



Eco-Friendly Intensification and Climate
resilient Agricultural Systems

Landscape approaches to agroecology: An avenue to buffer the shocks from market integration and climate change in Lao Uplands

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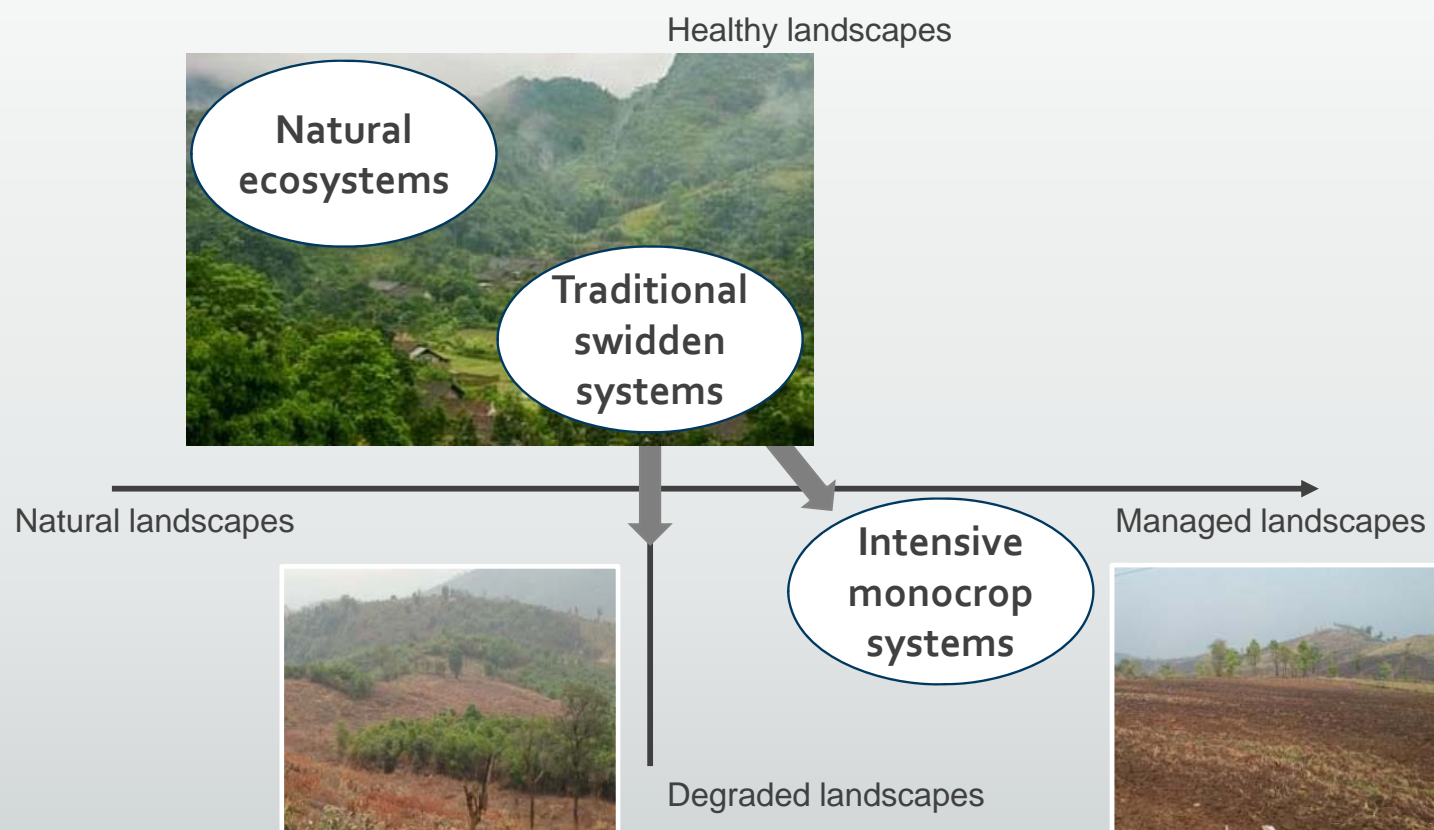
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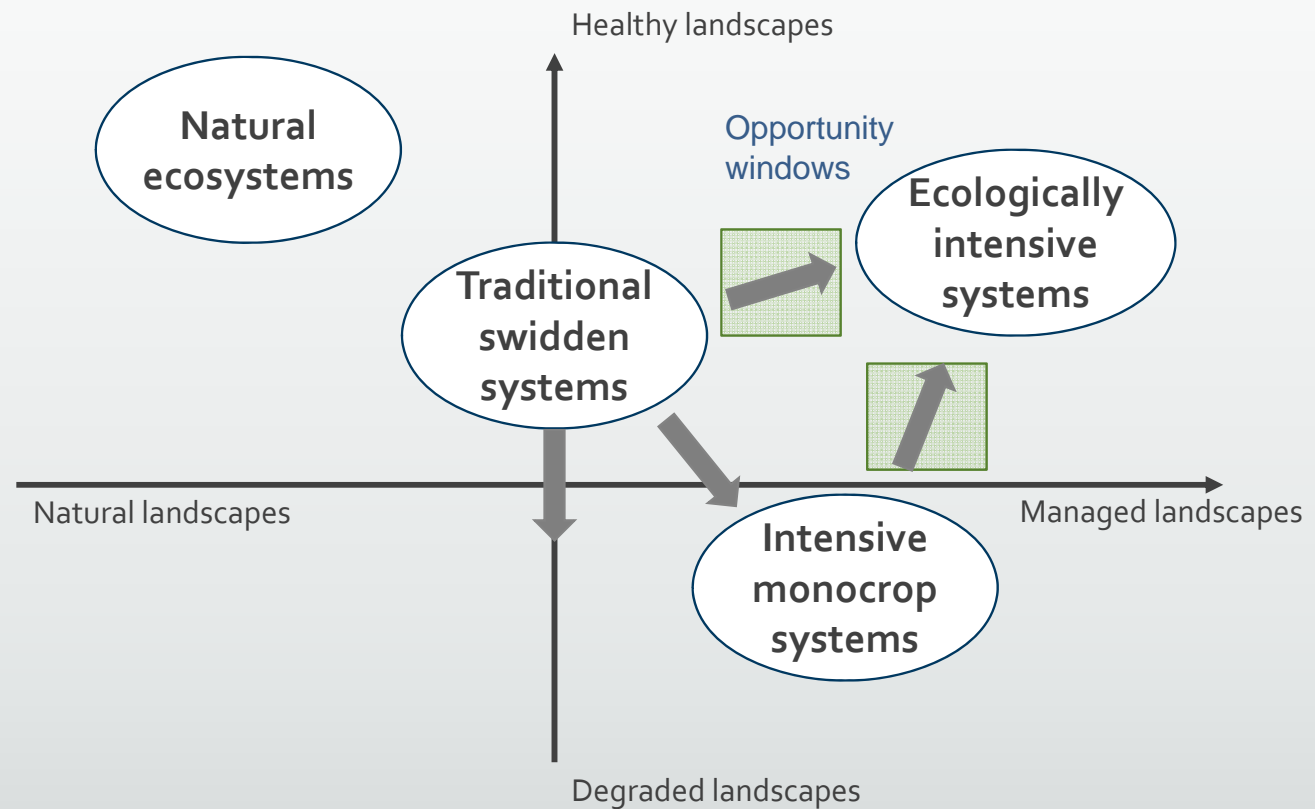
Transformative landscape: Conceptual framework



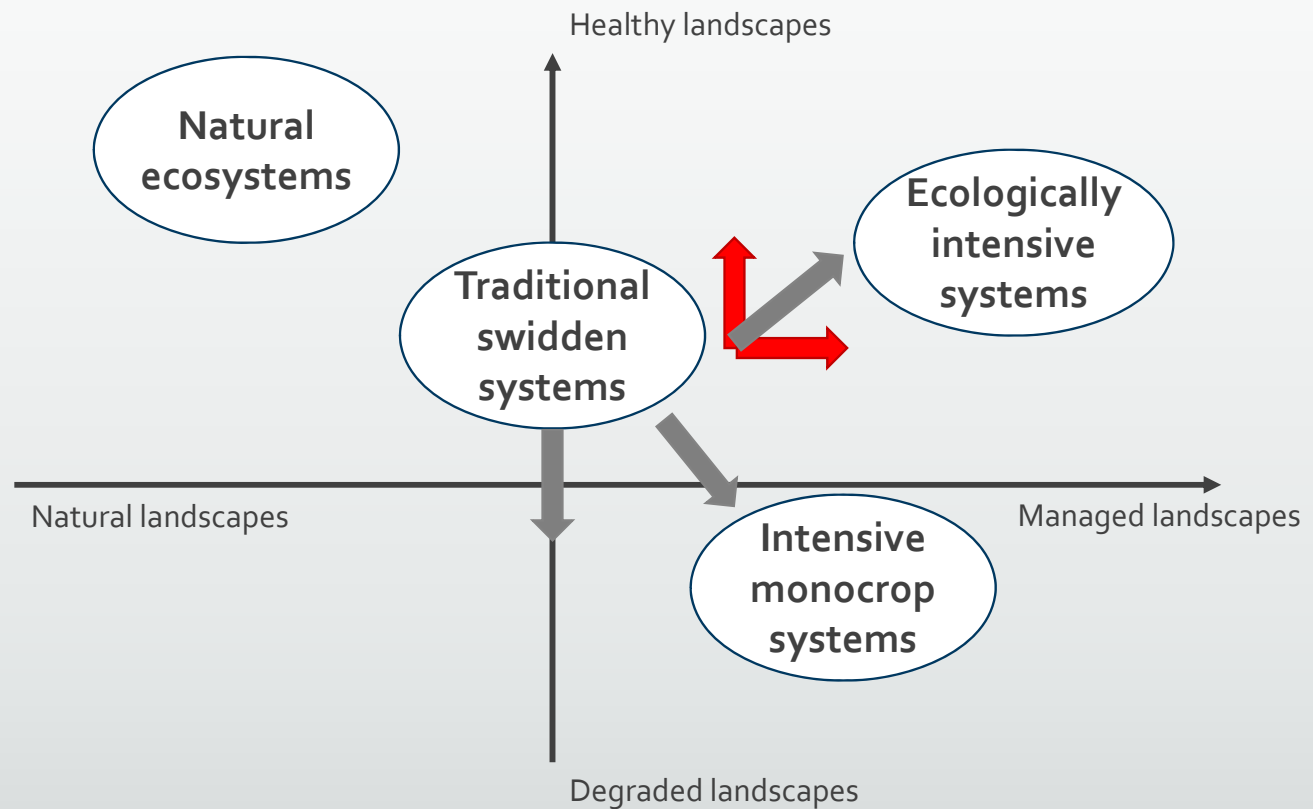
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Transformative landscape approaches towards agroecology

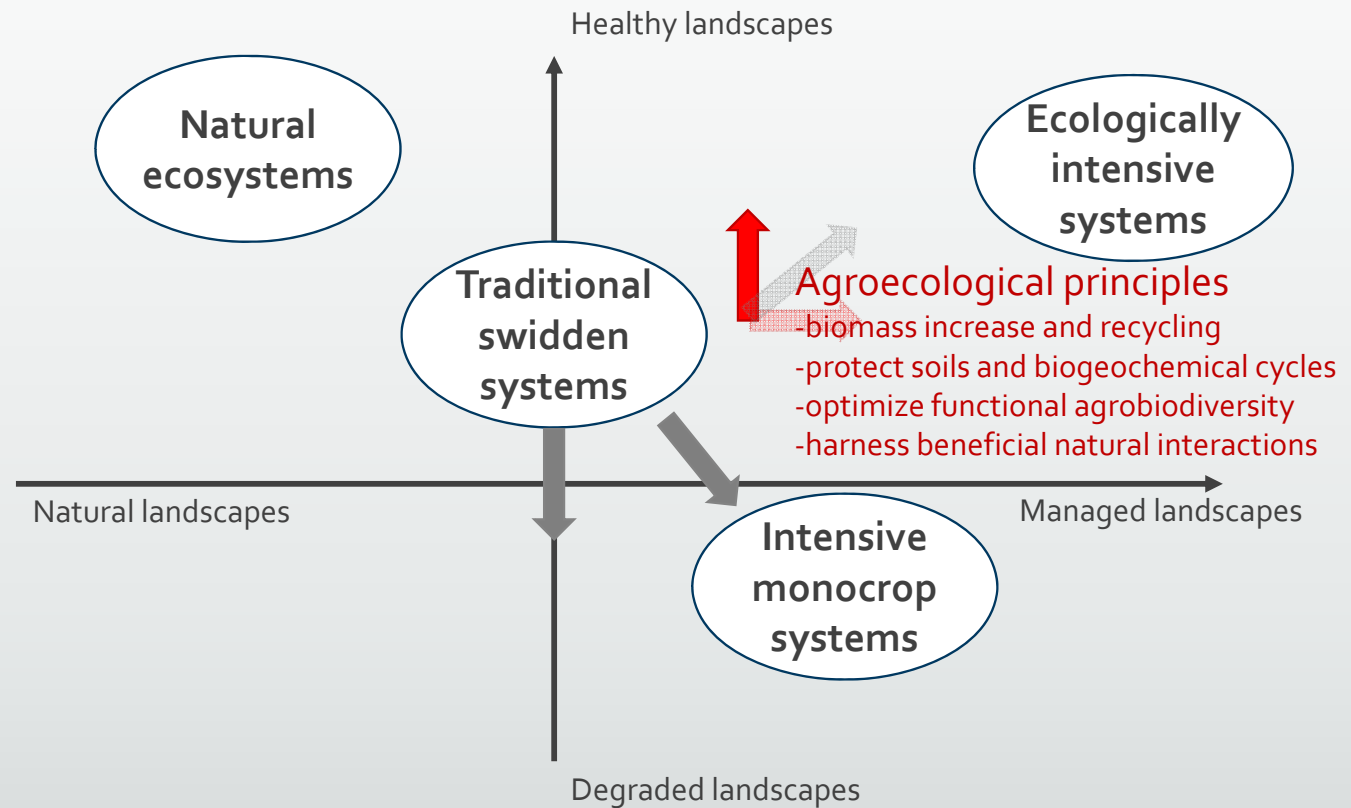


Transformative landscape approaches towards agroecology



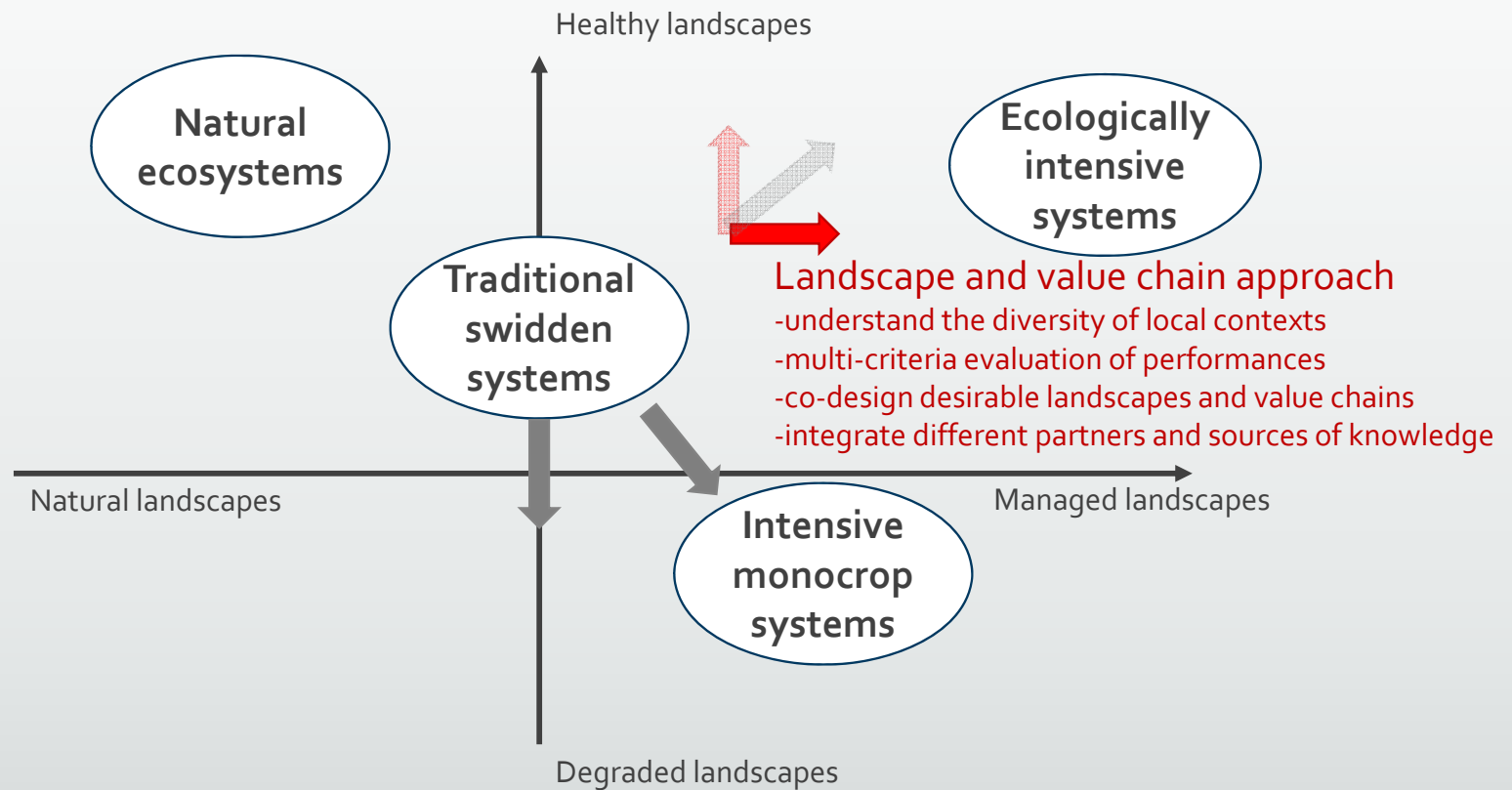
Adapted from
Griffon, 2013

Transformative landscape approaches towards agroecology

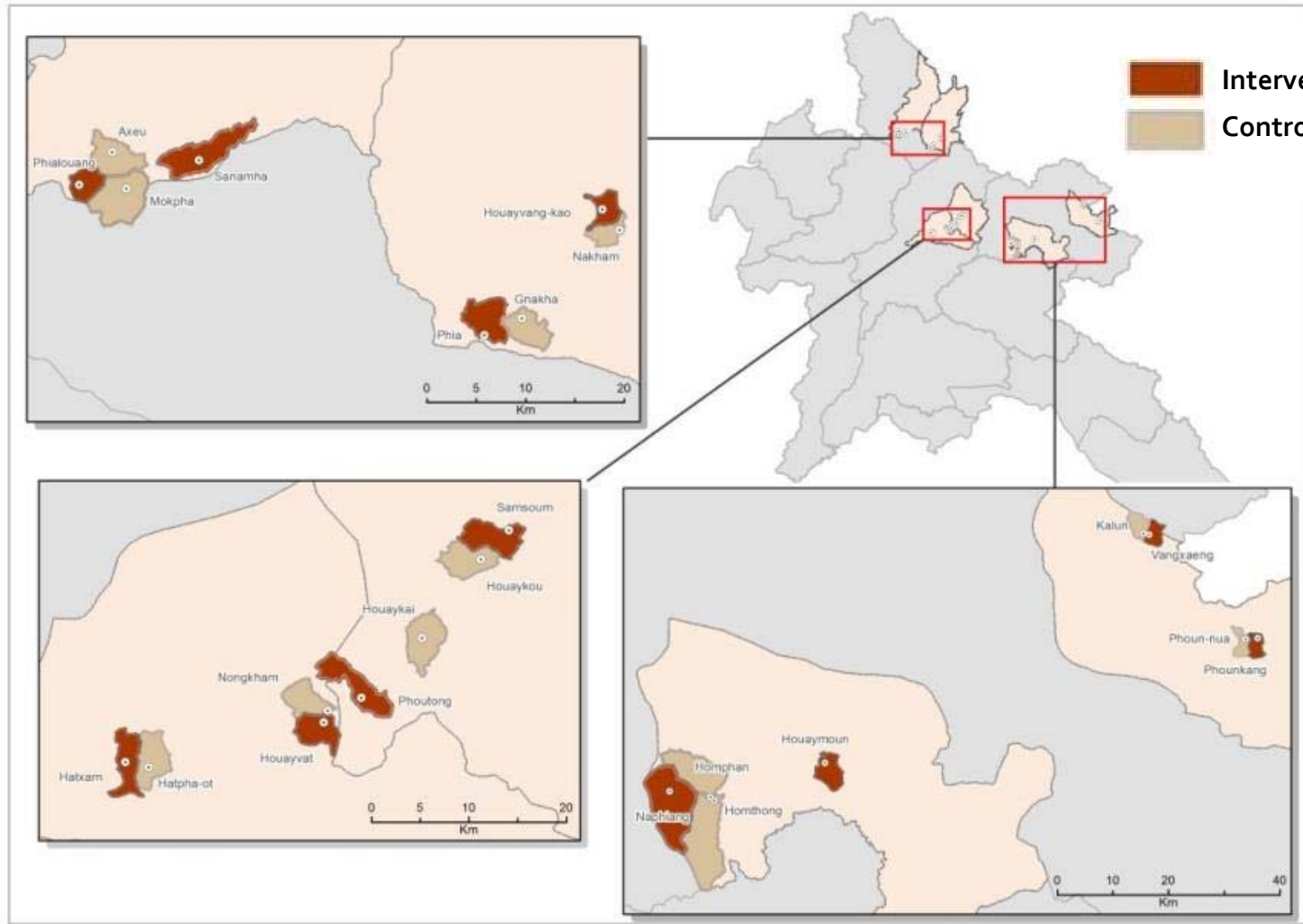




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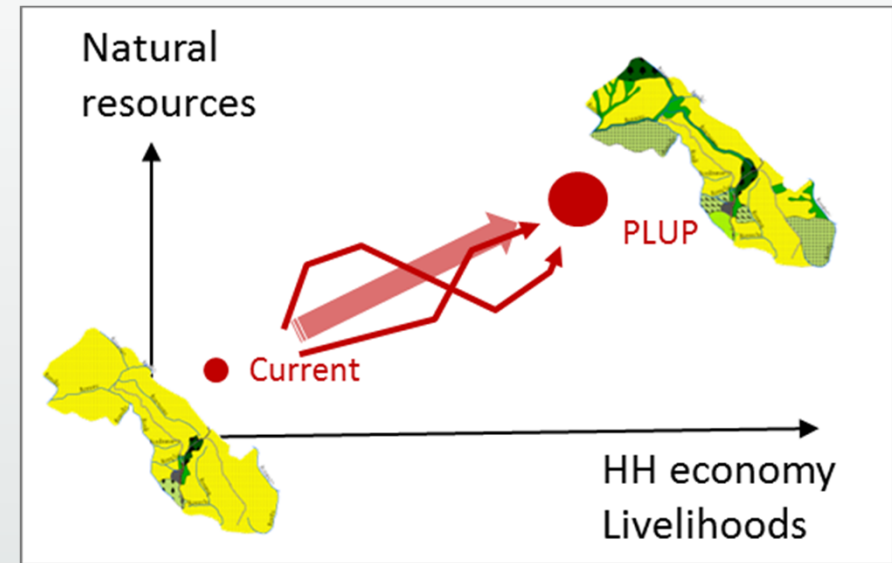
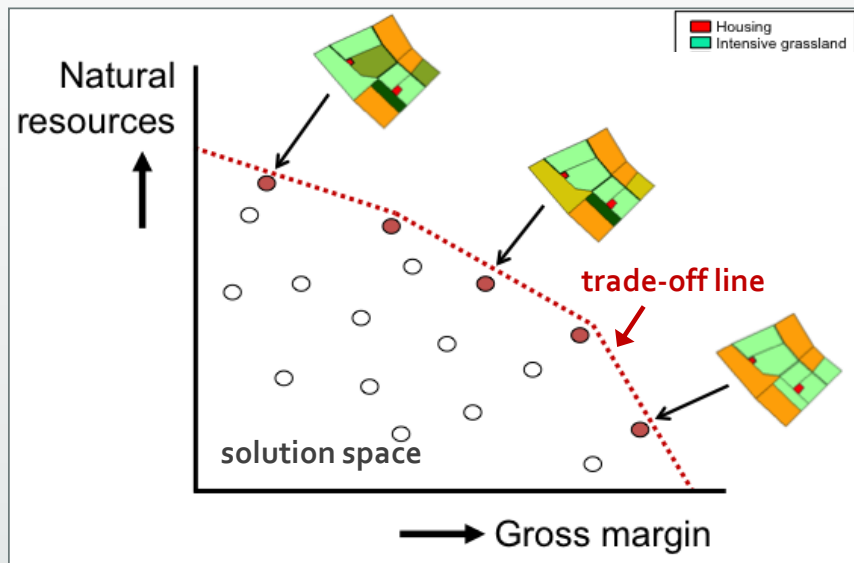


Implementation and monitoring



Transformative landscape approaches towards agroecology

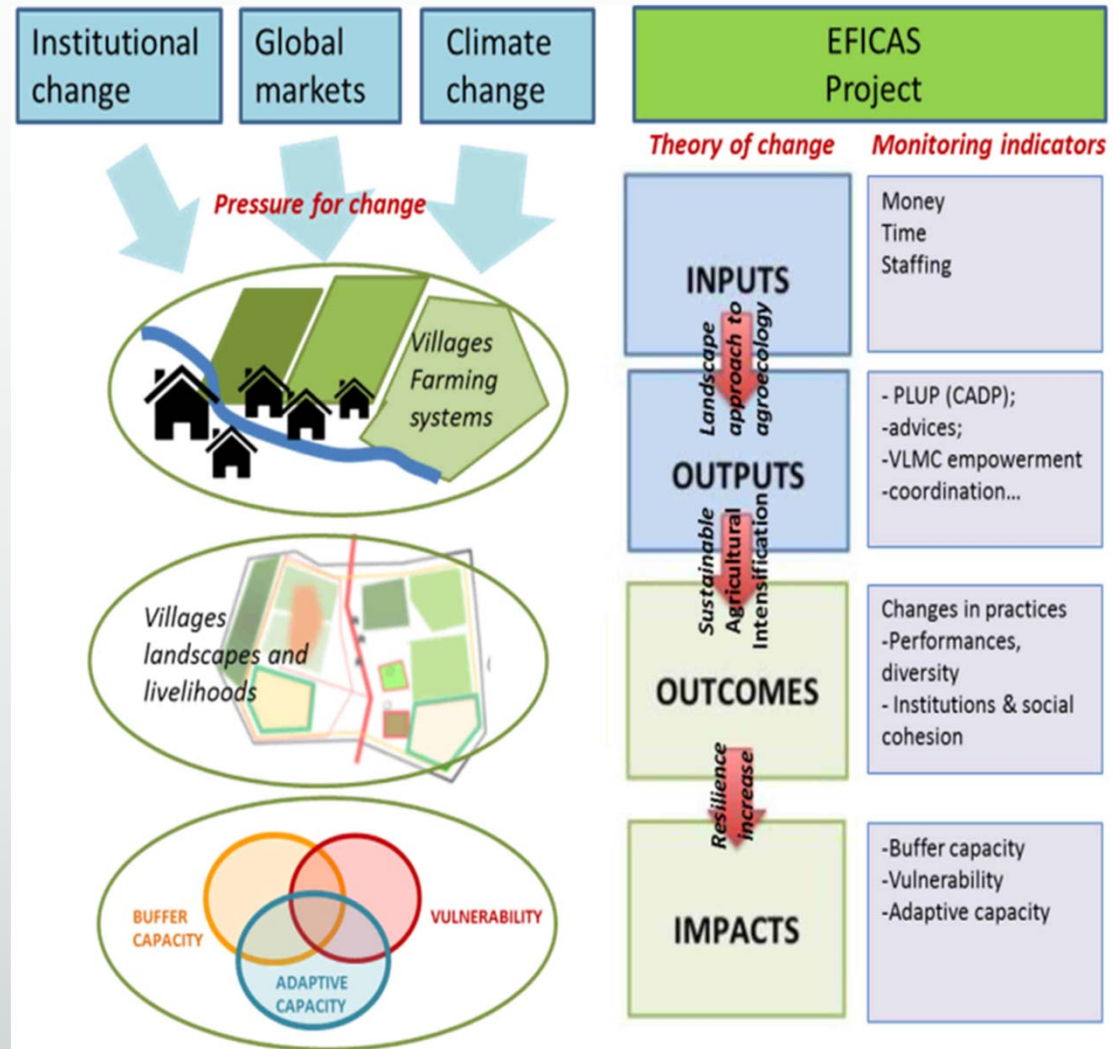
- **Participatory land use planning:** negotiating more desirable landscapes



Example of a set of alternative farm/landscape configurations that perform differently in terms of economic and ecological indicators.

Transformative landscape approaches towards agroecology

- Goal setting in a **Theory of Change** process





Transformative landscape approaches towards agroecology

Phoutong Village

Viengkham district, Luangprabang province



1. INTEGRATED APPROACH TO LIVESTOCK SYSTEM IMPROVEMENT

Living fences and forage production

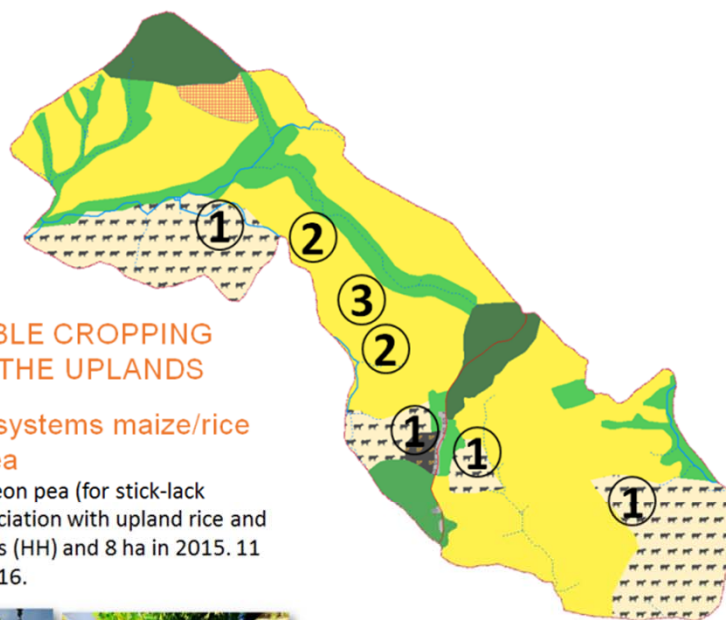
Set up livestock area with permanent living fences (combination of barbed wire and trees) 6.5 ha in 2015 involved 77 HH. In 2016, expand to additional 7 ha.

Training on forage management

30 people took part in the training to produce silage, hay, and feeding boxes.



- Community-based Agricultural Development Plans (CADP) embedded in PLUP – action plan adjusted to local context



2. SUSTAINABLE CROPPING SYSTEMS IN THE UPLANDS

Intercropping systems maize/rice with pigeon pea

Introduction of pigeon pea (for stick-lack production) in association with upland rice and maize, 9 households (HH) and 8 ha in 2015. 11 additional HH in 2016.



3. AGRICULTURAL INTENSIFICATION AND DIVERSIFICATION

Intercropping cassava and stylosanthes



Control of rodent damages

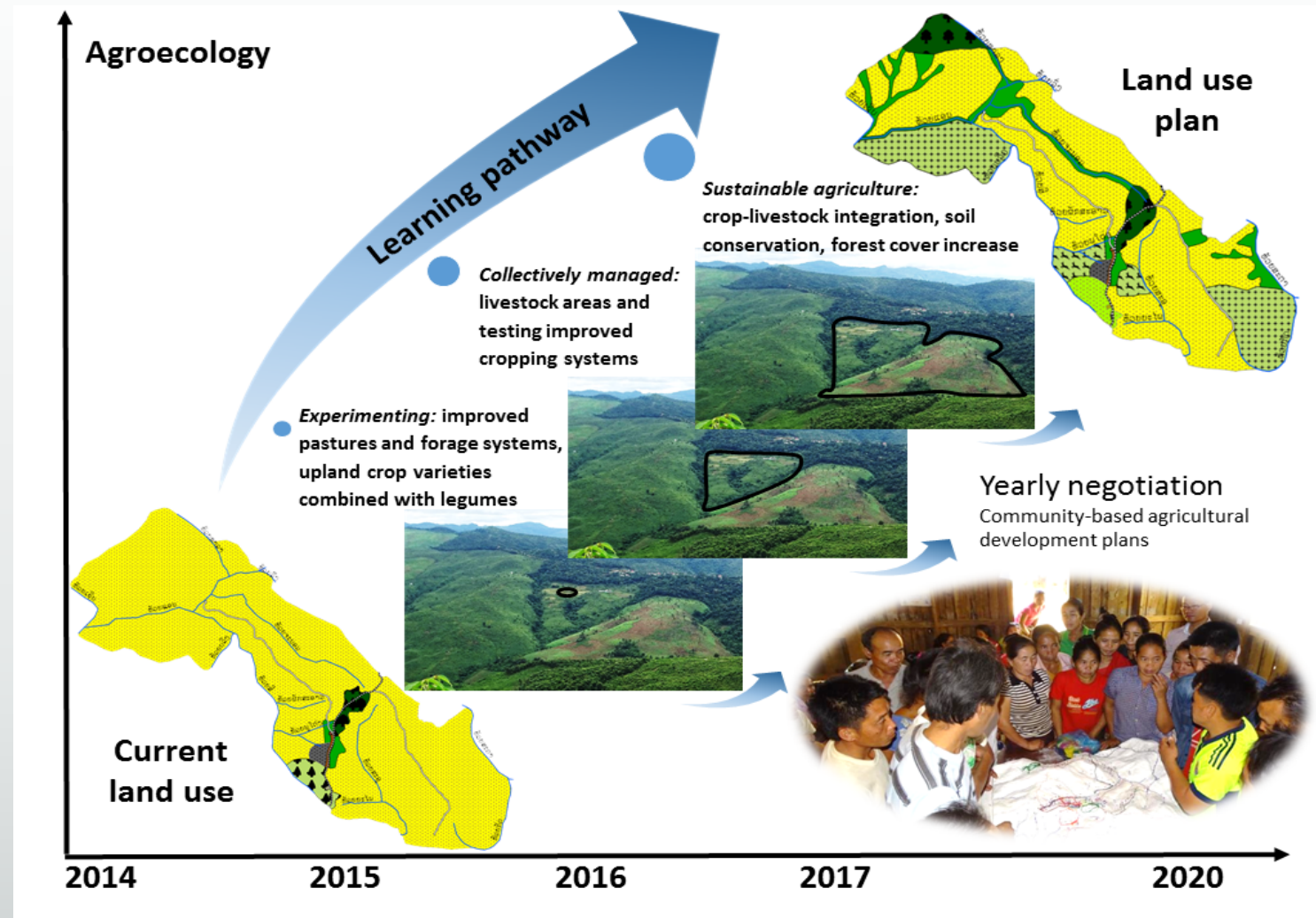
The project provided 400 metal traps in 2016

Rice bank for food security

The project provided 2 tons of rice for the village rice bank in addition to villagers' contribution in 2016.

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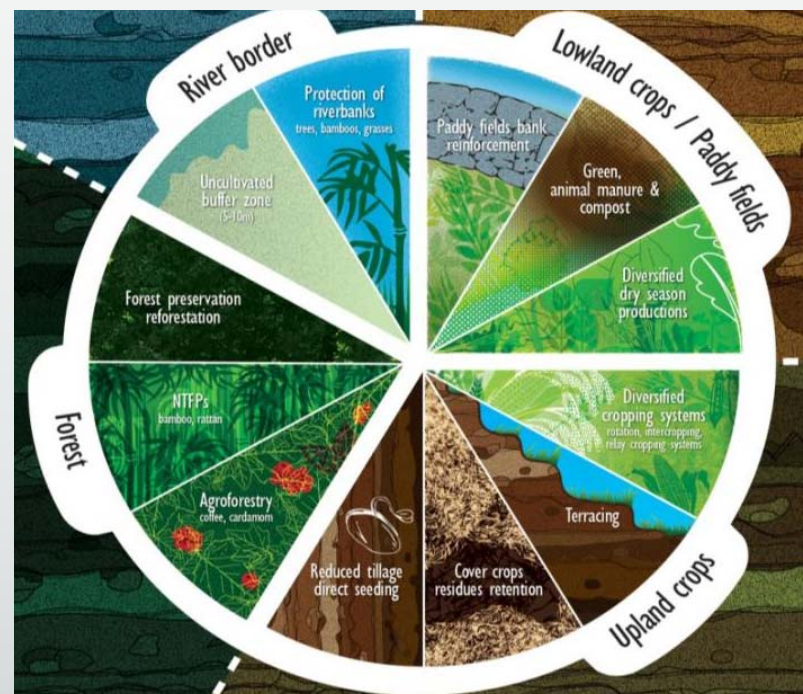
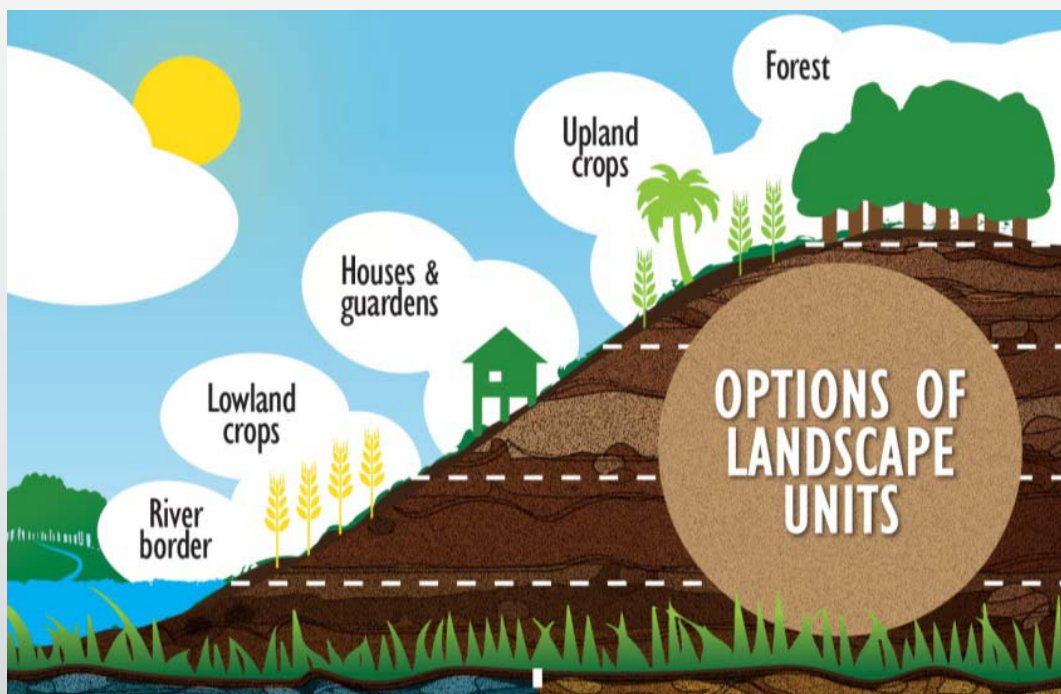
- **CADP:** an adaptive learning pathway towards collectively agreed land use plan





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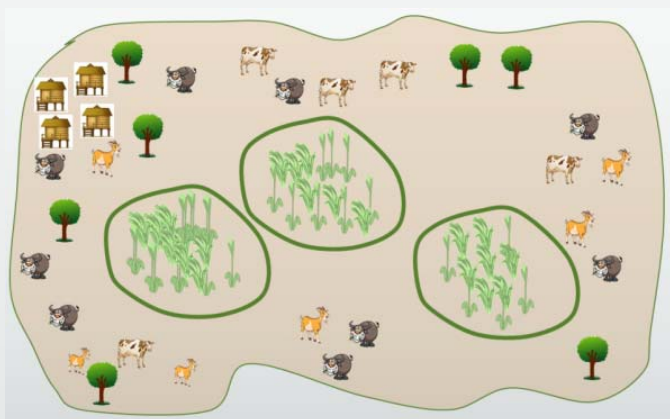
- **Innovative agroecological practices** tested with the whole village community in all compartments of the landscape





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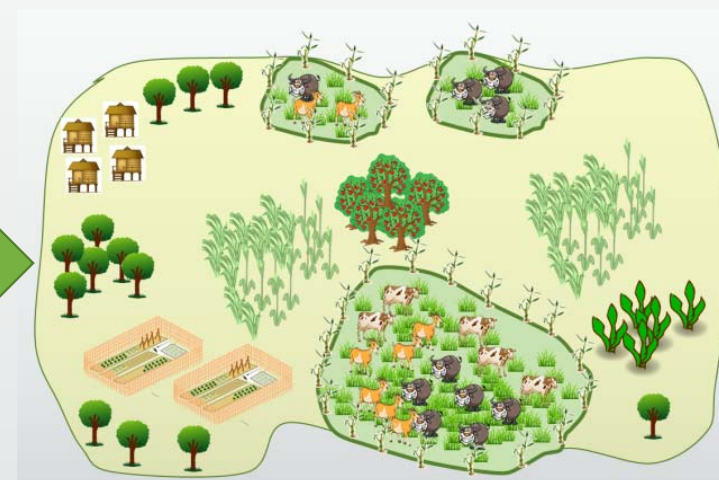
- Disconnection of crop and livestock systems for sustainable intensification then reconnection under a new system



Temporary (annual) fencing of cropping areas to protect crops against roaming animals during the cropping season



Animal free roaming/grazing once main crops harvested



Permanent fencing of livestock areas to better control animal roaming

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- **Gaming-simulations** to explore land use scenarios



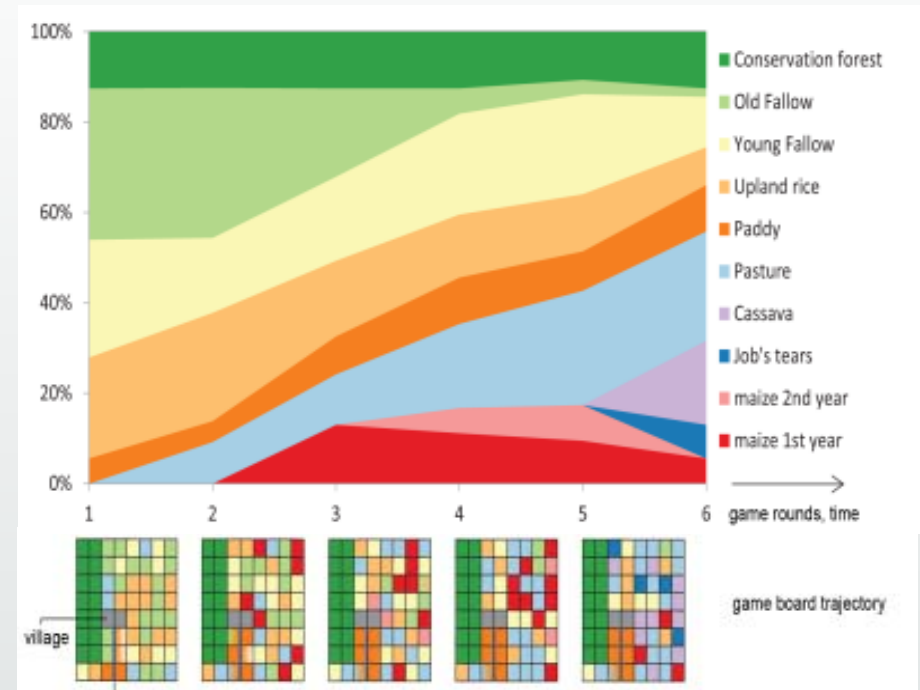
round1



round2



round3



Transformative landscape approaches towards agroecology

- **Engaging other stakeholders** in the innovation process

- The private sector (social business sharing common vision)
- Other GoL and NGO initiatives (convergent planning)





Take home messages

- **Green growth** requires managing **trade-offs**:
 - Boosting economic development
 - Preserving natural resources
 - Buffering risks for vulnerable populations
- **Synergies** can be achieved through **landscape approaches**:
 - Participatory land use planning
 - Effective enforcement of local regulations on land management
 - Sustainable intensification of agriculture through agroecology





Take home messages

- **Sustainable intensification** through agroecology
 - Engaging the whole village community
 - > landscape level management of agricultural innovations
 - Local ownership
 - > empowering village communities
 - A continuous learning process
 - > extension agents as communication facilitators, not expert prescriber



Thank you for your attention!

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