

# Vocational Training Program to build new generations of Agroecology young farmers

"Agroecology Futures" Regional Forum, 6-8 November 2018 PS9 – Building the new generation of agroecology farmers and promoters (Education, training and Agroecology)

Mr. JUMEL Guillaume Chivet & Dey Local NGO



Let's remember! Who are the young people in Cambodia?



Background: Cambodians are mostly young and mostly farmers

#### First barrier: Let's remember migration process

Where is Cambodian young people ?



(MAFF, 2003, 2007, 2010)

#### Land migration

- Deforestation 84% forest losses
- Crop boom-bust cycles (soybean, maize, cassava, black pepper, mango tree)
- Yield losses to 63% soil degradation



- Labor migration
  - ≈3.5M migrant workers to Thailand
  - Farm input costs increasing
  - Job farm workers shaky

Background: Land resources and labor migration

#### Second barrier: Let's remember farming image

Well-known challenge regarding the target audience



Key finding: farmer job seen by young people



#### Life and Soil NGO's Initiative Approaches



A way: Promoting Agroecology as action lever to involve young people to smallholder farming



- A challenge: Ecosystems are complex and diverse, Agroecology requires highlevel of knowledge input
- A priority: Developing Vocational Training for young rural people to learn about and adopt Agroecology approaches



Empowering young people by involving them to smallholder farming ?

#### Life and Soil NGO's Small-Scale Initiative Framework



- **Training** a new generation of **young** smallholder **farmers to implement** and disseminate **Agroecology**
- All students come from **poor smallholder farmers** in northern **cross-border provinces** in Cambodia
- 4-years experience in **Battambang province** in the field of **technical support** to farmers and Agroecology **action-research**



Launched in June 2017 thanks to ALiSEA Small Grant Facility



Initiative: 2-years Vocational Training Program Associate Degree level

#### **Basic interactions to design AE training content**



- Focus on **practical skills**, hands-on and field skills: tool to become sustainable development stakeholders
- Focus on scientific knowledge: to teach students to think for themselves - Getting Smart
- Deep understanding **diversity** and **complexity** of healthy agroecosystems
- Include a lot of fieldwork and hands-on activities → compositing, mulching, biopesticides, crop rotation, crop association, plant compagnon, etc. Actually practice first would be well
  - High involvement into rural development  $\rightarrow$  learning the technician job, social worker, farming advisor, pilot farmers



#### **Vocational training Example on Vegetable crops**

# What we practice ?

Maintain compost 500kg/month Making lots of

compost 1T/month Put compost 15kg/m<sup>2</sup> on topsoil nodisturb

Soil fertility

practices

Adding lots of mix-mulch

growing associate crops in continuous

Watering wet compost

Direct selling and supply chain

Continuous weekly harvesting Using biopesticides a little bit (neem, chili)

#### **Vocational training: Example on field crops**



# What are we are teaching ?



Soil Aggregate stability, water retention Soil Organic Biological activities, Soil Fauna, Microbiota

#### **Useful Science**

Impacts of farming practices

> N-fixation, Legumes, Nutrient cycle

Small-scale food processing

Matter,

pH/Redox

Plant Physiology, Food chain, Plant health beneficial insects

#### **Initiative Framework**



- **Full-time training** (30-35 hours/week) in small-classes, with food and accomodation
  - Ist promotion started on Jan. 2018 with 15 students
  - 2nd promotion will start on Jan. 2019 with 20 students
- Provide scholarships and tailored support for students
- Internships program on farm and at organizations, social enterprise, cooperatives

2-years Vocational Training Program Associate Degree level

#### **Initiative Impacts on Farmers**



Become Agroecology stakeholders: first vocational training extension

#### **Initiative Impacts**



# Video-based learning sharing on Facebook with Smartphone

Students are making sharing-videos on Facebook to disseminate Agroecology practices by online peer-topeer support for young people



Become Agroecology stakeholders: first vocational training extension

#### What we have to continue ?

- Continue to write new lessons based on field casesstudies and empirical approach of updating knowledge building
- Strengthen the skills of new teachers in Agroecology and upgrade our teaching practices
- Advocate for recognition new curriculum by Ministries (MoLVT, MoEYS, MAFF)
- On-going small project > initiative have to grow: developp new training programs for other level and in the other provinces ?
- Building AE famers futures : loan access, AE business plan, equipment access, etc.







### Next steps...



# Thank you

















#### Chivet & Dey Local NGO

Founded in 2017 Based in Battambang Fund by Vivre de sa Terre, French NGO Web : www.vivredesaterre.org





### On-going process

#### **Basic knowledge conceptual framework Plant Health Environment** Health S stems Mulching **Trap-Crops** Push-Pull Crop Composting **Crop** rotation **Repent-Crop** ractice **Direct Seeding Rice-Fish-Duck** No tillage **Crop** association Trees Green manure Mix Cover crops **Crop-Livestock Companion plants** Legume Cover crops **Relay-Crops Crop-Livestock** Legumes Non-Legume Cover crops Maize-legume Intercrop **Biopesticides Crop-Tree Intercrop Pheromones**

Vocationa What are we to and practices ?

Increasing plant biomass Compa

Compa Mix Control Cont

Relay-Cro Maize-legume Intercrop

Crop-Tree Intercrop

Pheromones

ng lots

compost

Growing associate crops

# ractices

Using biopesticides a little

Increasing biodiversity Trap-Crops Repent-Crop Push-Pull Crop

Practices

#### **Initiative Framework**

#### Leave Conventional







► 1st

2nd

# 2-years Vocational Training Program Associate Degree level



