



Sub-Sector Working Group on Agroecology (SSWG-AE)

Inaugural Meeting, 24 Nov '23

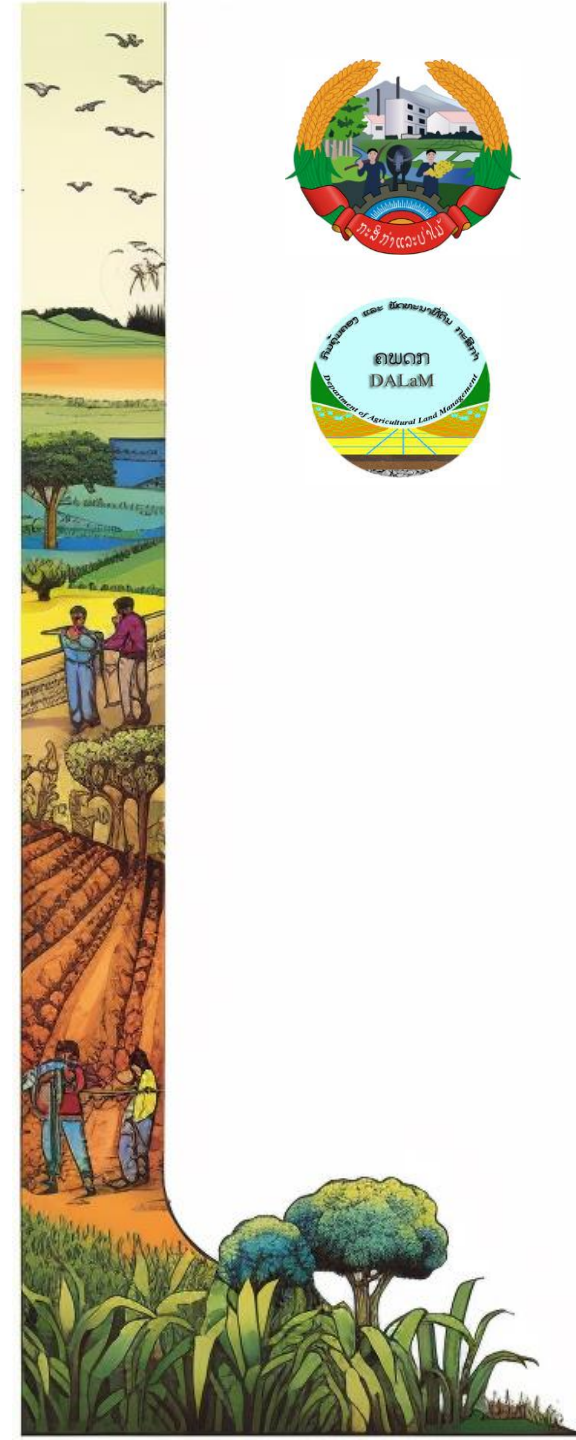
MAF, Vientiane



Agroecology

Concepts, Practices and Challenges in Laos

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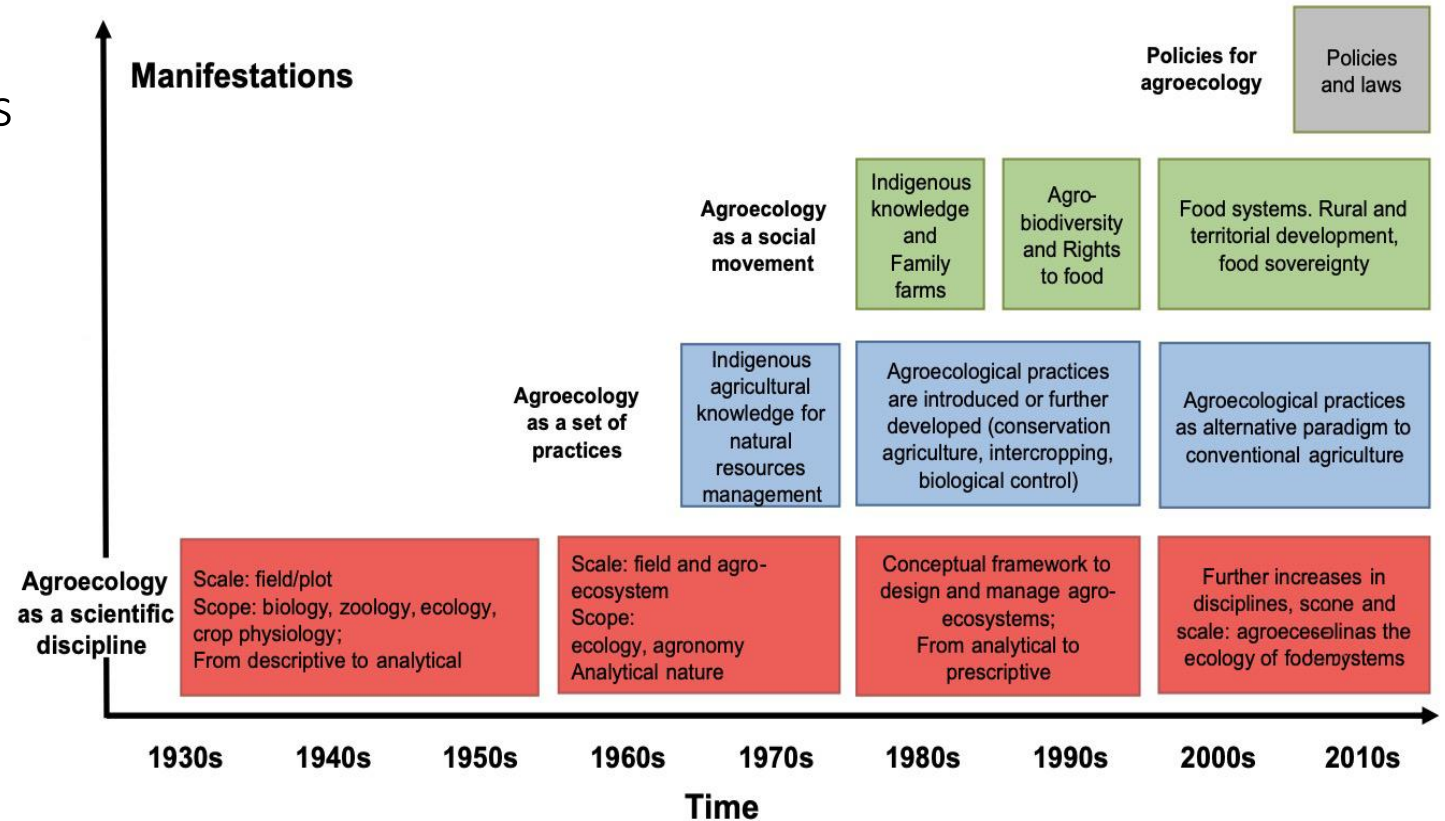
Why we need Agroecology

- The shift from subsistence farming to commercial agriculture has increased incomes for many people in Laos.
- But new farming techniques have also led to soil degradation, pesticide pollution and loss of biodiversity.
- Meanwhile, the country is still facing problems with childhood malnutrition and rural poverty.
- Farming systems in Laos need to become more efficient, healthier and cause less damage to the environment.
- The Lao Government has policies to promote Green and Sustainable Agriculture.
- Agroecology is expected to play a key role in implementing these policies, as part of food system transformation.



Agroecology is an evolving concept

- 50 years ago, AE was a scientific discipline focused on interactions among elements of farming systems (eg. between plants and pests).
- Now, AE is also seen as ‘a way of redesigning food systems, from the farm to the table, with a goal of achieving ecological, economic, and social sustainability’ (Gliessman 2016).
- The concept continues to be debated and interpreted.

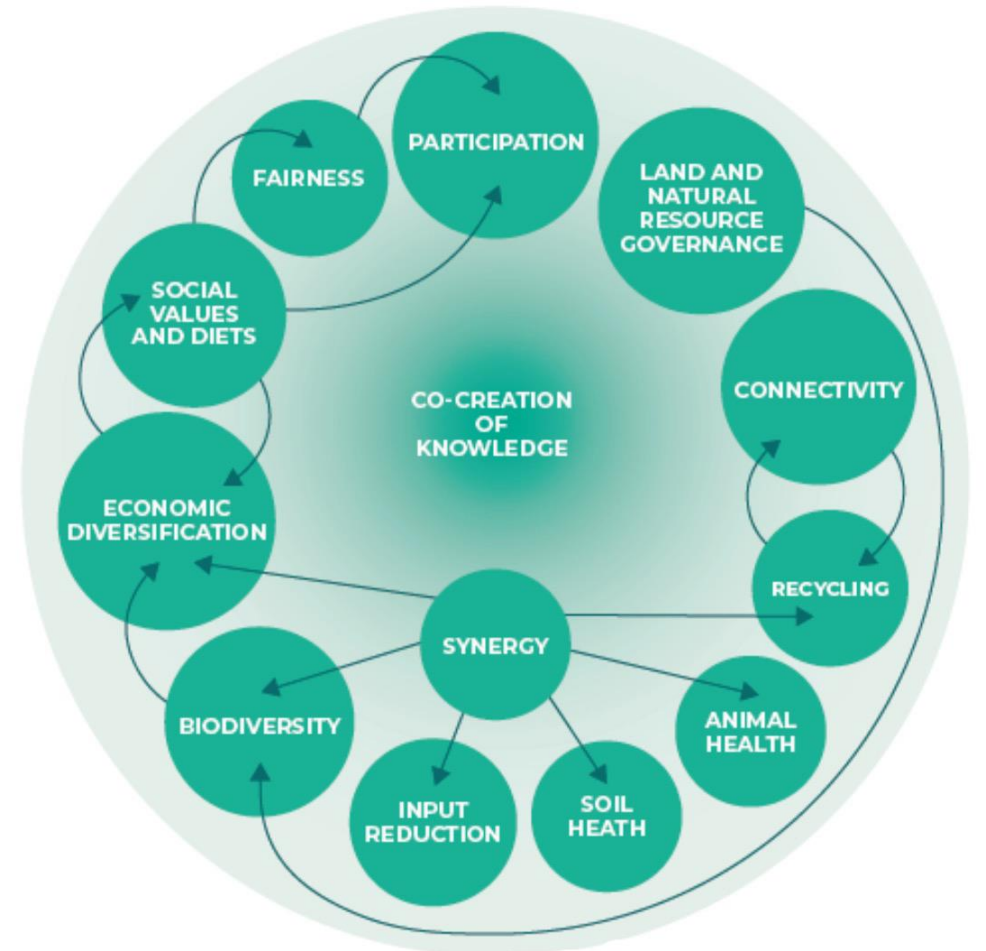


Wezel et al., 2020, *Agroecological principles and elements and their implications for transitioning to sustainable food systems. A review.*

Elements and Principles of AE



10 Elements of Agroecology: Food and Agriculture Organisation (FAO), 2018



13 Principles of Agroecology: High Level Panel of Experts on Food Security and Nutrition (HLPE), 2019

Can we make that simpler?

- The broad scope of the 10 Elements and 13 Principles have left many people confused.
- In summary:

Agroecology is a holistic approach to the analysis and management of farming and food systems that prioritises diversity and synergies at all levels to produce outcomes that are environmentally, socially, and economically sustainable.



Still confused?

There are many ways to apply agroecological concepts... and too many terms to understand!



Sustainable Agriculture Practices

Rice-fish farming

Integrated Pest Management

Seed saving

Conservation Agriculture

Crop Rotation

System of Rice Intensification

Farming Systems Development

Integrated Landscape Management

Organic Value Chains Development

Community Managed Agroforestry

Climate Smart Agriculture

Food Systems Transformation

Contributing to Green Growth

Linking Agric., Nutrition and Health

Protecting Biodiversity and Water

Increasing Food Industry Employment

Learning from experience

- The best way for producers and policy makers to understand the potential of agroecology is to look at actual experience.
- Agroecology concepts have been applied in Laos for more than 30 years.
- We should learn from this experience:
 - *What practices and approaches have produced the greatest benefits?*
 - *What has been scaled up and sustained, and how did that happen?*
 - *What have been the biggest challenges, and how can they be overcome?*
- These are questions that members of the new Sub-Sector Working Group on Agroecology need to examine.



Practical application of AE in Laos

Application level	AE strategy <i>and outcomes</i>	Eg. interventions with start dates
1. Techniques Implementing sustainable agriculture practices	<i>Improved yields and reduced use of external inputs</i> at the plot and field level as a result of agro-ecosystem analysis and adoption of new production methods	<ul style="list-style-type: none"> • Integrated pest management (1996) • NTFP management (1996) • Conservation agriculture (2001) • System of rice intensification (2001)
2. Landscapes Planning and management of integrated farming systems	<i>Improved productivity and sustainability</i> at community level through management of diversity and synergies across the farm and forest landscape	<ul style="list-style-type: none"> • Rice Integrated Farming Systems (1990) • Agro-ecological zoning (2004) • PLUP Manual (2009) • Community-Based Agric. Dev. Plans (2015)
3. Markets Value chain development for 'clean' agriculture	<i>Improved incomes</i> through establishment of farmer groups that receive certification for practices meeting standards for food safety and product identity	<ul style="list-style-type: none"> • Lao organic standards (2005) • Vientiane organic market (2006) • Lao adoption of ASEAN GAP (2011) • Geographic Indications (2016)
4. Organisation Promoting food sovereignty and empowerment of small farmers	<i>Improved livelihoods and equity</i> through collective action and strengthening the role of small producers as decision-makers in management of farming systems	<ul style="list-style-type: none"> • Sustainable Agriculture Forum (SAF 1991) • First documented cases of CBNRM (1993) • Bolaven Coffee Producers Coop (2007) • Lao Farmer Network (2014)
5. Food System Holistic approach to management of food production and associated natural resources, from production to consumption	<i>Improved food security, nutrition and resilience to both environmental and economic shocks</i> across the entire population, through multi-sectoral / multi-stakeholder cooperation	<ul style="list-style-type: none"> • First references to ecology, livelihoods and food systems in same study in Laos (2001) • Linking Ag, NRM and Nutrition (LANN 2008) • Improving the Resilience of the Ag. Sector to Climate Change Impacts (IRAS 2011)

Landscapes are a key level in the system

- Landscapes are the level of a food system where the practical relevance of agroecology is most easily understood.
- Landscape diversity, and the synergy between landscape elements, have a clear link to ecological sustainability.
- Also, landscape management requires multi-sectoral collaboration, thus providing a microcosm of the collective action required throughout the food system.
- Landscape approaches have been applied in Laos for more than 30 years. An analysis of this experience will help to unlock action at higher levels.
- As Co-Chair of the SSWG-AE, the Dept of Agricultural Land Management (DALaM) is positioned to coordinate this analysis.

Application level

1. Techniques

Implementing sustainable agriculture practices

2. Landscapes

Planning and management of integrated farming systems

3. Markets

Value chain development for 'clean' agriculture

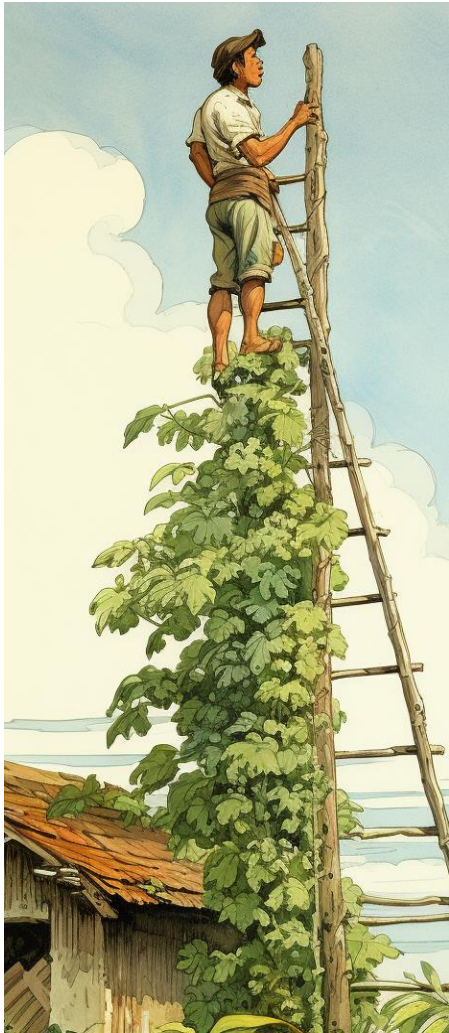
4. Organisation

Promoting food sovereignty and empowerment of small farmers

5. Food System

Holistic approach to management of food production and associated natural resources, from production to consumption

Some lessons from past experience



- Agroecology is not a new idea. Laos has lots of experience to build on.
- Various techniques and approaches have been implemented, suitable for different cropping systems, and different levels of the food system.
- This experience has often depended on external support. Sustainable agriculture has not always been sustained!
- Where expertise has been retained and shared, it has often been through CSOs and farmer networks such as SAF-SAEDA and the Lao Farmer Network.
- More attention has been given to technical aspects of agroecology than socio-economic dimensions such as incomes, labour availability, and gender roles.
- Policies and standards that support AE are in place at the national level, but weak enforcement at the local level often allows harmful practices to be applied.
- More effort is needed to engage with the private sector. AE often operates in a 'green bubble' that has little impact on large-scale commercial agriculture.

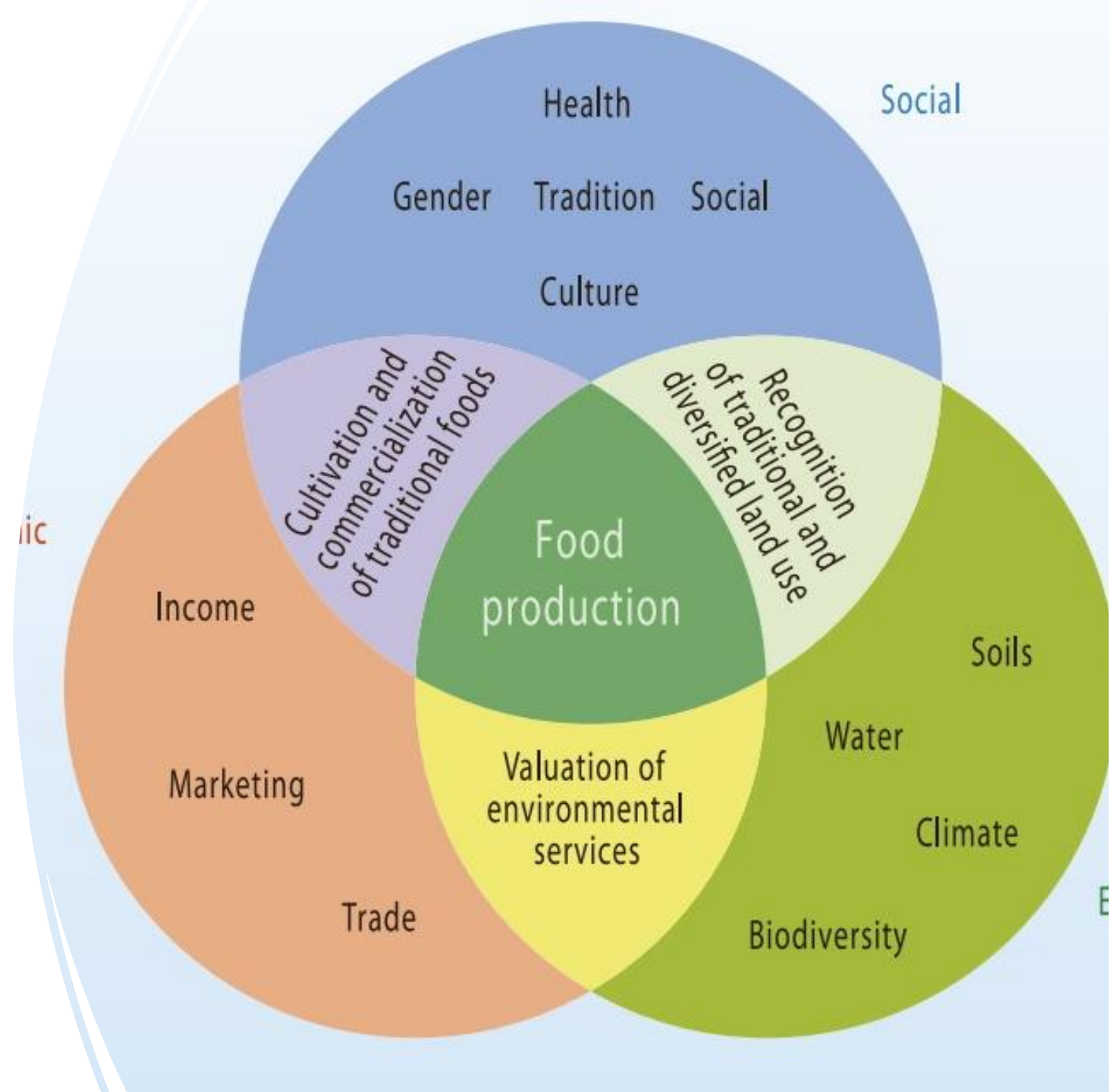
Challenge 1: Highlighting economic benefits

- The SSWG-AE must show that a landscape approach to AE will deliver on Government priorities for the agriculture sector.
- The contribution of AE to food security and environmental sustainability is clear, but the contribution to economic growth and is more difficult to prove.
- *The SSWG-AE needs to compile evidence that AE can deliver economic benefits in terms of jobs, incomes and investment.*



Challenge 2: Working across sectors

- The transformation of the food system is a multi-disciplinary and multi-sectoral challenge.
- Bureaucratic silos and competing interests are barriers to collaboration.
- *Multi-stakeholder dialogues is essential. The SSWG-AE must avoid becoming a platform for show-casing the work of one project, one Department or even one Ministry.*



Challenge 3: Working across borders

- The idea of a *National* food system has limited applicability.
- Laos is both an exporter and importer of food products. The sector is shaped by investments from neighbouring countries.
- If AE is to be 'a way of redesigning food systems' it requires coordinated action across the region.
- *The new SSWG-AE needs to be actively connected to similar efforts in neighbouring countries. The Lao Initiative for Agroecology (LICA) is a crucial link.*





Thank You