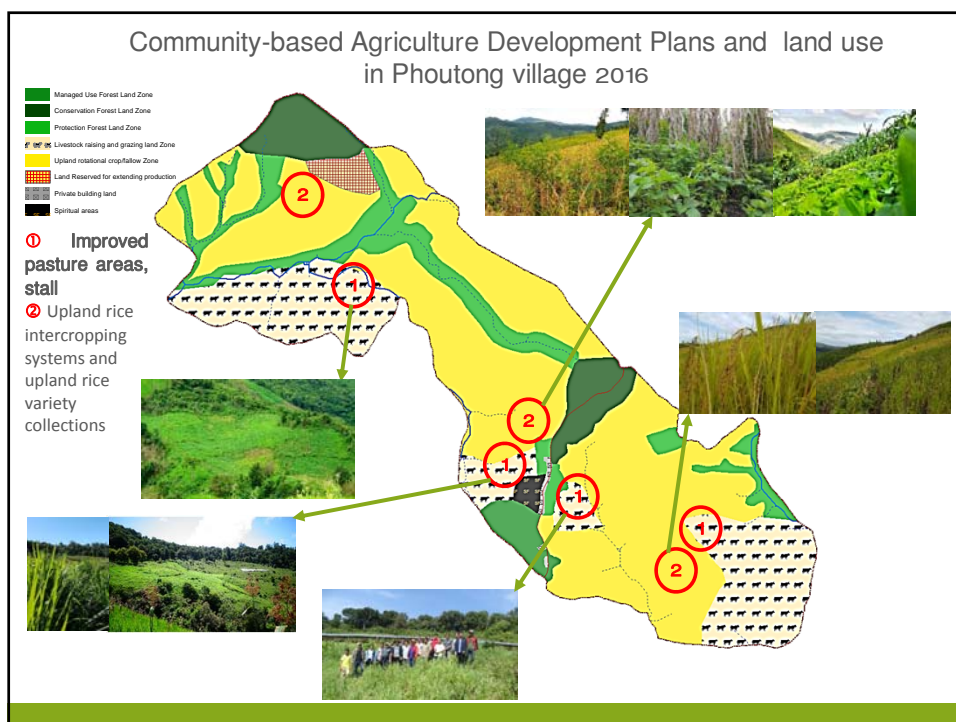


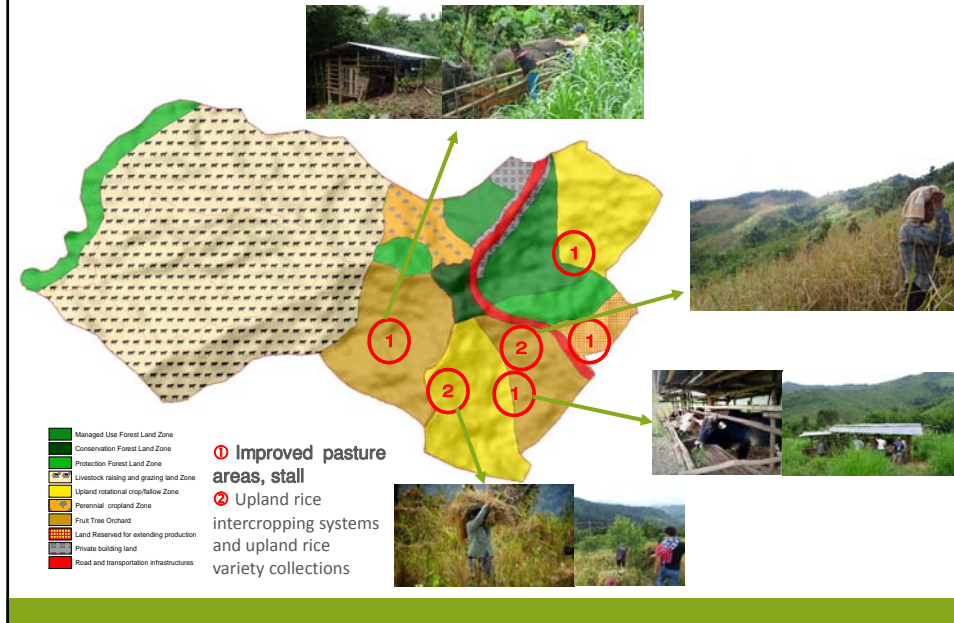


## Community-based Agricultural Development Plans 2016 - 2017

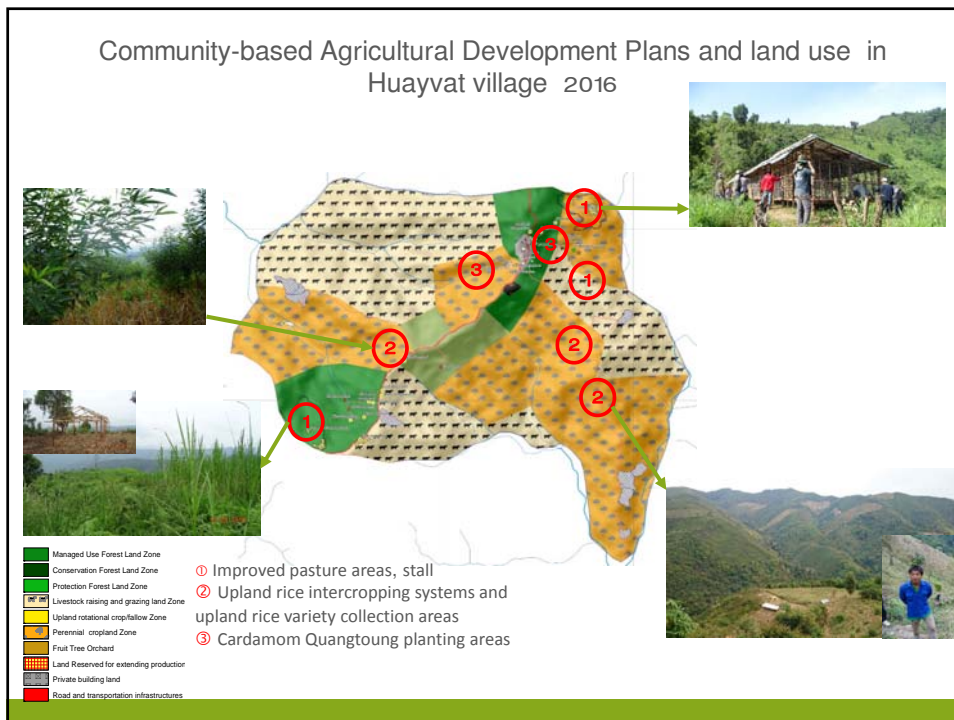
*EFICAS workshop, Monday, March 27th 2017, Luang Prabang*



## Community-based Agricultural Development Plans and land use in Samsoum village 2016



## Community-based Agricultural Development Plans and land use in Huayvat village 2016



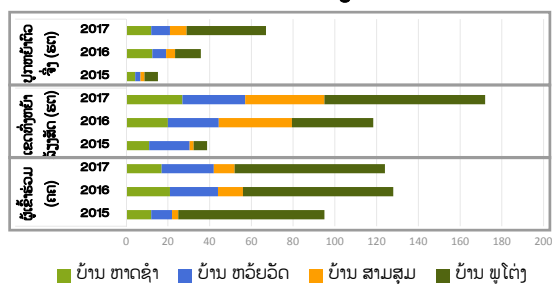
**Legend**

- Unclassification
- Managed Use Forest Land Zone
- Conservation Forest Land Zone
- Protection Forest Land Zone
- Industrial Tree Plantation Land Zone
- Paddy rice Land Zone
- Paddy rice Land Zone (with lowland rice and grazing land zone)
- Preserved - isolated Zone
- Bran stream
- Sinking land
- Road and transportation infrastructure
- Cultural land

**Numbered Locations:**

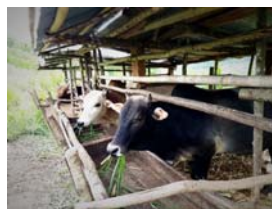
- Improved pasture areas, stall
- Upland rice intercropping systems and upland rice variety collection areas
- Lowland rice
- Fish conservation zone
- Group of people standing in a field

### Data on forage establishment



① Problem solutions to farmers who participated activities just wanted to have references to borrow money from bank, then they did not use the money as planned, to solve this is to collect detailed data with intervention households, Nayoby bank as well as DAFOs

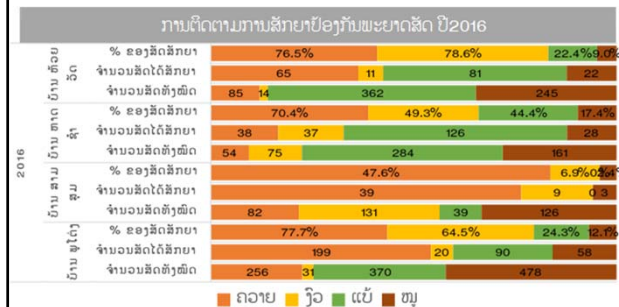
② Along with increasing numerous quantities, we also have to focus on quality or make better incomes per production units for example supporting farmers to have fattening cattle raising systems or shortening times in raising.





## 1.IMPROVED LIVESTOCK SYSTEM

### ❖ ANIMAL HEALTH



### ❖ SOME PENDING ISSUES

- ① Mostly farmers vaccinated only ruminants, but not with small animals
- ① Regulations must be put for animal vaccinations and when farmers vaccinated their livestock, they did not want payback to the animal revolving fund, on the one hand, they used it with other purposes.
- ① Animal vaccinations 2 times/year



## 1.IMPROVED LIVESTOCK SYSTEM

### ❖ LIVESTOCK AREA (STALL)

#### ESTABLISHMENT OF LIVESTOCK STALL IN EACH VILLAGE

| Villages | Goat stalls | Cattle stalls |
|----------|-------------|---------------|
| Hatsam   | 18(72m*2m)  | 4             |
| Huayvat  | 8 (20m*2m)  | 2             |
| Phoutong | 42(101m*2m) | -----         |
| Samsoum  | -----       | 4 (3*2m)      |



## 1.IMPROVED LIVESTOCK SYSTEM

### ❖ BUDGET TO SUPPORT VILLAGERS WHO DO NOT OWN LIVESTOCK

**9 Million LAK** (Ban Phoutong 8 M LAK / 8 families for, Ban Huayvat 1 M LAK/1ຄ family)



|             | Phoutong | Samsom | Houayvat         | Hadsam |       |
|-------------|----------|--------|------------------|--------|-------|
| Seedlings   | 3000     | 2000   | Local production | 3000   |       |
|             | Phoutong | Samsom | Houayvat         | Hadsam | Total |
| Barbed wire | 64       | 48     | 155              | 44     | 311   |



## 2. IMPROVEMENT AND DEVELOPMENT OF CROPPING SYSTEMS

Experiment of upland rice collection (Nok, Non, Laboun, Hinsoung)

|                 |                 |      |
|-----------------|-----------------|------|
| ບ້ານ ສາມສຸມ     | ເຂົ້າຫິນສູງ     | 1,89 |
|                 | ເຂົ້າປົກ        | 1,96 |
|                 | ເຂົ້າພື້ນເມືອງ  | 1,71 |
|                 | ເຂົ້າໜອນ        | 1,95 |
|                 | ເຂົ້າລາບູນ      | 2,05 |
| ບ້ານ ພູໄຕ້ງ     | ເຂົ້າຫິນສູງ     | 1,81 |
|                 | ເຂົ້າປົກ        | 1,56 |
|                 | ແນວພັນພື້ນເມືອງ | 1,75 |
|                 | ເຂົ້າໜອນ        | 2,48 |
|                 | ເຂົ້າລາບູນ      | 2,16 |
| ບ້ານ ຫ້ວຍບໍ່ດິດ | ເຂົ້າຫິນສູງ     | 0,75 |
|                 | ເຂົ້າປົກ        | 0,40 |
|                 | ແນວພັນພື້ນເມືອງ | 0,73 |
|                 | ເຂົ້າໜອນ        | 1,04 |
|                 | ເຂົ້າລາບູນ      | 0,84 |



4 families per each villages within 3 village (Ban Samsoum, Ban phoutong, Huayvat) and each plot is 200 sq meters

*When comparison between local and improved upland rice, it was found that improved rice varieties have higher yield about 10-45% in the same area.*

ສະມິດຕະພາບ...

## 2. IMPROVEMENT AND DEVELOPMENT OF CROPPING SYSTEMS

### Rice blind test (Nok, Non, Laboun, Hinsoung)

|                |             | ບ້ານຫາດຊ້າ | ບ້ານ ຫ້ວຍວັດ | ບ້ານ ພູໄຕ້ງ | ບ້ານ ສາມສຸມ |
|----------------|-------------|------------|--------------|-------------|-------------|
| ເຂົ້າປົກ       | ຫອມ         | 2.95       | 2.4          | 2.6         | 3.00        |
|                | ອ່ອນ        | 2.2        | 1.65         | 2.2         | 2.13        |
|                | ໜຽວ         | 2.1        | 2            | 2.55        | 2.07        |
|                | ລັກສະນະເມັດ | 2.8        | 2.1          | 2.1         | 2.73        |
| ເຂົ້າຫິນສູງ    | ຫອມ         | 2.35       | 2.15         | 2.45        | 2.27        |
|                | ອ່ອນ        | 1.9        | 1.8          | 2.25        | 1.87        |
|                | ໜຽວ         | 2.2        | 1.95         | 2.4         | 2.27        |
|                | ລັກສະນະເມັດ | 2.65       | 2.6          | 2.65        | 2.73        |
| ເຂົ້າພື້ນເມືອງ | ຫອມ         | 1.6        | 1.6          | 1.75        | 1.93        |
|                | ອ່ອນ        | 2.1        | 2            | 2.25        | 2.33        |
|                | ໜຽວ         | 1.95       | 2.05         | 2.4         | 2.27        |
|                | ລັກສະນະເມັດ | 2          | 1.75         | 2.1         | 2.07        |
| ເຂົ້າລາບູນ     | ຫອມ         | 1.5        | 1.65         | 1.45        | 1.53        |
|                | ອ່ອນ        | 2.25       | 2.3          | 2.9         | 2.33        |
|                | ໜຽວ         | 2.25       | 2.3          | 2.6         | 2.27        |
|                | ລັກສະນະເມັດ | 1.8        | 1.65         | 2.45        | 1.93        |
| ເຂົ້າ ຫອບ      | ຫອມ         | 1.65       | 2.85         | 2           | 1.53        |
|                | ອ່ອນ        | 1.9        | 2.9          | 2.7         | 1.80        |
|                | ໜຽວ         | 2.2        | 2.95         | 2.85        | 2.33        |
|                | ລັກສະນະເມັດ | 1.85       | 2.85         | 2.4         | 2.00        |



- Huayvat and Phoutong prefer Non rice variety more than the other varieties
- Samsoum and Hatsam prefer Nok rice variety more than the other varieties

## 2. IMPROVEMENT AND DEVELOPMENT OF CROPPING SYSTEMS

### Associated crops in upland rice-maize (pigeon pea associated with upland rice)

- Integrated cropping systems (Upland rice+Pigeonpea)

| Villages | HH involved | Area (ha) |
|----------|-------------|-----------|
| Hadsam   | 10          | 6         |
| Huayvat  | 44          | 44        |
| Phoutong | 10          | 3         |
| Samsoum  | 3           | 2         |

#### Limited points have to be improved:

1. Price of production is not stabilize, between 8000-15000 in each years
2. Still have not market for stick lack in some villages, so many villagers are not interested to cultivate it, it should trader for buying

- Integrated cropping systems (Upland rice+ Soybean or Peanut)

| Crop    | Hadsam | Hadsam | Hadsam | Hadsam |
|---------|--------|--------|--------|--------|
| Peanut  | 34     | 38     | 69     | 17     |
| Soybean | 14     | 34     | 62     | 16     |

- soybean seed variety DT12
- Age of soybean around 110 days, its production average around 1,1 ton/ha (Phoutong village)
- Production of soybean average around 10,7 kg/1kg

#### Notice and guideline implementation:

- ① Promotion in product is not much due to it have limited local market

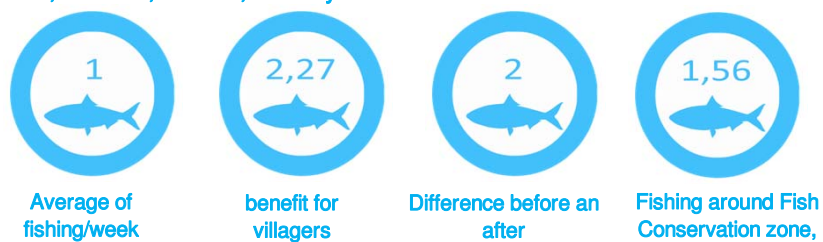


### 3. AGRICULTURAL INCOME IN SAMSOUM VILLAGE

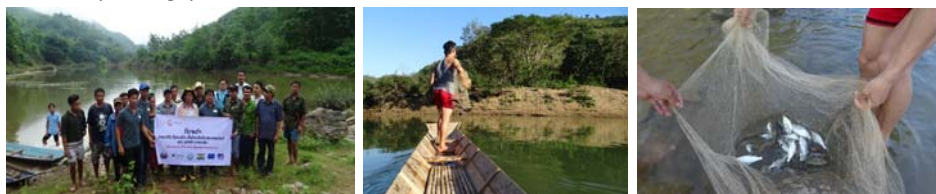


### 4. CREATING FISHING CONSERVATION ZONE (HATSAM VILLAGE)

Villagers Interview who go to fishing at around their village, around 33 families (0=no have, 1=normal, 2=have, 3=many)



Project have supported figuring with at 6000 and there are many species: Papak, Pakom, Panam, pamang, pasalienfai, and others





## 5. TECHNICAL SERVICE CENTER, MUONG MUAY VILLAGE

### ❖ Testing and Producing different type of crops :

- Testing cultivation of maize + red bean, productivity 4,2 ton/ha
- Cardamom Kuangtoun (Good widespread and it will be provided to target villages in 2017)
- Crop DT 84, productivity 124 kg

### ❖ Providing type of crops to target village

- Provide living fence 3000 tree nursuring
- Provide Nepia grass seeds 4 trucks
- Provide Mulato grass seeds 50 kg
- Provide Paspalom grass seeds 50 kg



## 6. BUILDING CAPACITY

- 1) Survey and monitor the project activities and agriculture land use with target village by village land management committee 9-12 people/village, one time/ monthd
- 2) Select who is responsible for each activities within the villages for monitoring project implementation, data collection, report for each activities, 4-8 people per village (based on activities in the villages)
- 3) Study tour on livestock and cropping systems at Kham and Nonghat district, total 30 people including female 8 people (24 people, 6 staffs )
- 4) Training on cooking bean (cookies, Tofu...) for villagers. 125 people including 95 female
- 5) Training on preserving soybean seed and seed bank in 4 villages





## 7. LESSONS LEARNT

Activity implementation is adaptive to the strategy of Department of Agricultural Land Management

- the activity implementation is accordance with strategy and development plans of 2 districts ( Viengkham and Pakseng) that is to focus on livestock systems improvement
- farmers mostly understand the expansion of improved pasture for raising livestock much better.
- Increasing crop diversifications for making more incomes ( legume ....)

### ➤ Remarks/ challenges

- *Farmers' understanding to the land use plan,*
- *The activity implementations which is adaptive to the land use plan is still complicated in some villages and turning from traditional livestock and cropping systems to the innovative agricultural practices are still difficulty in coordination and cooperation with other organizations are not good enough due to the limited time and local capacity to change,*
- *Increasing production is still dependent on market.*

## 7. COMMUNITY BASED DEVELOPMENT PLAN 2017

### Improve Livestock System

#### Improve pasture area (feed)

|                                     | Hatsam | Huayvat | Phoutong | Samsoum |
|-------------------------------------|--------|---------|----------|---------|
| Number (family)                     | 14     | 21      | 70       | 10      |
| Area (ha)                           | 12     | 9       | 38       | 8       |
| Including exiting and new expansion |        |         |          |         |

#### Improve fence, cowshed and water tank

|                    | Hatsam   | Huayvat | Phountong | Samsoum |
|--------------------|----------|---------|-----------|---------|
| fence barbed wire  | 60/12 ha | 45/9 ha | 190/38 ha | 40/8 ha |
| fence living fence | 3000     | 3000    | 3000      | 3000    |
| stall              | 12       | 9       | 38        | 8       |
| water resource     |          | 1       | 2         |         |

For barbed wire, it is provide based on real area that was measured by villagers . 5 rolls/ha

#### Improve animal health

- Animal vaccination 2 time/year



## 7. COMMUNITY BASED DEVELOPMENT PLAN 2017

Improve and develop Cropping System

### Crop diversification and cash crops (soybean and peanut)

|   | Hatsam | Huayvat | Phountong | Samsoun |
|---|--------|---------|-----------|---------|
| soybean (family)  | 15     | 20      | 27        | 15      |
| first thing must negotiate the detail of contract and participation |        |         |           |         |

Continues crop cultivation (continue peanut after short time of maize).

|  | Hatsam | Huayvat | Phouton | Samsoun |
|--|--------|---------|---------|---------|
| Cultivate peanut after short time of maize (family)                  | 4      | 4       | 4       | 4       |
| crop cultivation associated with upland rice (stick lack production) |        |         |         |         |

|   | Hatsam | Huayvat | Phoutong | Samsoun |
|---|--------|---------|----------|---------|
| Pigeon pea-stick lack (family)                                      | 8      | 39      | 21       | 6       |
| first thing must negotiate the detail of contract and participation |        |         |          |         |

### Improve paddy rice (Hatsam).

| Activities   | Number of families |
|--|--------------------|
| registration of lowland  | 11                 |
| Testing SRI cultivation  | 6                  |
| Testing Kainy varietie   | 6                  |
| Raising duck in paddy  | 3                  |
| soy cultivation for soil improving (Cotalania) after harvesting rice | 6                  |

### Crop cultivation for preserving forest- stream zone

|                                     | Hatsam | Huayvat | Phoutong | Samsoun |
|-------------------------------------|--------|---------|----------|---------|
| Kuangtong cardamom cultivation (nn) | 6      | 14      | 6        | --      |

## 7. COMMUNITY BASED DEVELOPMENT PLAN 2017

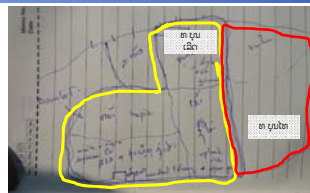
The idea of creating household model

▪ Hatsam : 2 HH

▪ Huayvat: 1 HH

▪ Phountong : 2 HH

▪ Samsoun: 2 HH



## 7. COMMUNITY BASED DEVELOPMENT PLAN 2017

### Building capacity on villagers

1. Study tour 1 time/5people/village
2. Training on soybean cultivation 1 time
3. Training on local crop seed conservation
4. Training on village animal vaccination
5. Training on SRI cultivation 1 time
6. Evaluation and monitoring the activities and agricultural land use of village land management committee

# Thank you

