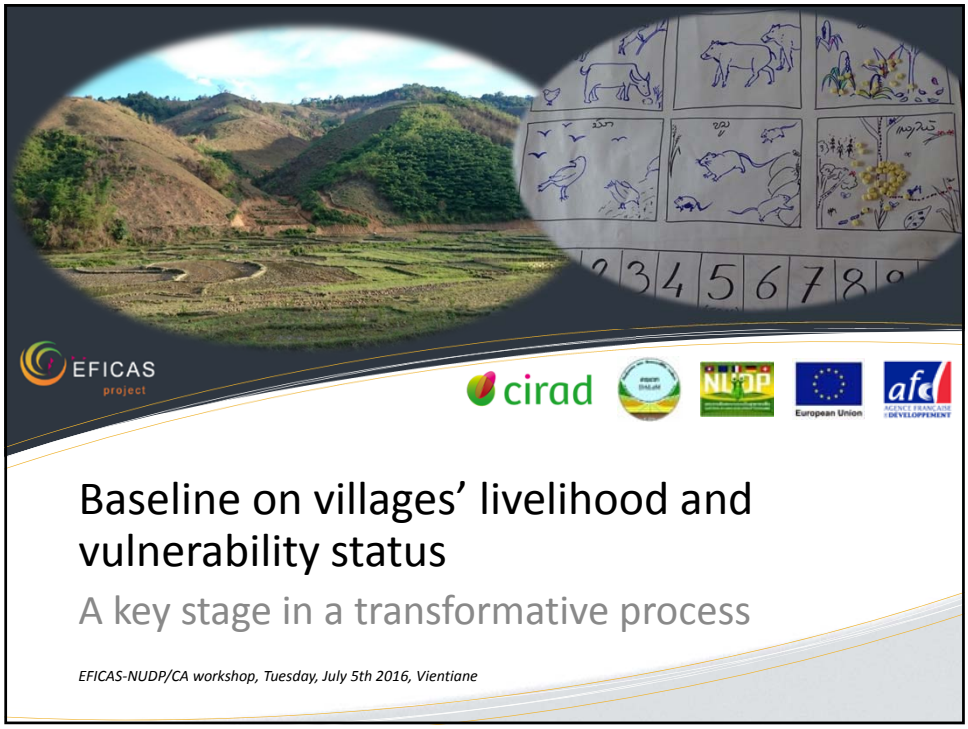


Baseline on villages' livelihood and vulnerability status

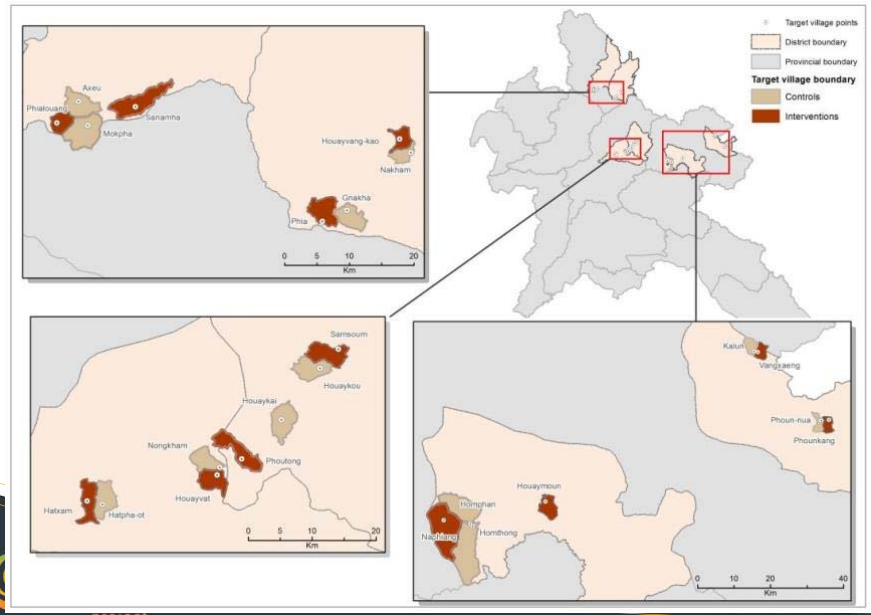
A key stage in a transformative process

EFICAS-NUDP/CA workshop, Tuesday, July 5th 2016, Vientiane

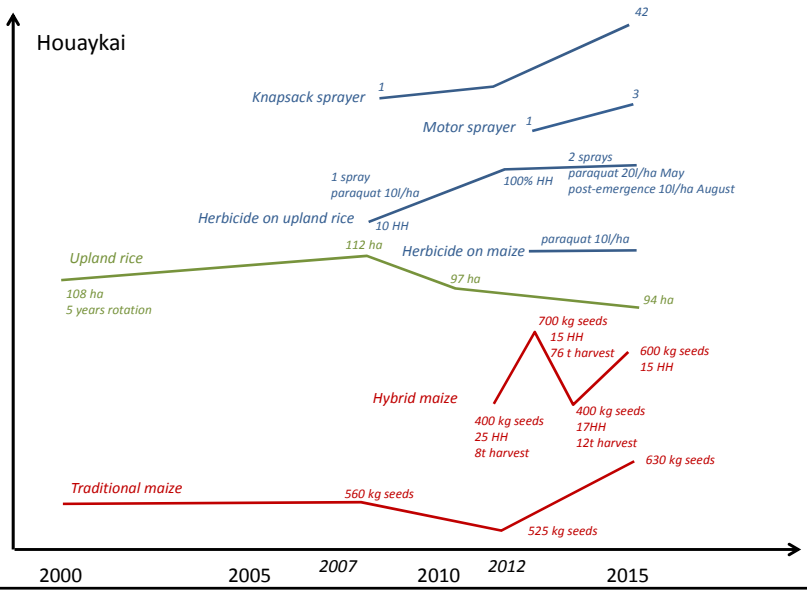
Outline

- Understanding village **trajectories**
- Characterizing village **diversity**
- Assessing **vulnerability**
- Identifying leverage point to increase **resilience**

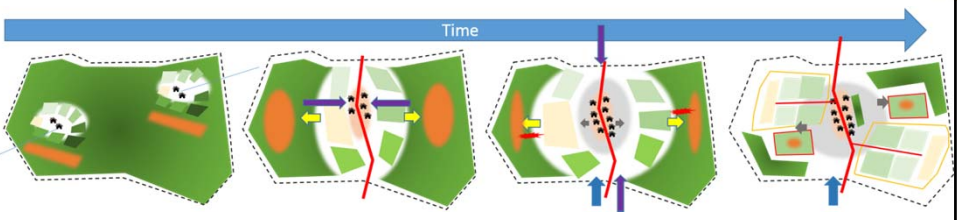
Village location



Changes in landscapes and livelihoods



Understanding village trajectories



Houaykai

- **Maize expansion**
  - road opening for cash crops
  - use of herbicides on maize
  - } indebtedness
  - conversion of rice fallows
  - deforestation
  - } land degradation
- **Poverty trap**
  - poor fallow -> no way back to swidden rice
  - pay debts by selling rice -> food insecurity
  - shift to off-farm jobs and migration

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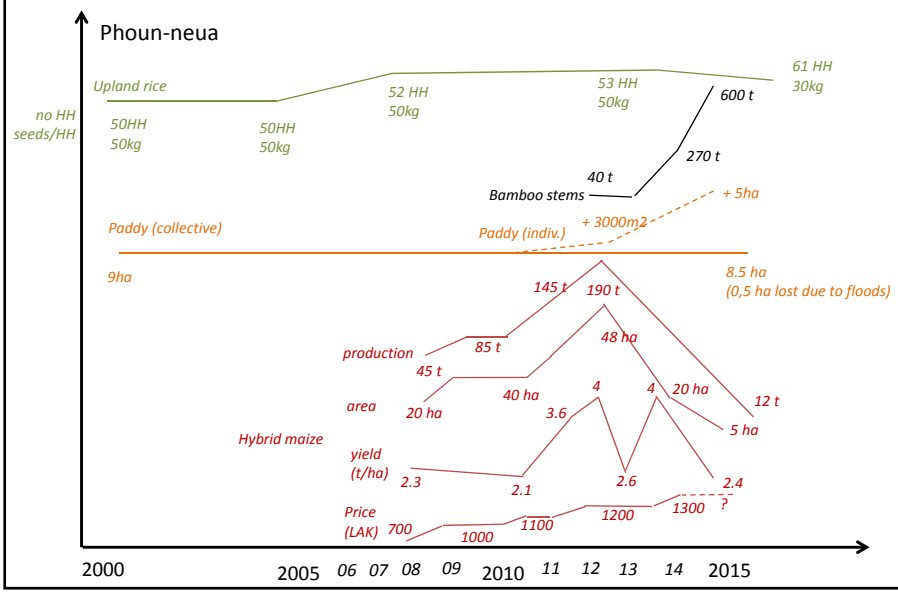
Changes in landscapes and livelihoods



Diversity of livelihood systems

Can be understood as a combination of a limited number of factors:

- Geomorphology
  - village located on top of hill or along river
  - percentage of lowland / upland
- Accessibility
  - village accessible whole year or only dry season
  - access to market opportunities and services
- Population
  - density and dynamics
  - composition (ethnic groups)
- History
  - social capital
  - governance of natural resources

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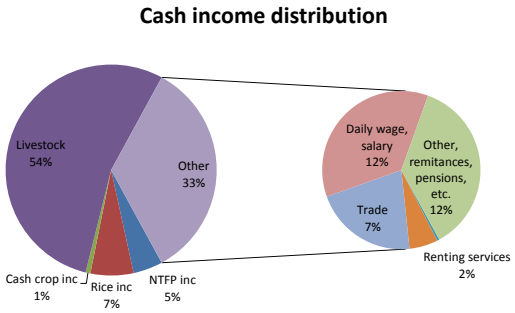
Village baseline data

Topics	Variable	Houaphan		Louang Prabang	
		Houamuang	Viengxay	Viengkham	Pakseng
		Houaymoun	**Phounkang**	**Phoutong**	**Houayvat**
Population	Households (no)	69	36	71	43
	HH members (no)	405	186	429	240
	Women (no)	191	93	195	118
	Labor force (no)	171	81	162	84
	% active population	42%	44%	38%	35%
	Dependency ratio (chidren/adult population)	46%	41%	53%	58%
	% children 6-15 going to school	87%	97%	97%	95%
Agriculture	Upland rice prod (t)	106	18	189	65
	Upland rice production (kg/capita)	234	97	441	272
	Lowland rice production (t)	11	48	0	0
	Lowland rice production (kg/capita)	28	258	0	0
	Rice production (kg/capita)	262	354	441	272
	% upland rice on total rice production	89%	27%	100%	100%
	Maize production (t)	517	65	90	7
	No Buffalo	0	28	188	59
	No Cattle	191	68	28	2
	No Goat	42	0	202	144
	No Pig	130	62	351	141
	No Fish pond	5	31	5	2

Village baseline data

Topics	Variable	Houaphan		Louang Prabang	
		Houamuang	Viengxay	Viengkham	Pakseng
		Houaymoun	**Phounkang**	**Phoutong**	**Houayvat**
Household economics	% swidden	87%	67%	92%	95%
	% paddy				
	% livestock				
	% trade				
	% salary/employment				
	Village NTFP income (r				
	% NTFP income				
	Village rice income (m				
	Village cash crop incor				
	Village livestock incom				
	Village non-farm incor				
	% non-farm income				
	Village annual cash inc				
	Avg HH cash income (r				
	Avg farm income (mill				
	Avg non-farm income				
	Gini index on cash inc				



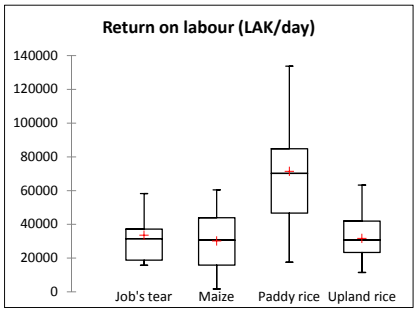
Diversity of production systems

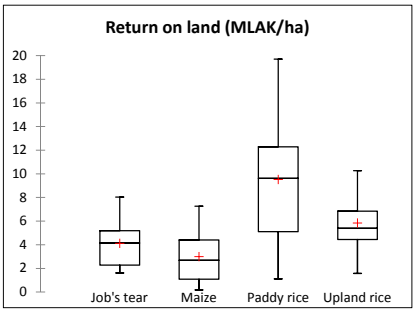
Location		Uplands agriculture			Livestock
Province	Villages	Fallow length	Cultivation patterns	Crop associations	Management types
Houaphan	Houaymoun				
	Naphieng				
	Phounkang				
	Vangseng				
Phongsaly	Phia				
	Huayvangkao				
	Phialuang				
	Sanamha				
Louang Prabang	Hadsam				
	Houayvat				
	Samsoom				
	Phoutong				

Color codes

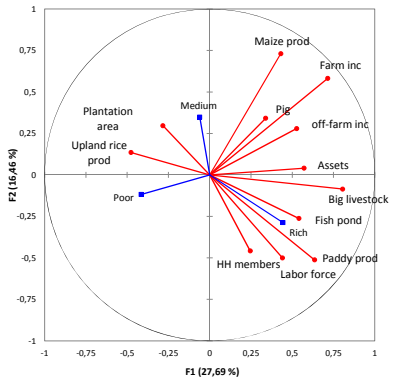
Fallow length	Cultivation patterns	Crop associations	Management types
A=1-2yrs	A=1-3 groups	A=1crop	free-roaming
B=3-5 yrs	B= 4-6 groups	B=2crops	tended
C=6-9 yrs	C=7-9 groups	C=3-5crops	livestock area
D>= 10 yrs	D>=9 groups	D>=6crops	forage

Cropping system performances





Diversity of livelihood systems



e.g. Vangseng village

- Population changes
  - From 10-15 children to 3-4
  - Better education, less arms for agriculture
- Paddy – swidden interactions
  - Objective: rice sufficiency
  - Increasing paddy -> decreasing swidden
- Livestock
  - Savings, cash income, but
  - Disease outbreaks, unpredictable losses
- Maize (cash crops) expansion
  - Increasing income - indebtedness
  - Land degradation
- Plantations
  - Securing land tenure
  - Market uncertainty (mak kao, rubber, etc.)

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Vulnerability assessment

- How climate hazards and economic fluctuations may affect local livelihoods
  - How would local populations respond
  - Which livelihood resources are most affected
- How can project activities affect critical livelihood assets and reduce environmental and economic risks.

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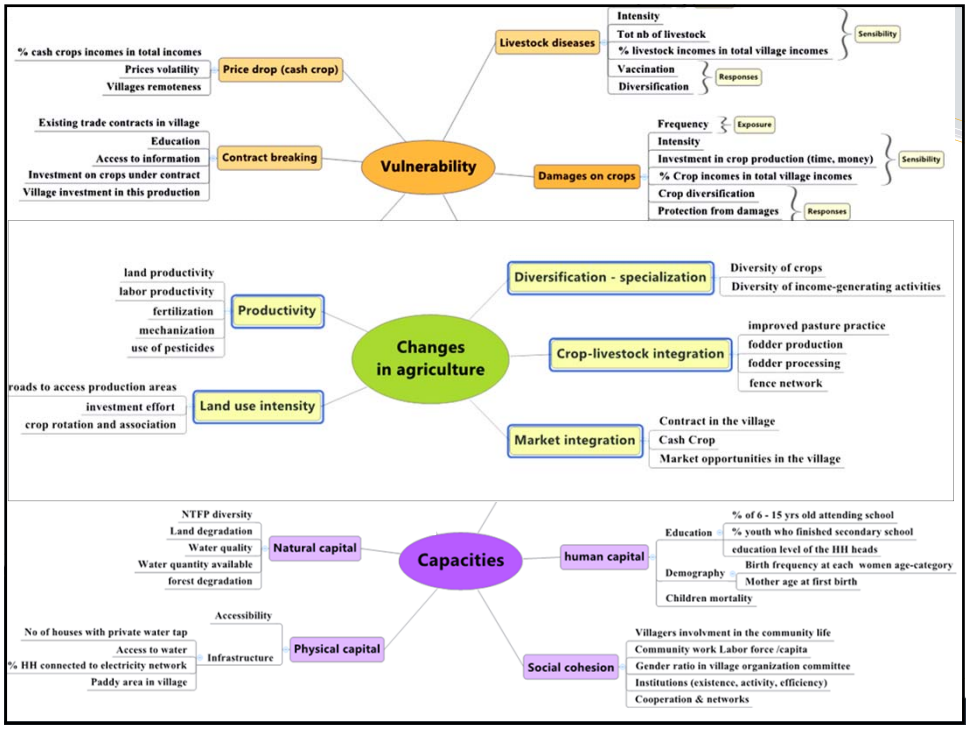


Impact pathways

Land use planning

Forest protection/management

Agricultural intensification

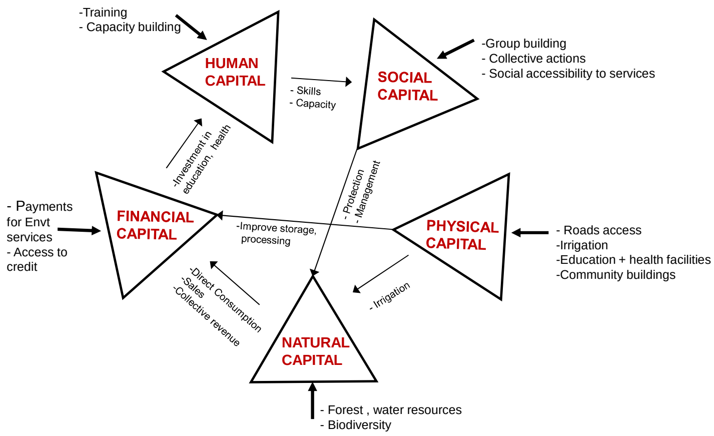
➡

Income

Ecosystem services

➡

Improved livelihoods



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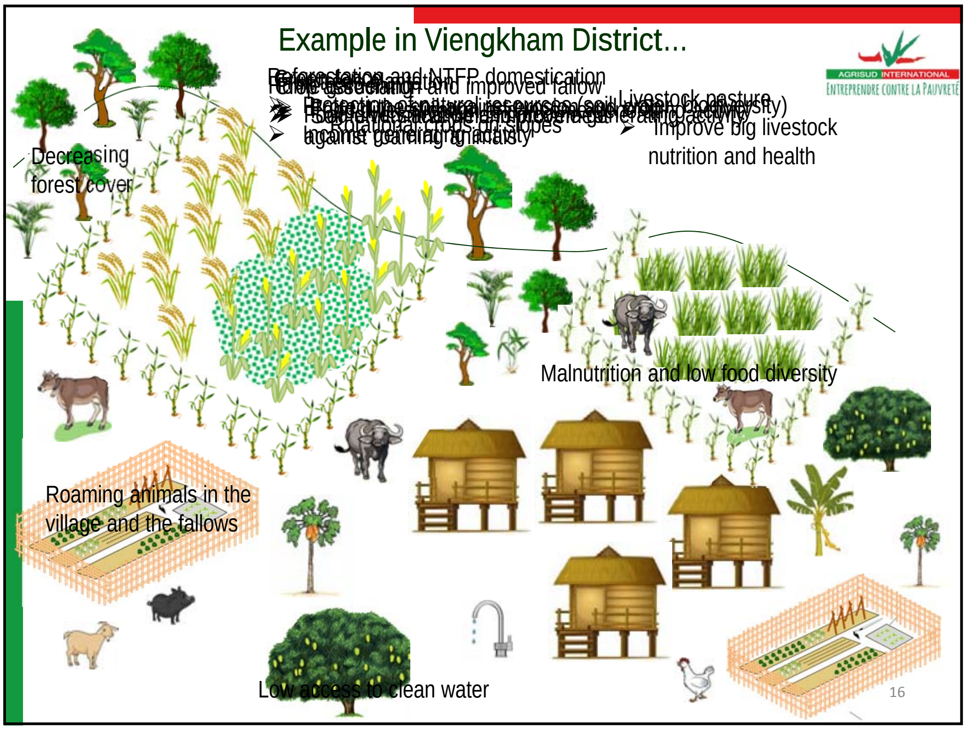
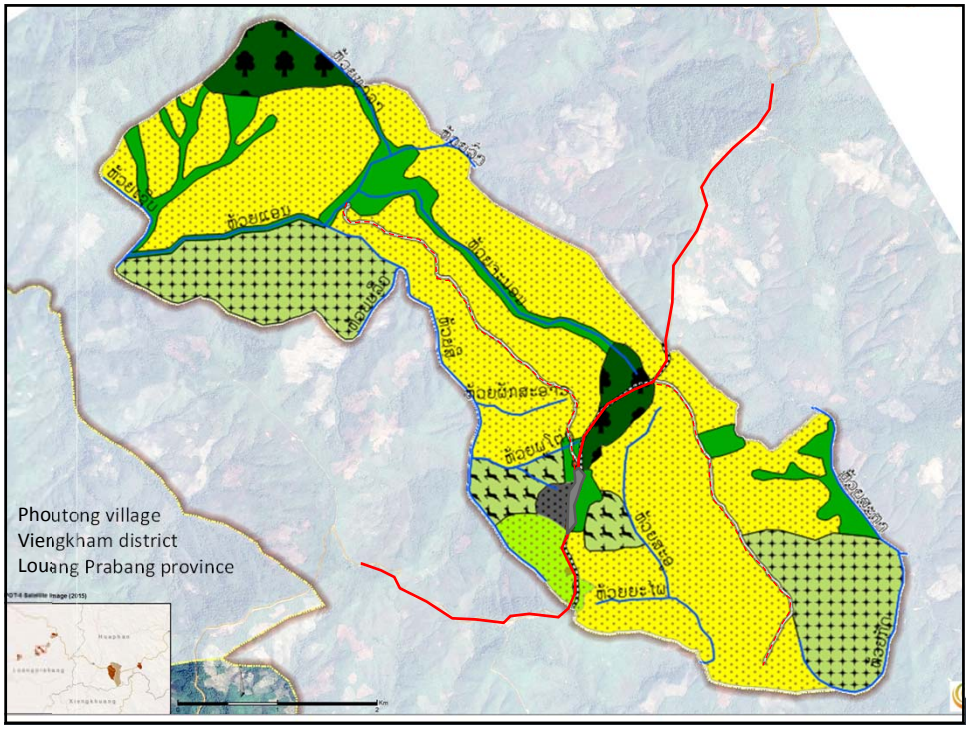
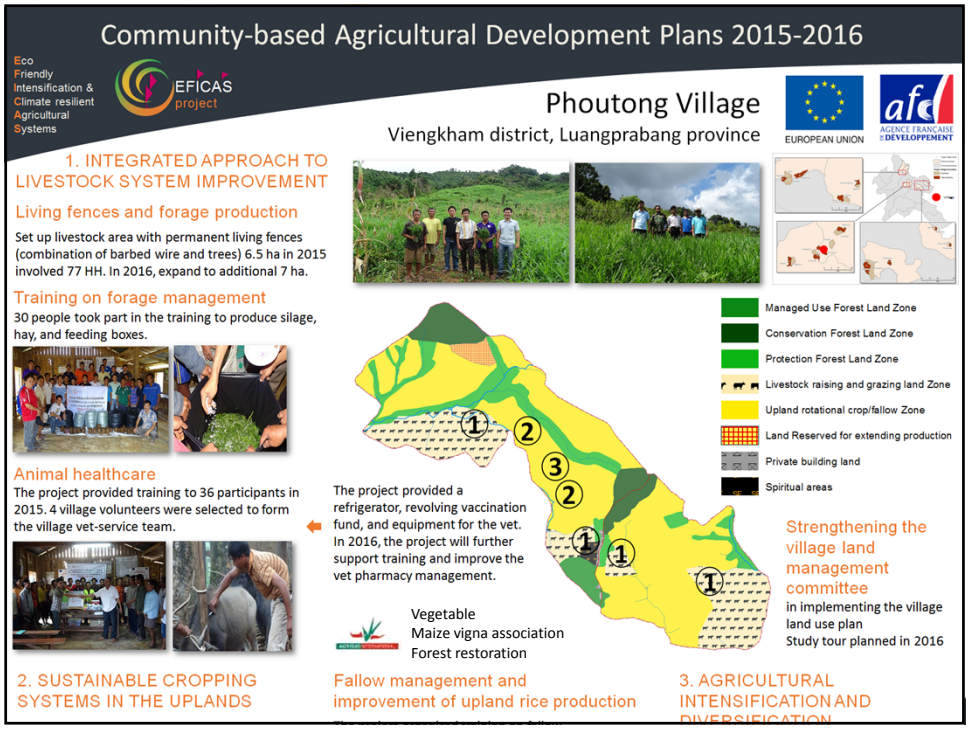
Example in Viengkham District…



AGRISUD INTERNATIONAL
ENTREPRENDRE CONTRE LA PAUVRETÉ

16


Phoutong village
Viengkham district
Louang Prabang province


Community-based Agricultural Development Plans 2015-2016
Eco Friendly Intensification & Climate resilient Agricultural Systems
EFICAS project
Phoutong Village
Viengkham district, Luangprabang province
EUROPEAN UNION
AGENCE FRANÇAISE DE DÉVELOPPEMENT
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.
Animal healthcare
The project provided training to 36 participants in 2015. 4 village volunteers were selected to form the village vet-service team.
The project provided a refrigerator, revolving vaccination fund, and equipment for the vet. In 2016, the project will further support training and improve the vet pharmacy management.
Managed Use Forest Land Zone
Conservation Forest Land Zone
Protection Forest Land Zone
Livestock raising and grazing land Zone
Upland rotational crop/fallow Zone
Land Reserved for extending production
Private building land
Spiritual areas
Strengthening the village land management committee
in implementing the village land use plan
Study tour planned in 2016
Vegetable
Maize vigna association
Forest restoration
2. SUSTAINABLE CROPPING SYSTEMS IN THE UPLANDS
Fallow management and improvement of upland rice production
3. AGRICULTURAL INTENSIFICATION AND DIVERSIFICATION

Animal healthcare

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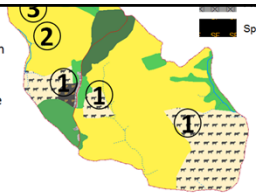


Strengthening the village land management committee

in implementing the village land use plan
Study tour planned in 2016

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.

Introduction of labor saving devices

12 hand jab planters for upland rice and maize sowing were provided to villagers.

Fallow management and improvement of upland rice production

The project organized training on fallow management and improved upland rice varieties in 2015. 48 people took part.

3. AGRICULTURAL INTENSIFICATION AND DIVERSIFICATION

Intercropping cassava and stylosanthes

Control of rodent damages

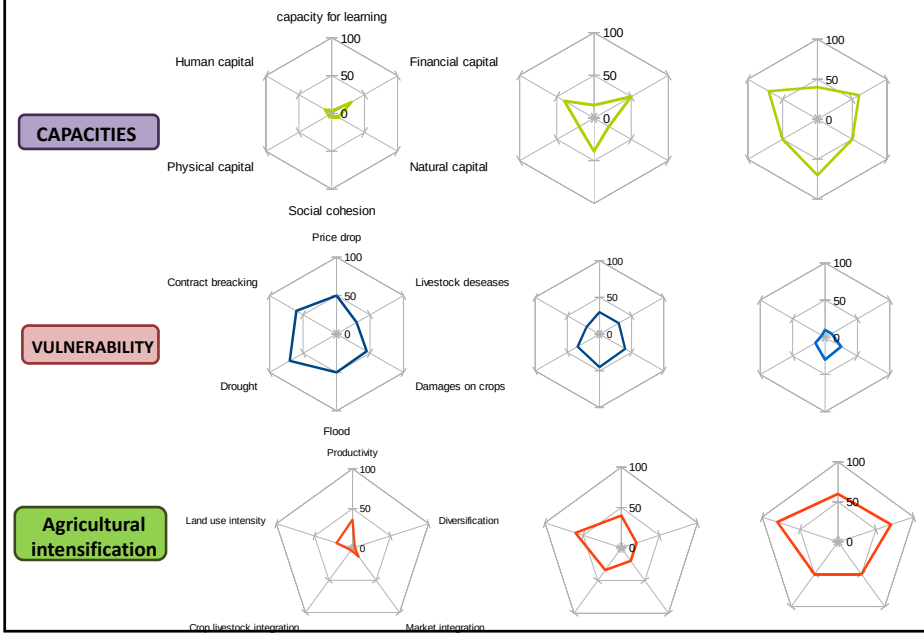
The project provided 400 metal traps in 2016

Rice bank for food security

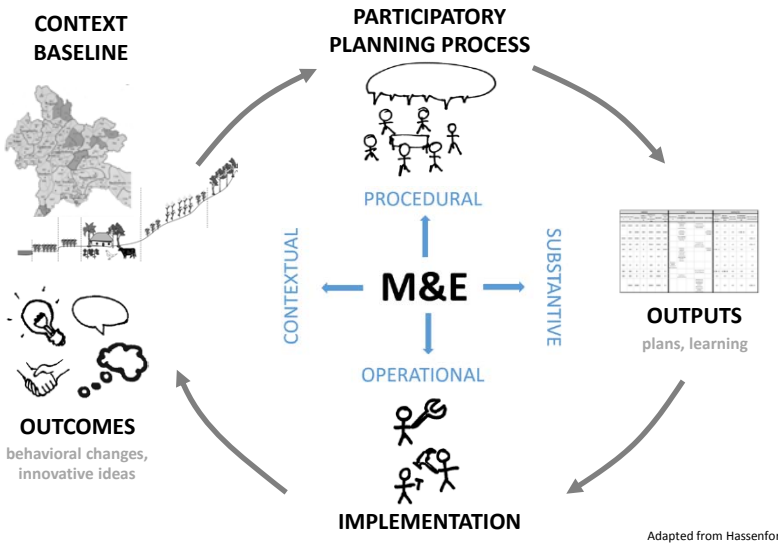
The project provided 2 tons of rice for the village rice bank in addition to villagers' contribution in 2016.

cirad

Expected indicator changes in time



Conclusion: M&E as an integral part of a village transformative process



Adapted from Hassenforder et al. 2015

Conclusions

- Assessing project's impacts on resilience
  -> methodology is developed and tested
  -> data analysis still on-going
  -> preparation of 2nd round
- Expected short & long term impacts
  -> changes in agricultural practices
  -> changes in landscape management
  -> changes in livelihoods, vulnerability
- Partnership perspectives
  -> on-line database for data storage and sharing
  -> linking with other project baselines (e.g. CC adaptation)
  -> support to communication platform involving R&D partners

Thank you for your attention!

For more information:

www.eficas-laos.net

Eco-Friendly Intensification and Climate resilient Agricultural Systems (EFICAS)