



# PROMOTING AGROECOLOGY FARMING FOR SELF-RELIANT LIVELIHOOD OF LOCAL UPLAND FARMERS

Eco-vegetables of Hmong community in Long Lan village, Luang Prabang District, Luang Prabang province, Laos

Main objective of this initiative is to document and share the success stories of Long Lan in growing native vegetables with local techniques in connection with local markets in order to contribute to the raising of public awareness of sustainable agroecological practices, particularly among young farmers, officials and functional government bodies, not only in Luang Prabang but also elsewhere, for them to learn from and apply in their own farms, as well as in policy formulation.

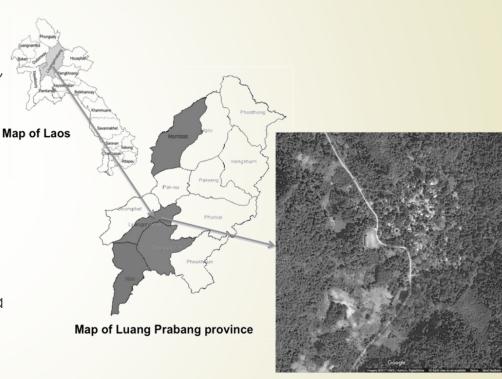






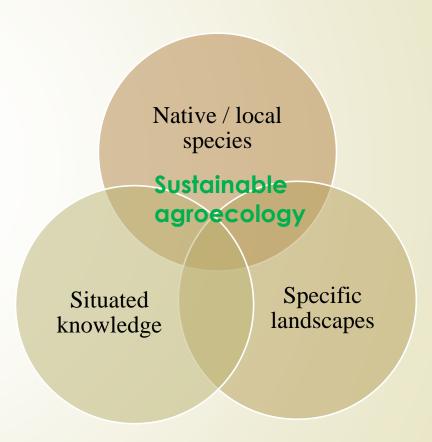
#### Long Lan village

- Home to 74 Hmong families (511 people) belonging to 7 clans, including Zang, Ly, Ho, Tho, Mua, Song and Vang.
- 45 km north-east of the UNESCO Cultural Heritage City of Luang Prabang.
- Situated in the watershed of Phou Sung mountain, at approximately 1,200 meters.
- The traditional livelihoods of families rely mainly on shifting and rotational cultivation, livestock raising and the harvesting of natural products.
- Has experienced many ups and downs as a consequence of external impacts e.g. American War, policies banning opium growing and shifting cultivation but lack ò alternatives, and the growing influence of the market economy since the 1990s.



# Methodology in ensuring local livelihood sovereignty

- CHESH Lao / SPERI has started its applied research and in ensuring livelihood sovereignty of different indigenous communities in Luang Prabang, including Long Lan.
- Ensure the rights of families and entire community to access to natural resources
- Maintenance of cultural identities and local indigenous knowledge and species in agri-cultivation, and community governance.



#### Main supportive activities

- Conduct on-going studies of the traditional farming practices of Long Lan and other communities in Luang Prabang
- Promote community based land rights, local knowledge based land uses
- Facilitate capacity building via exchange trips (Vietnam & Laos), training, workshop, and so on.
- Promote local farmers to do experimental (e.g. growing plum, Asparagus, tomato, etc.), as well as native species, particularly vegetables.
- Facilitate Famers' Field School to enrich and expand knowledge in natural resources and agroecology



### Transition from rotational farming to ecological vegetable production

- High level diversity of varieties
- •Local / native varieties (rice, plants, animals)
- •Situated knowledge, solutions and local labors
- Nature based farming (e.g. natural biomass and energies)
- Self-subsistence

Shifting/rotational farming

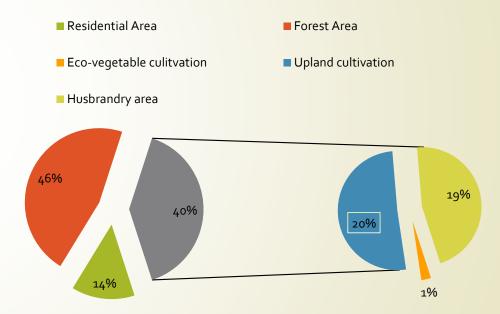
#### Eco-vegetable production

- Applied local / native and newly adapted varieties
- •Combined newly adopted techniques and solutions with ethnic knowledge
- Maximize natural biomass, energies
- •Integrated livestock and vegetable production
- •Small scale market oriented agroecology production
- Semi-subsistence

#### Categories of land uses of Long Lan

Total natural area: 8,439.19 hectares, which is divided into 3 main zones including: residential, forest and productive land

The land for ecological vegetable cultivation of Long Lan is 88.75 hectares, accounting for about 1% mainly distributed in four main production zones.



#### Varieties of vegetables

Chayote (Chi Thai)

Yellow flower Mustad (Zaub nTsuag)

Dill (*Zau*b nTxhwb nyug)

Coriander (*Zaub* n *Txh*w*b*)

Green Mustad (*Zau*b nTsuab)

Green been(Tawm)

Radish(*Zau*b nTug)

Rapeseed (Zaub Noj Txiv)

Bamboo shoot (nTsuag)

Green squash (Txiv lus)

Cabbage (Zaub Nom)

Long beam (Taun nTev)

Hmong cucumber (Dib)

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## Principles in growing ecological vegetables

- First principle: Maintaining the largest areas of land covered by natural forest to ensure the stability and sustainability of the production components.
- Second principle: Ecological vegetable cultivation areas are located in the most favorable soil and climate conditions.
- Third principle: Selecting vegetable varieties most suited to the climatic conditions and soil conditions of each production area.
- Fourth principle: Integrating farming and livestock, mainly cows
- Fifth principle: No using of chemicals.
- Sixth principle: Practice fallow to restore the ecosystem and nutrients to the soil.
- **Seventh principle:** Diversify species to ensure the safety of household income.



### Modes of ecological vegetable cultivation

- Growing vegetables in the valleys. So a large amount of cow dung and humus from vegetation of the natural forests, remnants of slash and burns as well as surface and underground accumulation, continuously add nutrition and moist to the soil.
- Arrangement of plots of diverse ecological vegetables in the swidden fields. This ensures both a diversified food supply for families on the same area of land over a certain period, and promotes an interaction and complementarity between crops related to nutrition and light.
- Intercropping of different types of vegetables with swidden rice and other varieties; so that it optimizes soil nutrients, light, water and other factors at different levels for each type of vegetable, also increases labor productivity and the diversity of products in the same space and time.
- Rotation planting vegetables on a piece of land to optimize spatial arrangements, supportive relations amongst different types of vegetables in the right times of the year.



#### Values of ecological vegetables

- ✓ Total yield of different vegetables in the entire village of about 500 tons per year, approximately 1.8 billion kip.
- ✓ Besides the nutrition and ecological values, eco-vegetables play a relatively large role in the income components of families in Long Lan, accounted for 52.57%. Average income over 24 million kip/ household per year.
- ✓ Growing eco-vegetables creates potential job opportunity in the village as it accounts for 40-50% of total household working days. It also takes place continuously 9-10 months per year.





### The value chain of ecological vegetables

- Interviewed for 10 types of vegetables grown in Long Lan
- There is a big difference in terms of value from growers to final consumers
- This is due to lack of cooperation / coordination between vegetable growers; so that, lack of bargaining power compared with collectors and retailers
- Vegetable growers also lack of marketing skills / strategies.

