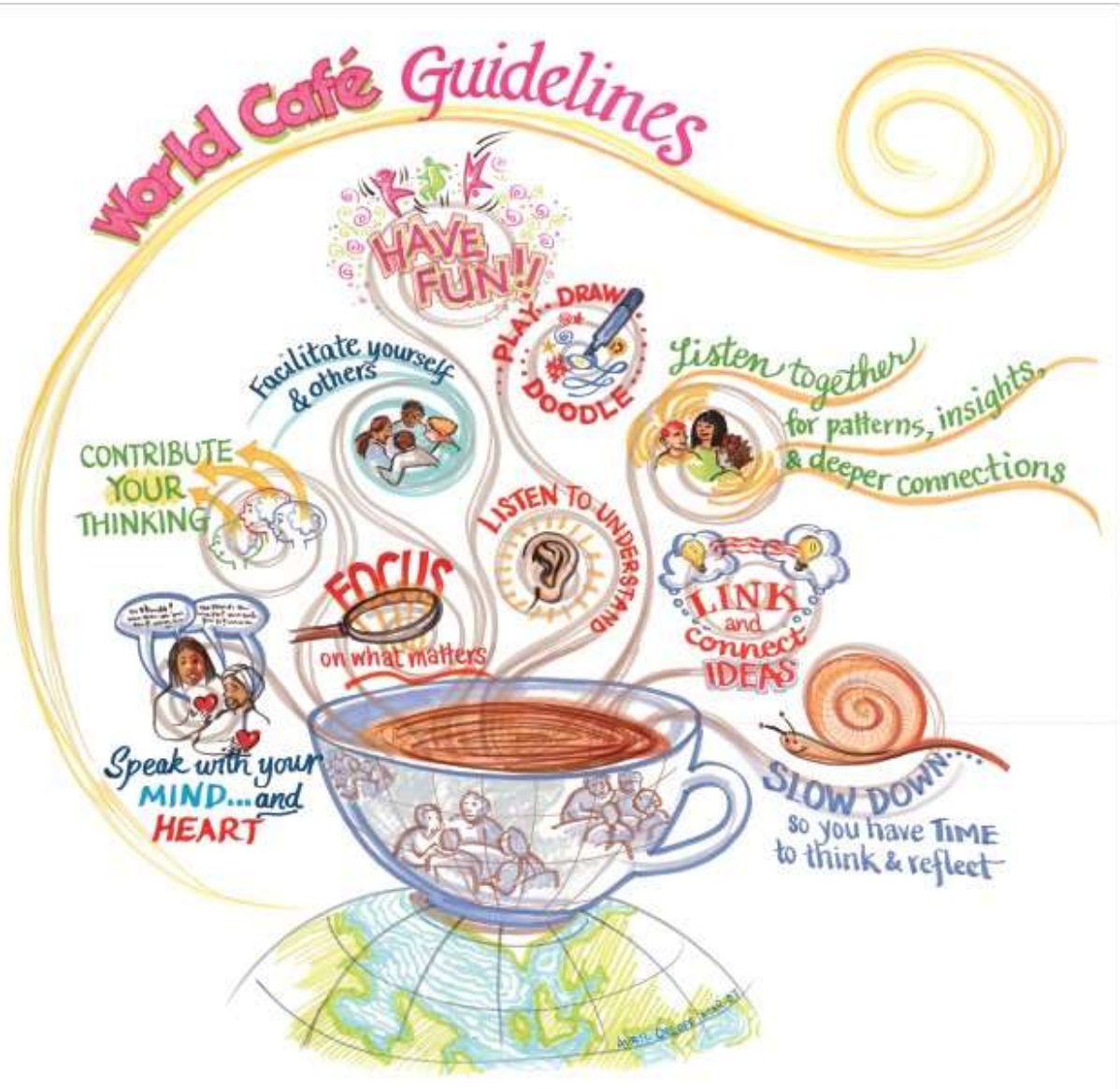


World café uses Seven Design Principles as following

- 1) Set the Context
- 2) Create Hospitable Space
- 3) Explore Questions that Matter
- 4) Encourage Everyone's Contribution
- 5) Connect Diverse Perspectives

6) Listen Together for Patterns & Insights

7) Share Collective Discoveries



Hereafter is a summary of the different discussions that have taken place in each table for the 3 main questions.

Table 1: What are the priorities in Laos for curriculum development aiming at promoting agroecology?

The facilitator of this table was Ms. Oulavanh Sinsamphanh (NUoL/FES)

The different priorities mentioned at Table 1 have been summed-up into a recap board:

Access	Practices
<ul style="list-style-type: none"> - Computer and internet access (students can benefit greatly from online materials, but often cannot get access) - Basic Computer skills (Excel, Word, PowerPoint...) - Language (English in particular) - Media skills (video making: the use of the application Splice (for Apple devices only, https://splice.com/) for instance allows to set up videos in a very easy and quick way) - Human resources (visiting lecturers, resource people → Invitation of development practitioner to deliver conference/lecture at university) - Access to e-learning studio 	<ul style="list-style-type: none"> - Thesis / internships for students related to agroecology - Case studies - Field visits - Study tour - Practical / laboratory <p>➔ Make it real, Exposing students to real world examples (good and bad), not just theory, abstract.</p>
Learning by doing	Contents
<ul style="list-style-type: none"> - Organising stimulating events such as student contests: photo or video competition - Fostering critical thinking - Providing optional courses on media production - Supporting publications - Team work on case studies - Develop Organic Agriculture market at university level 	<ul style="list-style-type: none"> - Need a change of methodology, not just change of content - Designing an Agroecology curriculum (transversal) - Translating guidebooks into lao language - Hard and software available - Open date platform - Training on social dimension of Agroecology as well / focus on farmers - Linkage between and different discipline and topics that make Agroecology coherent as a transversal movement - Agroecological zoning for Laos - To include marketing/certification (develop standards) in curriculum

Overall, a major priority that has been expressed and discussed throughout the day is “Learning by doing”. Participants highlighted the practical aspect of agroecology and really emphasized on the importance of offering internships and practical case studies to the students.

The general concept of **critical thinking** has also been raised during the day. Educational curriculum should foster such critical thinking, providing analytical skills and opportunities to student to think by themselves.

Table 2: What are the gaps in current curriculum addressing agroecology?

The facilitator of this table was Ms Hongnapha Phommabouth (ALISEA/GRET)

Gaps in content's quality

Gaps identified have highlighted that it is not just about the curriculum content, but also about the quality of teaching.

Participants have mentioned issues with available teaching materials such as:

- Difficulties to access literature in Lao Language
- Needs for updated examples
- Lack of practical activities/exercise that support AE learning
- Difficulties to define the term agroecology
- Lack of a clear concept of AE that should be supported by standards (uniform standards): Agroecology, Green agriculture, GAP, pesticide free vegetables, Organic Agriculture...

Access to teachers' trainings

Participants have highlighted the importance for teachers to keep in touch with the moving environment they teach. This would enhance the accuracy and relevancy of the courses and also contribute to reducing the generational gap between students and teachers.

Teacher's accountability

At the technical college of Luang Prabang (NAFC), around 120 modules are proposed. However, there is a high level of variation in terms of quality between the different modules depending on the teacher. This questions the relevancy to set up student evaluation of their teachers. Such approach exists already in Thailand for example.

- ⇒ Opinions from the participants about this issue were divided but this raises the question of the accountability of the teachers, which can be questioned. There was a consensus on the fact that teachers must be accountable.

Lack of transversality

Generally, in Laos, agroecology is not taught as a discipline per se. It is a combination of different courses such as agroforestry, organic agriculture, integrated pest management, etc. There is no class on agroecology as a pluri-disciplinary movement. Therefore, the concept and principles of agroecology are likely to be misunderstood or ignored. In order to understand the eco-systems, there is a need for de-constructing the knowledge silos in which these various disciplines are stored.

Lack of access to facilities

It was pointed out the little budget available at university level for practical exercises.

Overall, there is a lack of field materials and laboratory facilities, AE learning centers, computers and internet connection. In addition, field study are also rare (only some universities or technical colleges own some lands to practice on).

Gap in relationships

Farmers and students

It was acknowledged by participants that there is a big gap between farmers and students which results into misunderstandings once the students enter the work market. This is related to the abstract and

theoretical design of the courses. Very often, students do not realise what does it take to be a farmer or their daily constraints.

One example from France has been raised to further illustrate this issue. Indeed, there, agriculture students have to carry out an internship on a farm for two to five weeks (depending on the agriculture school / university) during their first year. They work as farm labour and do the exact same work as farmers do. It is deemed to give them an overview of the arduousness of farm work and to better understand farmers' claims later on in their professional life.

Lack of exchange

Between universities / faculties

It has been pointed out that universities do not share enough. Indeed, there is a great potential in sharing expertise and resources (human resources, literature, information, facilities...) between the different faculties.

Between universities and professionals

It is also true between universities and outsiders such as development practitioners, farmer leaders, private sector operators or even government authorities. Involving professionals in the courses design or as speakers would allow a more concrete and practical approach. It would also reduce the gaps in understanding between students and farmers / professionals.

Table 3: How can collaboration between University and Development Practitioners can be improved?

The facilitator of this table was Dr Pascal Lienhard (CIRAD)

The discussion started by assessing the state of existing collaborations between universities and development practitioners. The main examples of collaborations given (and discussed) were related to students from Universities making internship within Development institutions/practitioners.

Surprisingly, the role of Universities / professors as service providers (e.g. consultancy, training provision) to development institutions/practitioners was little discussed/presented whereas it appears to be an important source of collaborations.

The participation of Universities to the different round tables (Working groups, Sub Sector Working Groups) was rapidly discussed but could be another pathway to improve collaborations between Universities and Development institutions.

The point of views and expectations from University and Development practitioners' sides were collected and summarized in the table hereafter:

Development institutions	Universities
<ul style="list-style-type: none"> - Lack of focal point (who to ask when looking for students?) - Timing and duration of internships as set by universities/curriculum do not fit with needs from projects/practitioners (ex: BSc or MSc students in Agriculture mostly available) 	<ul style="list-style-type: none"> - Development practitioners to be more proactive (e.g. internship proposals, research topics); - Current situations: universities are sending letters to NGOs, international agencies, and private sectors to look for internship for their students

<p>from February to April vs agricultural season = April to October)</p> <ul style="list-style-type: none"> - Student selection process not transparent enough (criteria for selection?) - Student proficiency in English seen as limiting factor for working with international projects - Poor availability of BSc / MSc studies reports - Contract/Agreement signature process too long/complex (ex: for training provision) 	<ul style="list-style-type: none"> - Need more information from Development Practitioners / institutions on their fields of expertise - Need for more formal agreements with Development institutions
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Cross cutting issues appeared to be mainly related to 2 topics: 1) Information sharing & 2) Institutional arrangements.

Different improvement pathways were discussed for these 2 topics

1) Improving information sharing

- **Improve existing directories:** iNGOs directory (<http://www.directoryofngos.org/ingo2/home>) insures that information are regularly updated; what about directory of Universities/college of Agriculture?
 - A **contact list** could be elaborated by the universities building on previous internships and it could be regularly updated with the support of development practitioners whenever there are needs or offers
- **Organization of a yearly event** were Universities/students and Development institutions/practitioners could meet face-to-face to discuss about respective needs; a “Job Fair” is organized yearly by universities with little participation from Development institutions; this could be completed by an internship fair,
- Increase the use of **online resources & social medias:** e.g. Laolink (<http://www.laolink.org/>), Lao44 (<http://www.lao44.org/>), LaoFAB (<http://www.laofab.org/>), AliSEA website (<http://ali-sea.org/>) Facebook page (<https://www.facebook.com/AgroecologyLearningAlliance>)...

2) Institutional arrangements

- Develop and/or disseminate when existing standard agreement forms (e.g. for internships)
- The elaboration of the terms of reference for internship would be eased by the provision of expectations from the university in terms of pedagogical content
- National existing networks in AE (e.g. LaoNAFE, SRI, organic farming) could be used to improve coordination mechanisms between Universities and Development practitioners
- The creation of a coordination mechanism would facilitate the interaction between stakeholders. This should include a secretariat

Way forwards / first collective actions...

Regional workshop & e-learning

As immediate follow up of this first working session on pedagogical material elaboration, a **regional workshop** will be organized in **Cambodia** in the **week of the 9th of October 2017**, with a specific focus on **e-learning for mainstreaming agroecology**. Further information will be shared shortly through AliSEA website and newsletter.

In regards to existing e-learning offers addressing agroecology in English language, it is worth mentioning 2 Massive Open Online Course (MOOC) supported by the French government:

- **MOOC Agroecology** supported by SupAgro, Agropolis Foundation, Agreenium and UVAE.



This addresses 5 different topics:

- 1- The emergence of Agroecology
- 2- Different approaches to Agroecology
- 3- Implementation – 4 case studies
- 4- Apply the concepts of Ecology for innovative systems
- 5- Multi-factoral and multi-scale issues of the agroecological transition

2 sessions have already been conducted in 2016 and 2017.

This MOOC is Free of charge but needs a registration.

Courses are available in French and English language and lead to the issuing of a certificate (based on actual participation)

- **MOOC GASCON: Agroecological Management of Vegetal and Animal Communities** supported by Agreenium, UVAE and UVED

This addresses 4 different topics:

- Evolution of the concepts in Crop Protection – Definition of Agroecological Crop Protection (ACP)
- Experimental approaches for ACP
- Modelling for ACP
- Landscaped approaches for ACP

This MOOC will be launched in September 2017. It will be free of charge but will need a registration. It will be available in French and English language.

More information: <https://www.fun-mooc.fr/> & <https://www.uved.fr/>

Fostering collaboration between Universities and Development Practitioners

Several low cost and highly effective initiatives could be supported in the short term to increase collaboration and provide further opportunities for students to get first hand practical experience regarding agroecology:

- To set up **monthly agroecological conferences / lectures** at Faculty level (Faculty of Agriculture & Faculty of Environmental Sciences) led by **development practitioners and other relevant stakeholders** (farmers leaders, private sector operators, international researchers...)

Such interventions should not be longer than 1 or 2 hours and rely mostly on **experience sharing** to illustrate practices and researches conducted at grass root level

Calls for interventions and invitations should be announced by **Faculty teachers** and relayed on different social media, newspapers and relevant websites

Whenever possible, students from different faculties should be encouraged to join such conferences in order to increase exchanges between universities and faculties

- To organize a **yearly internship fair** at the same time of the job fair that is organized by the University.

The first one could be organized in January – February 2018. A specific effort should be done beforehand in order to clarify what would be expected from the Faculties and from the development practitioners.

Broad communication about the event would be necessary in order to encourage as much organizations as possible to participate

Raising awareness and advocating government

As mentioned during the workshop, specific actions should be organized in order

- To **introduce agroecology to the young generation** (as early as the primary school).

Interesting initiatives have been implemented already

- in Laos and Thailand: Rural Ecology and Agricultural Livelihoods (REAL) Education which is an integrated learning process where school children explore what is happening on local farms, gain an understanding of ecology, and develop critical thinking skills with respect to environmental, health and social problems ([http://v1.vegetableipmasia.org/Concepts/Rural%20Ecology%20and%20Agricultural%20Livelihoods%20\(REAL\).html](http://v1.vegetableipmasia.org/Concepts/Rural%20Ecology%20and%20Agricultural%20Livelihoods%20(REAL).html))
- in Timor Leste: Permatil initiative <http://aliseaonline.org/aliseaonlineibrary/permacultureagroecology-system-in-timor-leste-national-school-curriculum-for-basic-education/> & <https://permacultureprinciples.com/post/permaculture-in-timor/>
- to promote AE at national scale with more active engagement from the government and multi stakeholder's alliances.

Collective learning and sharing events are under preparation and will be announced soon