



# ໂຄງການພັດທະນາໄມ້ປ່ອງ ແຂວງຫົວພັນ

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## **Innovative learning process for building sustainable NTFP value chains: the case of the Bamboo Project in Huaphan Province**

*An overview in 7 slides*

Vientiane, Laos, October 2014  
J.F. Kibler, GRET



*This short presentation in 7 slides provides in a few minutes an overview of the Bamboo Project implemented in 2011-2014 in Huaphan Province: the approach adopted, the process engaged, the main achievements, and the challenges for the coming years.*

*Who would like to have more detailed information and examples, may simply click on the [hypertext links](#) inside the core text in the 7 slides, and come back to the core text by clicking [back](#) on the top left side of the slide.*



Houaphanh ambitions to be the “leading province in Lao PDR in the development and management of a sustainable bamboo industry, providing “green gold” (kham kiao) to the people and contributing to poverty alleviation.” (Provincial Bamboo Strategy)

## **1. The Bamboo Project in support to the Huaphan Bamboo Strategy**

*In 2010, the Province Governor signed and published a “5 years bamboo sector development strategy” in Huaphan for the period 2011-2015.*

*The “Bamboo Strategy” defines goals and objectives, and defines an original and specific public institutional arrangement for developing a sustainable bamboo sector.*

*A “Bamboo Project”, funded by international cooperation (EU, AFD, FE) and run by two iNGO (**GRET**, SNV), supports the implementation of the “bamboo strategy” since 2011.*

*2011-2015 is considered as an experimental phase of the “Bamboo Strategy”.*



Fresh bamboo shoots (bamboo species: mai Khom) for domestic market

## **2. A value chain approach: linking forest management and market**

A value chain approach has been adopted for supporting the development of the bamboo sector, linking sustainable management of bamboo forests and business/market, from the villagers to the traders and consumer, with the government.

The Bamboo Project provides support along the value chain, on five topics: land management, bamboo forest management, bamboo plantation, business and market, enabling environment.

Four bamboo value chains receive support and are developed:

- handicraft for domestic market and export
- fresh bamboo shoots (nor khom) for domestic market
- dried bamboo shoots (nor hok) for export to Vietnam
- slats and sticks (mai khouane) for export to Vietnam



Dried bamboo shoots (bamboo species: mai Hok) for Vietnamese market

### **3. Promising results**

*In 4 years implementation, substantial results have been achieved.*

*More than 60 villages of three districts are today involved in the development of sustainable bamboo value chains. 22 villages have been allocated 4000 ha bamboo forests for use and trade, 25 villages have more than 300 ha bamboo plantation. In 2013, 60 village producer groups collected, processed and sold bamboo products for a total value of 340 000 USD, representing an average of 5800 USD/village or 225 USD/household. 50 Village Service Providers are being trained to offer services to the producer groups.*

*Specific results (methods, techniques, tools) have been achieved for each one of the three objectives: 1. sustainable management of bamboo resources; 2. bamboo based businesses; 3. enabling environment.*





Village Processing Units with collective dryers for producing high quality dried hok shoots – quality grade A1&2 - for Vietnamese market

#### **4. A collective learning process**

*Beyond the results achieved, interesting is to observe the collective learning process involving all stakeholders of the bamboo sector: village producer groups, traders and companies, and government.*

*All stakeholders recognize that there is not a simple “recipe” to apply. Stakeholders need to build and learn together. This is true for resource management (e.g.: How to simplify the preparation of forest management plans ? How to organize bamboo forest monitoring every year ? How to organize communal land titling ?) and for business development (e.g.: which business model for hok value chain provides highest added value for producers ? What are the risks and benefits of different business models for khouan slats value chain ?)*

*The Bamboo Project, together with the Government, facilitates a collective learning process.*



Three complementary actions: Forest management plan, Technical research and Annual monitoring

## 5. Mechanisms in place for facilitating the collective learning process

A key contribution of the Bamboo Project is to create and facilitate mechanisms and bring competences together for the collective learning process.

This is illustrated through three examples.

- Three complementary actions are institutionalized for reaching sustainable forest management: i. the preparation of the FMP approved by the district; ii. the annual forest monitoring done by villagers; iii. the scientific experimentation on FM techniques with the support of FRC/NAFRI.
- Every year, a Value Chain Multistakeholders Workshop is organized for each value chain (e.g.: hok shoots, handicraft...), where stakeholders assess the progress of past year and discuss the challenges for next year
- Quarterly meetings with the District Bamboo Committees facilitate the coordination among departments, and with the Project. It also helps to solve problems or take opportunities for the value chains development.



Annual multistakeholders value chain workshops, gathering villagers, traders, and government

## **6. Encouraging process and achievements**

*The multi-stakeholder learning process engaged and the results achieved so far are encouraging. Huaphan province is on the way to prove that a sustainable bamboo based economic sector may significantly contribute to poverty reduction and forest preservation.*

## **7. Challenges for coming years**

*However, the process is still young, and several challenges need to be addressed in the coming years: the consolidation and extension of forest management in the villages, the consolidation of business models, the organization of the bamboo sector, the provision of sustainable services to stakeholders...*

*Particularly, one key challenge for the coming years is to maintain the learning processes and mechanisms in place. In the past four years, this role has been mainly assumed with the support of the Bamboo Project.*





## **8. The current Bamboo Project will end in 2015**

*The funding of the current Bamboo Project will end in 2015.*

## **9. Looking for partners and donors for a Bamboo Project 2**

*A Project evaluation carried out in 2014 by the Bamboo task Force confirmed the interest of stakeholders for pursuing the process engaged. The Bamboo Task Force clearly expressed its interest for a continuation of the Bamboo Project, aiming at supporting the achievement of the new challenges.*

*Considering that the process engaged still requires support for consolidation and extension of the bamboo sector, **GRET is looking for interested partners and donors for shaping and implementing a « Bamboo Project 2 » in the coming years.***



Jeff Kibler, Project manager, **GRET**

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**Annex 1. Huaphan Bamboo Strategy :  
an innovative initiative for building a  
sustainable bamboo sector**

## The Bamboo Provincial Strategy 2011-15

- The “**Bamboo Provincial Strategy 2011-2015**” has been approved by Governor of Huaphan Province.
- **Objectives 2011-2015:**
  1. Sustainable bamboo resource management (natural communal forests & individual plantations)
  2. Bamboo Business Development
  3. Enabling environment (Policy & Organization)





## 3 general objectives for 2011-2015

### **Objective 1: Reach sustainable management of bamboo resources**

Allocate and secure bamboo forests to villagers for trade  
Ensure sustainable forest management  
Develop bamboo plantations

### **Objective 2: Develop bamboo business**

Develop several bamboo value chains  
Find out the best “business models” for the value chains  
Improve quality, prices and develop domestic and export markets

### **Objective 3: Create an enabling environment**

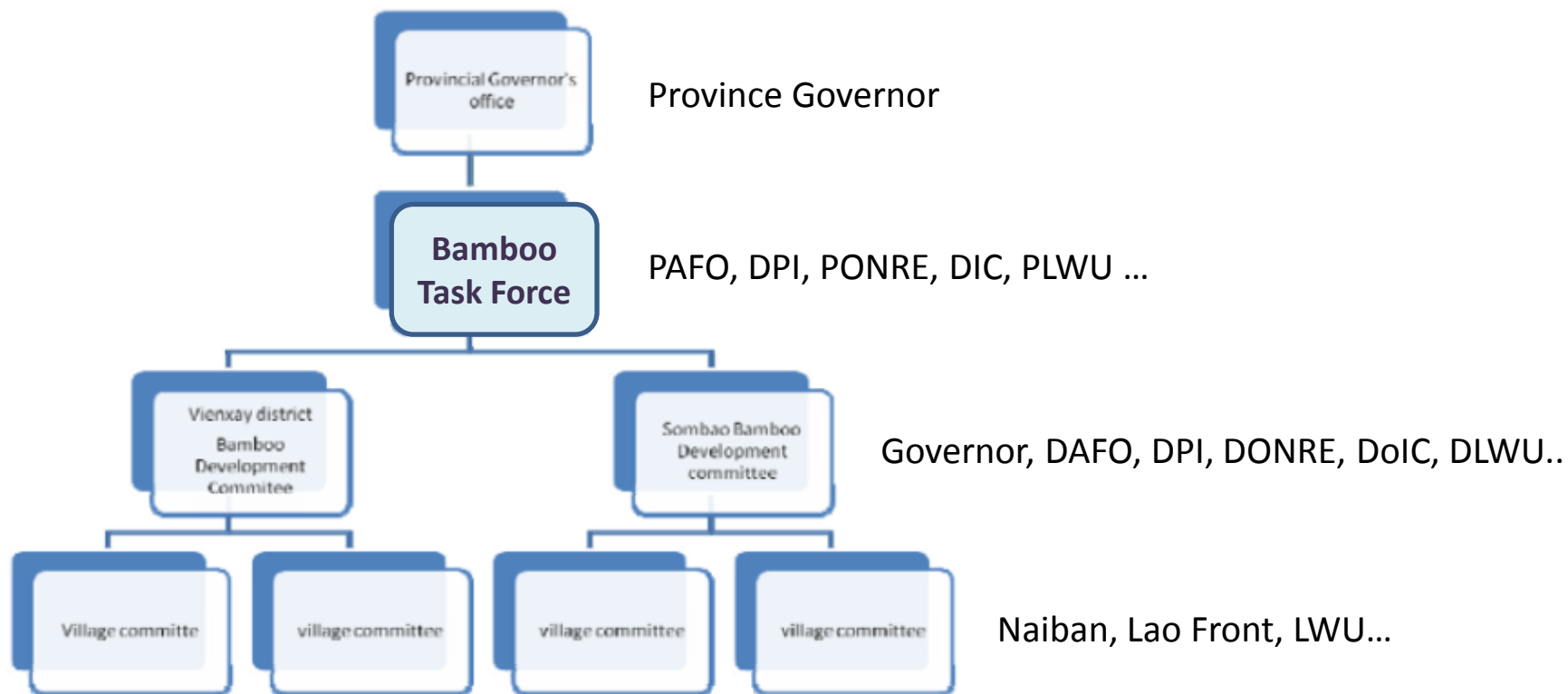
Train ‘technicians’ and ‘village service providers’ for the bamboo sector  
Promote organization of the bamboo sector for sustainable value chains  
Build and implement enabling policies: land, quota, taxes, incentives





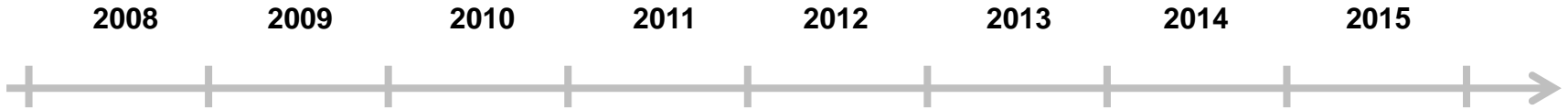
## A specific public administration arrangement for facilitating the implementation of the Strategy

- The Province defined an innovative and specific administrative arrangement for facilitating the implementation of the Bamboo Provincial Strategy





# A iNGO-run « Bamboo Project » for facilitating the implementation of the Bamboo Strategy

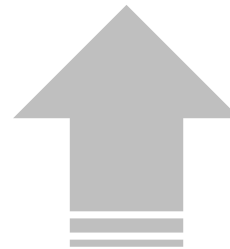


The **Bamboo Project** has been designed to support the government, villages, and private sector for implementing the Provincial Bamboo Strategy

It is implemented by Gret, SNV, PAFO, DPI, and three Districts



**Provincial BB Strategy 2011-2015**

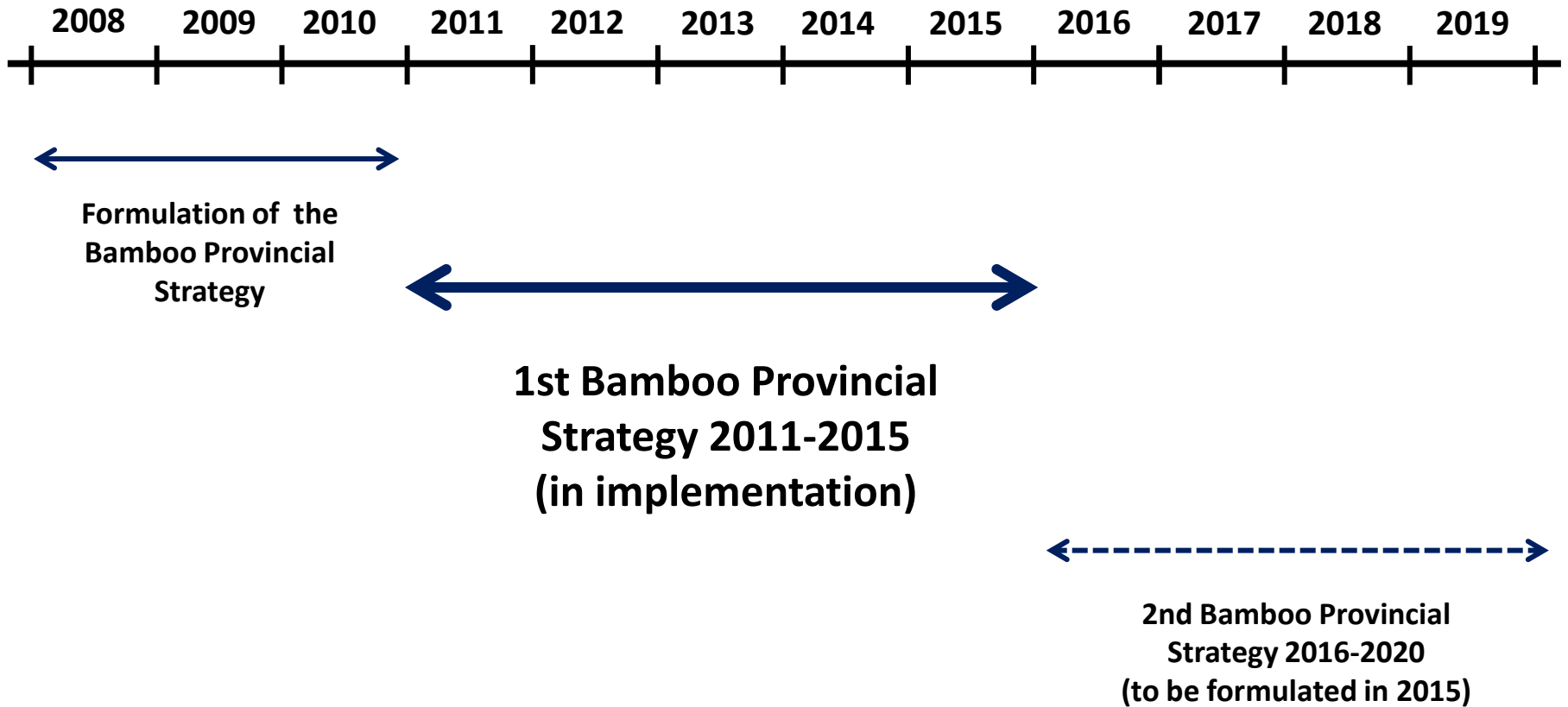


**Bamboo Project 2011-2014**





## 2011-2015: an experimental phase



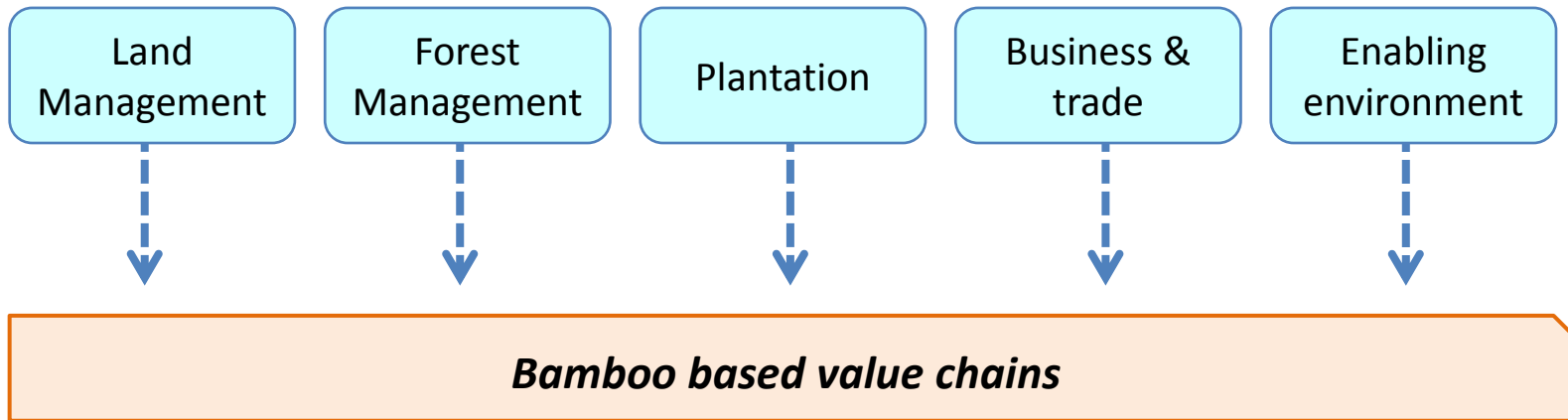


## **Annex 2. A value chain approach**



## From bamboo forest to the market

- The Bamboo Project adopted a value chain approach, and has been structured for providing support to all components of the value chains.



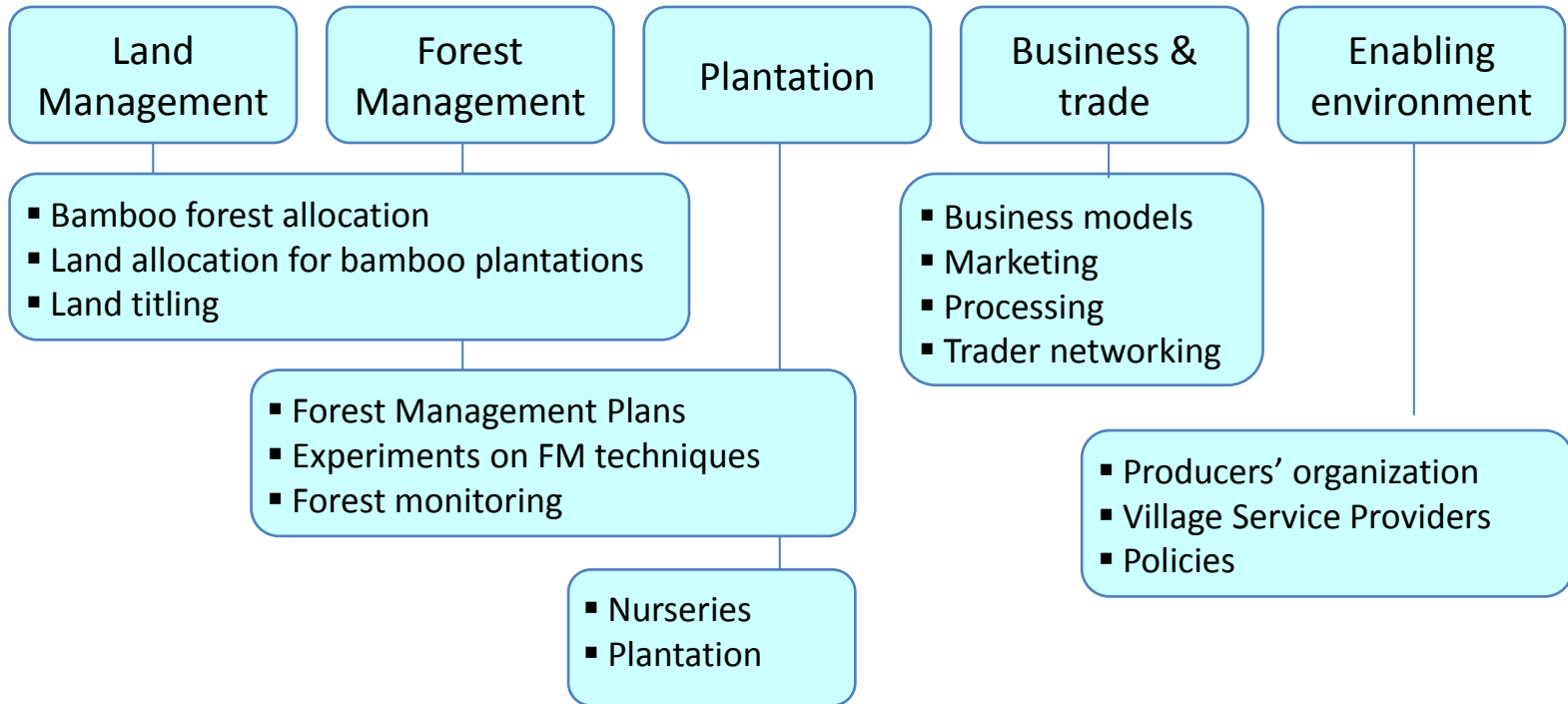
Linking sustainable natural resource management and business/market  
From the villagers to the traders and consumer, with the government





## Support provided

- For each component, the Bamboo Project team provides a series of technical supports, according to needs and opportunities in each value chain.





## Four bamboo based value chains

- Four bamboo value chains are developed, involving more than sixty villages in three districts (Viengxay, Sam Neua, Sobbao).



Handicraft products for domestic market and export  
Different species of bamboo



Slats and sticks for export to Vietnam  
Mai Kouane : *Dendrocalamus longifimbriatus*



Fresh bamboo shoots for domestic market  
Mai Khom : *Indosasa sinica*



Dried bamboo shoots for export to Vietnam  
Mai Hok: *Dendrocalamus hamiltonii*



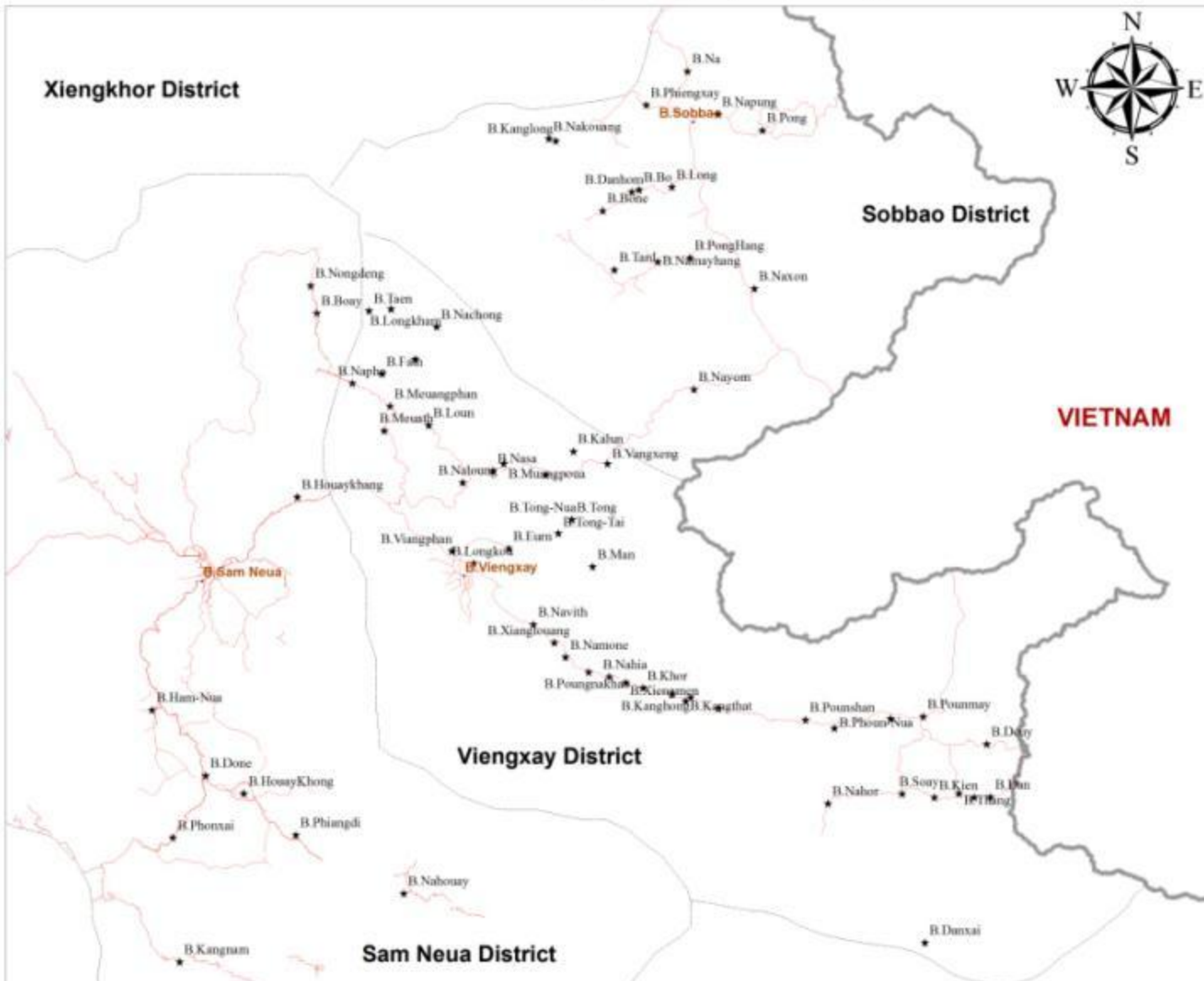


## **Annex 3. Results and lessons learned**



# More than 60 villages involved in 2014

[Back...](#)



### Legend

- National Border
- Districts Limits
- Roads
- Slats and Sticks villages
- LMC Factory
- Hok\_Vill
- Khome\_Vill
- Handicraft&Furnitures Vill
- FM 2013
- PLantation\_vill 2013
- E and D plots

1:100 000

0 2 1000 200 8 400 Meters

PROJECTION.....U.T.M.ZONE 48  
Delineation of International Administrative boundaries on the map is approximate



## Objective 1

### **Objective 1: Reach sustainable management of bamboo resources**

- Allocate and secure bamboo forests to villagers for trade
- Ensure sustainable forest management
- Develop bamboo plantations





# Results

## Bamboo forest allocation & titling

- **Methods:**
  - i. A PLUP method including bamboo activities
  - ii. A Combined Method (CM) focused on bamboo activities
  - iii. A method in test for Communal Land Registration and Titling (CLRT) of bamboo forest plots
  
- **Results:**
  - i. At the end of 2013, 4000 hectares of bamboo forests (86 plots) were allocated to 22 villages for further forest management and trade
  - ii. In September 2014, 36 ha of bamboo forest (3 plots) registered by DONRE/PONRE for Communal Land Titling in 1 village



# Results

## Bamboo forest management

- **Methods:**
  - i. *Preparation of Forest Management Plan:*

A method for bamboo forest inventory 1%: hok, khom, khuane, xang  
Rules for sustainable forest management: hok, khom, khuane, xang
  - ii. *Forest monitoring:*

A method for village bamboo forest monitoring : hok, khom, khuane
  - iii. *Experiment & Demonstration on bamboo forest management techniques:*

E&D plots with scientific protocol on species: hok, khom, dja, khuane, xang
  
- **Results:**
  - i. Among the 4000 hectares of bamboo forest allocated, 3000 hectares are already managed with forest management plan in 15 villages.
  - ii. Already 2 years data collection on E&D plots (need 1 more year)
  - iii. Forest monitoring done by 21 villages in 2013 (data 2014 not yet available)



# Results

## Bamboo plantation

- **Methods:**
  - i. Technique for preparing nursery and planting with culm
  - ii. Technique for planting bamboo: luang, hok
  - iii. Technique for planting bamboo : khouan, khom (in test)
  - iv. Intercrop with bamboo plantation with coffee (in test)
  
- **Results:**
  - i. 5 village nurseries skilled for producing seedlings
  - ii. 320 hectares in bamboo plantation (560 plots) in 25 villages (data end 2013)

# Synthesis of results for objective 1

District	Bamboo forests & plantations in 2013	Bamboo forests						Plantations
		Khouane for Handic	Khouane for Stick fact	Khom for shoots	Hok for shoots	Xang for paper pulp	Total Forests	Total Luang plantation
Viengxay	villages involved 2013	19	17	6	9	-	41	11
	villages with allocation plots	4	7	8	7	-	16	11
	hectares	8	13	18	20	-	59	339
	villages with FMP plots	78	1 349	915	1 054	-	3 396	181
	hectares	1	6	7	5	-	11	
	villages who monitor	1	10	17	14	-	42	
Sobbao	hectares	26	1 206	876	582	-	2 690	
	villages involved 2013		14	7			20	
	villages with allocation plots	7	-	-	-	4	9	12
	hectares	1	-	-	1	4	5	12
	villages with FMP plots	1	-	-	1	13	15	170
	hectares	30	-	-	20	274	324	67
Sam Neua	villages with FMP plots	-	-	-	-	3	3	
	hectares	-	-	-	-	3	3	
	villages who monitor	-	-	-	-	28	28	
	villages involved 2013	8	-	1	-	-	9	2
	villages with allocation plots	-	-	1	1	-	1	2
	hectares	-	-	11	1	-	12	51
Total	hectares	-	-	277	7	-	284	75
	villages with FMP plots	-	-	1	1	-	1	
	hectares	-	-	11	1	-	12	
	villages who monitor	-	-	277	7	-	284	
	villages involved 2013	34	17	7	9	4	<b>59</b>	<b>25</b>
	villages with allocation plots	5	7	9	9	4	<b>22</b>	<b>25</b>
hectares	9	13	29	22	13	<b>86</b>	<b>560</b>	
Total	hectares	108	1 349	1 192	1 081	274	<b>4 004</b>	<b>323</b>
	villages with FMP plots	1	6	8	6	3	<b>15</b>	
	hectares	1	10	28	15	3	<b>57</b>	
	villages who monitor	26	1 206	1 153	589	28	<b>3 002</b>	
Total	villages who monitor	-	14	8	-	-	<b>21</b>	



## Objective 2

### **Objective 2: Develop bamboo business**

- Develop several bamboo value chains
- Find out the best “business models” for the value chains
- Improve quality, prices and develop domestic and export markets



# Results

## Khouane slats value chain

- **Khouan slats & sticks for Vietnam**
  - i. During the season Dec 2012-July 2013, **549 households from 17 villages** harvested, pre-processed and supplied 3 500 T of slats to 4 companies, generating an average income of **1,6 M kips per household**.
  - ii. More villages involved in 2014





# Results

## Khom shoots value chain

- **Khom fresh shoots for domestic market:**
  - i. During the season Dec 2012-March 2013, **336 households from 7 villages** harvested and sold 210 T of fresh shoots to 12 traders and collectors, generating an average income of **1,7 M kips per household**
  - ii. More villages involved in 2014



Khom shoots





# Results

## Hok shoots value chain

- **Hok dried shoots for Vietnamese market:**
  - i. During the season August to September 2013, **270 households from 7 villages** harvested, processed and sold 12 T of dried shoots in different sub-value chains, representing an average income of **0,9M kip /household**.
- **Hok fresh shoots for Chinese market:**
  - i. In the same time, **350 households of 6 of the villages** sold 81 T of fresh bamboo shoots, generating an average income of **0,2 M Kip/household**.



Hok shoots





# Results

## Handicraft value chain

- **Handicraft for national market & export:**
  - i. In 2013, **458 households from 34 villages** made and sold handicraft products to 11 traders or directly in trade fairs, generating an average income of **2,1 M kips/household**.



Handicraft

## Synthesis of results for objective 2

**In total, 59 villages produced and sold for a total value of 340 000 USD in 2013**  
**This GDP does not include the added value by the traders and companies.**

District	Economic results in 2013	Total	Bamboo forests					Total from forests	Plantations	Total
			Handicraft from forest	Slats & Sticks from forest	Khom shoots from forest	Hok shoots from forest	pulp factory from forest		Luang plantation	Total from forest & plantation
Viengxay	villages involved 2013	43	19	17	6	9	-	41	11	43
	households	2 023	254	549	239	432	-	1 203	279	1 350
	Million Kip total		517	874	377	328	-	2 096	215	2 311
	Million Kip / village		27	51	63	36		51	20	54
	Million Kip / HH		2,0	1,6	1,6	0,8		1,7	0,8	2
Sobbaio	villages	14	7	-	-	-	4	9	12	14
	households	896	136	-	-	-	214	136	161	237
	Million Kip total		311	-	-	-	-	311	143	454
	Million Kip / village		44				suspended	35	12	32
	Million Kip / HH		2,3				2,3	0,9	2	
Sam Neua	villages	9	8	-	1	-	-	9	2	9
	households	535	68	-	100	-	-	168	47	207
	Million Kip total		123	-	211	-	-	334	78	412
	Million Kip / village		15					37	39	46
	Million Kip / HH		1,8				2,0	1,7	2	
Total (Kip)	villages	66	34	17	7	9	4	59	25	66
	households	3 454	458	549	339	432	214	1 507	487	1 794
	Million Kip total		951	874	588	328	-	2 741	436	3 177
	Million Kip / village		28	51	84	36	suspended	46	17	48
	Million Kip / HH		2,1	1,6	1,7	0,8		1,8	0,9	2
Total (USD)	villages	66	34	17	7	9	4	<b>59</b>	<b>25</b>	<b>66</b>
	households	3 454	458	549	339	432	214	<b>1 507</b>	<b>487</b>	<b>1 794</b>
	USD total		118 875	109 300	73 500	41 000	-	<b>342 675</b>	<b>54 500</b>	<b>397 175</b>
	USD / village		3 496	6 429	10 500	4 556	-	<b>5 808</b>	<b>2 180</b>	<b>6 018</b>
	USD / HH		260	199	217	95	-	<b>227</b>	<b>112</b>	<b>221</b>



## Objective 3

### **Objective 3: Create an enabling environment**

- Train 'technicians' and 'village service providers' for the bamboo sector
- Promote organization of the bamboo sector for sustainable value chains
- Build and implement enabling policies: land, quota, taxes, incentives



## Results

### Capacity building of technicians

- **Technicians from District and Provincial departments trained « on the job »**
  - i. Combined Method: DAFO, DONRE, PAFO, PONRE
  - ii. E&D: DAFO
  - iii. Forest monitoring: DAFO, PAFO
  - iv. Land titling: DONRE, PONRE
  - v. Plantation: DAFO, PAFO
  - vi. Business and organization: DIC, DPI, LWU



## Results

### Village Service Providers

- **53 village service providers from 24 villages**
  - i. 5 villagers nurseries skilled to produce seedlings
  - ii. 10 Village bamboo Technicians specialized in bamboo plantation
  - iii. 21 Village Volunteers actually engaged in the management and data collection from E&D plots on forest management
  - iv. 9 Village Service Providers specialized in training on handicraft & furniture
  - v. 6 future Village Forest Monitoring Technicians selected by VBC



## Results

### Village bamboo producer groups

- **90 bamboo groups formed, with around 200 “leaders” involved**
  - i. 34 Bamboo Handicraft Producers Groups - BHPG
  - ii. 10 Bamboo Shoot Harvesting and Commercialization Groups - BSHCG
  - iii. 17 Bamboo Supply Groups for stick factory with VBC
  - iv. 4 Bamboo Supply Groups for paper pulp factory with VBC
  - v. 25 Bamboo Plantation Groups (for receiving support from the Project)

These bamboo groups are not yet formally registered

These groups have different levels of organization: high for shoot, medium for handicraft, low for khouane and xang

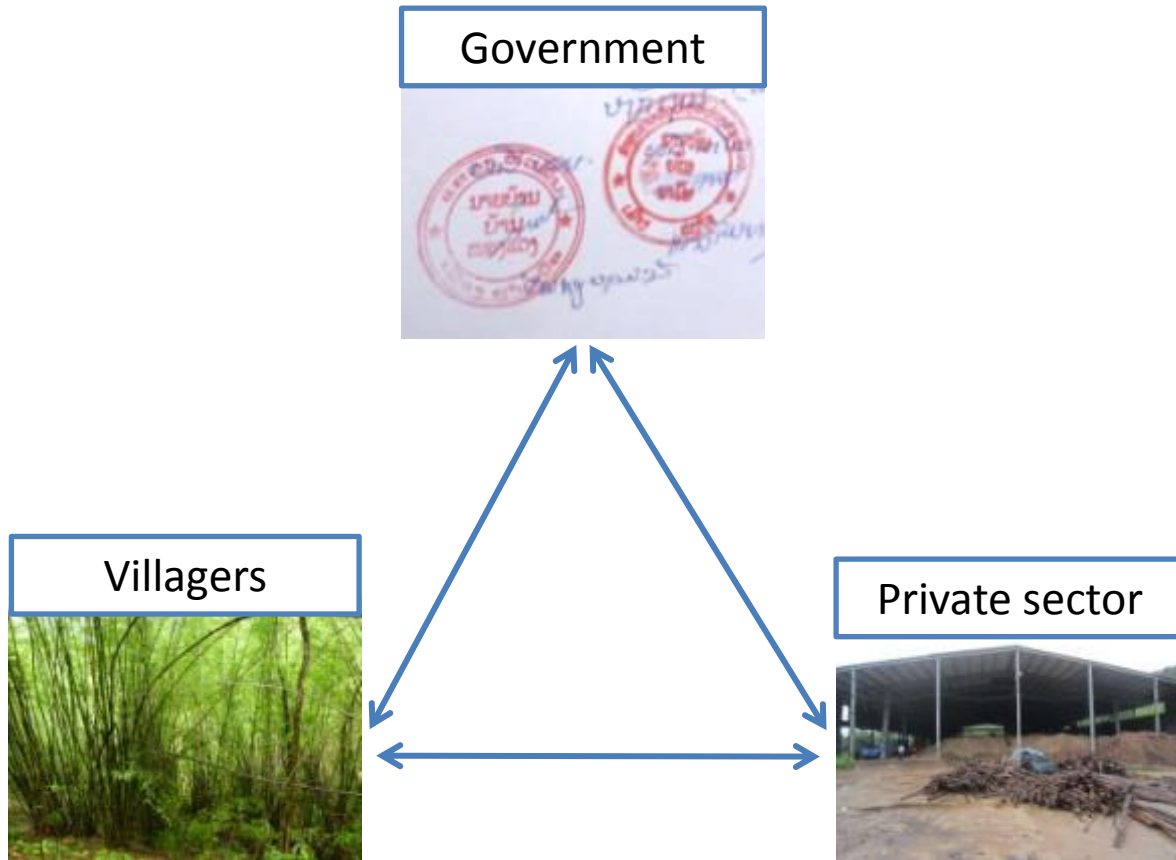
- **Discussion is engaged among producer groups leaders for creating a « bamboo association » of « bamboo cooperative »**



## **Annex 4. A multi-stakeholders learning process**



# Government, villagers and private sector are learning together



## Key challenges

Which mechanisms and methods for **sustainable use of the bamboo forests** in the villages ?

Which **business model** for higher incomes for the villagers (poverty reduction)

Which **policies and producer groups' organization** for developing the bamboo sector ?






## Example of learning process:

### how to make faster the bamboo forest allocation and management plan ?

- In 2013, a « Combined Method » (CM) has been designed with technicians and villagers, for shortening the time dedicated to the bamboo forest allocation and the preparation of forest management plans (FMP).

**2011: FMP**



**BB**

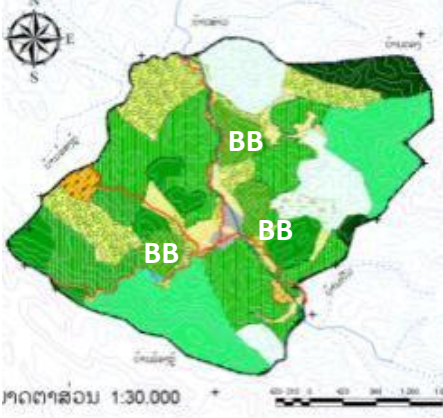
Forest plot demarcation

Inventory 100%, rules

Forest Management Plan



**2012: PLUP**



**BB**

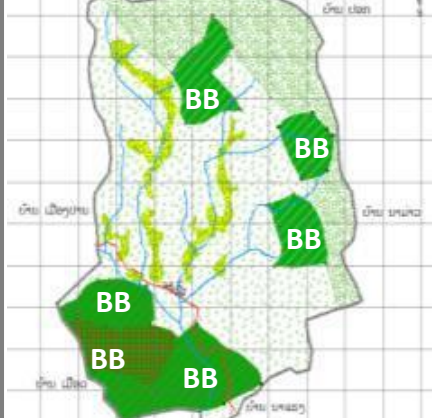
Village limits checked

Planning all activities

Forest plots demarcation



**2013-14: CM**



**BB**

Village limits checked

Forest plots demarcation

Inventory 1%, rules

Forest Management Plan



## Example of learning process:

### how villages can make the bamboo forest monitoring every year ?

- In 2013, a « forest monitoring method » has been designed with the Village Bamboo Committees for assessing the status of the bamboo forests and the respect of the forest management rules every year. The cost of the monitoring is financed by the village, thanks to fees collected from the traders on the production sold. The method is improved every year

1



**Discussion meetings with villagers about forest**

2



**Field survey on every bamboo forest plot**

3



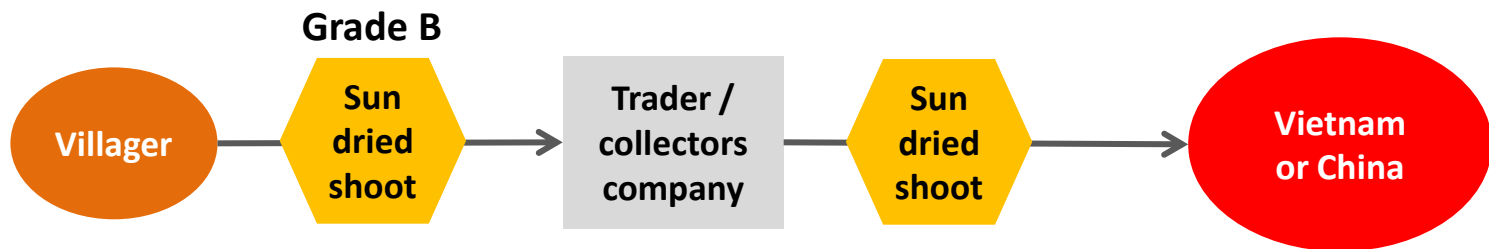
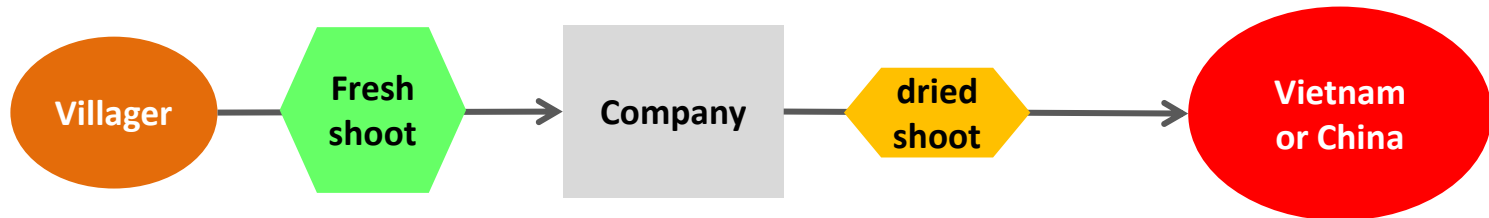
**Discussion meetings with villagers about rules**



## Example of learning process:

### which business model is better for hok shoots value chain ?

- Since 2013, hok shoot producer groups are experimenting several business models to find out which generates more added value for the villagers. In 2014, 4 villages are experimenting Village Processing Units which directly export to Vietnam.



#### Village level

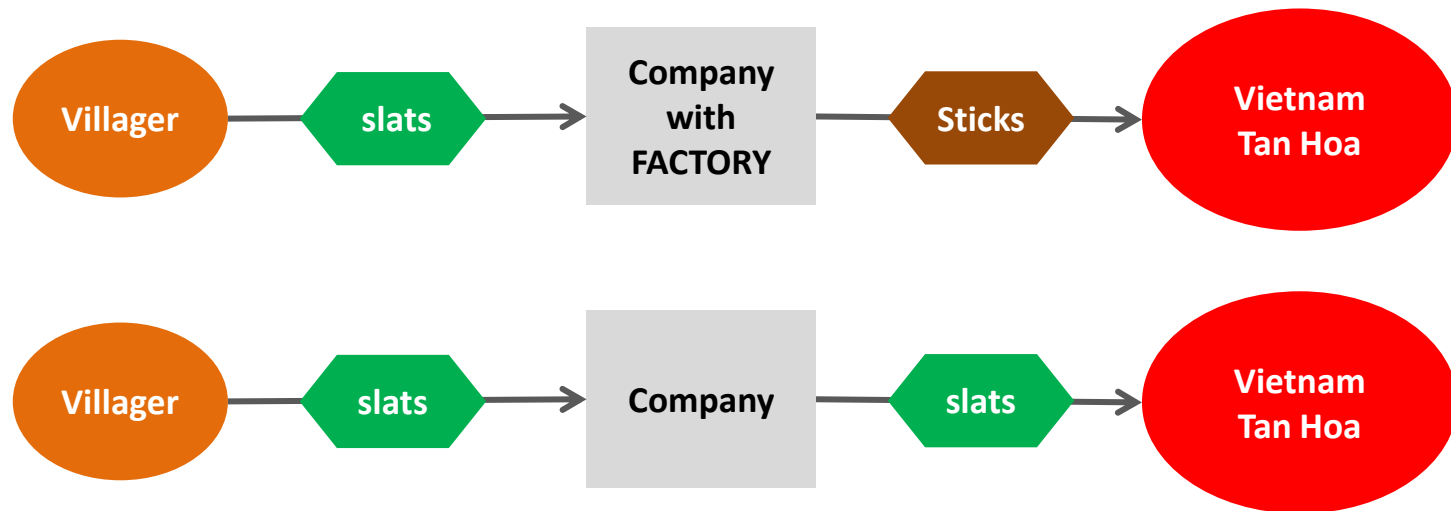




## Example of learning process:

### which business model is better for khouan slats/sticks value chain ?

- In 2013, two « business models » have been tested in the same time: (1) export of slats processed in sticks in a factory; (2) direct export of slats without final processing. The second model allowed to involve more villages and generated higher price to producers thanks to competition among traders during the collecting period. The province compared the risks and benefits of each model before deciding their policy: 80% must be processed, 20% can be exported in slats.





## Example of learning process:

### experiment of Communal Land Titling of bamboo forest plots

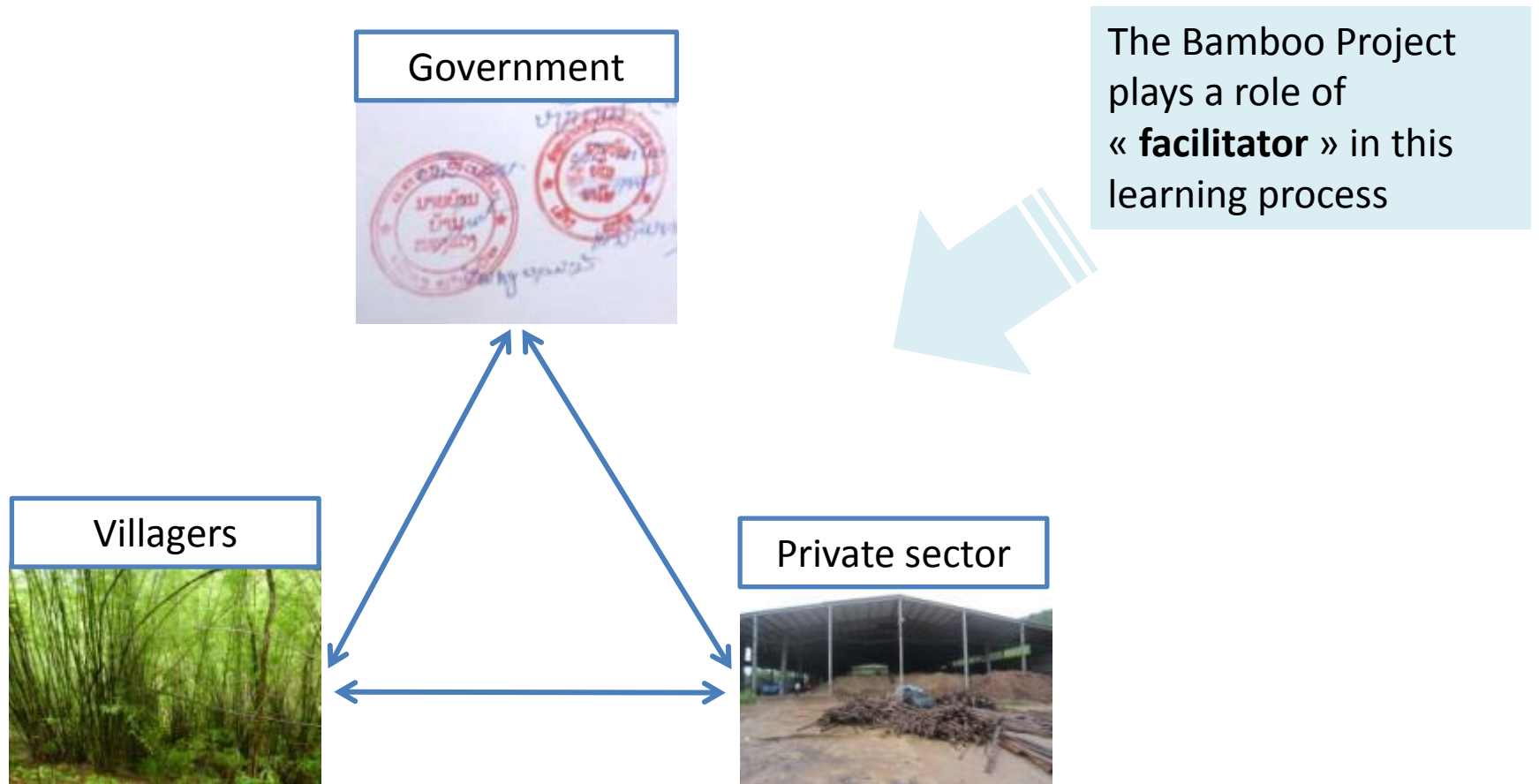
- In 2014, Central level, Province and Viengxay District agreed to experiment the communal land titling (CLT) of bamboo forest plots in 5 villages. This test will provide lessons on method, costs and organization. It has been implemented in one village in June 2014



17 06 2014



# Government facilitates the learning process, with support of the Bamboo Project





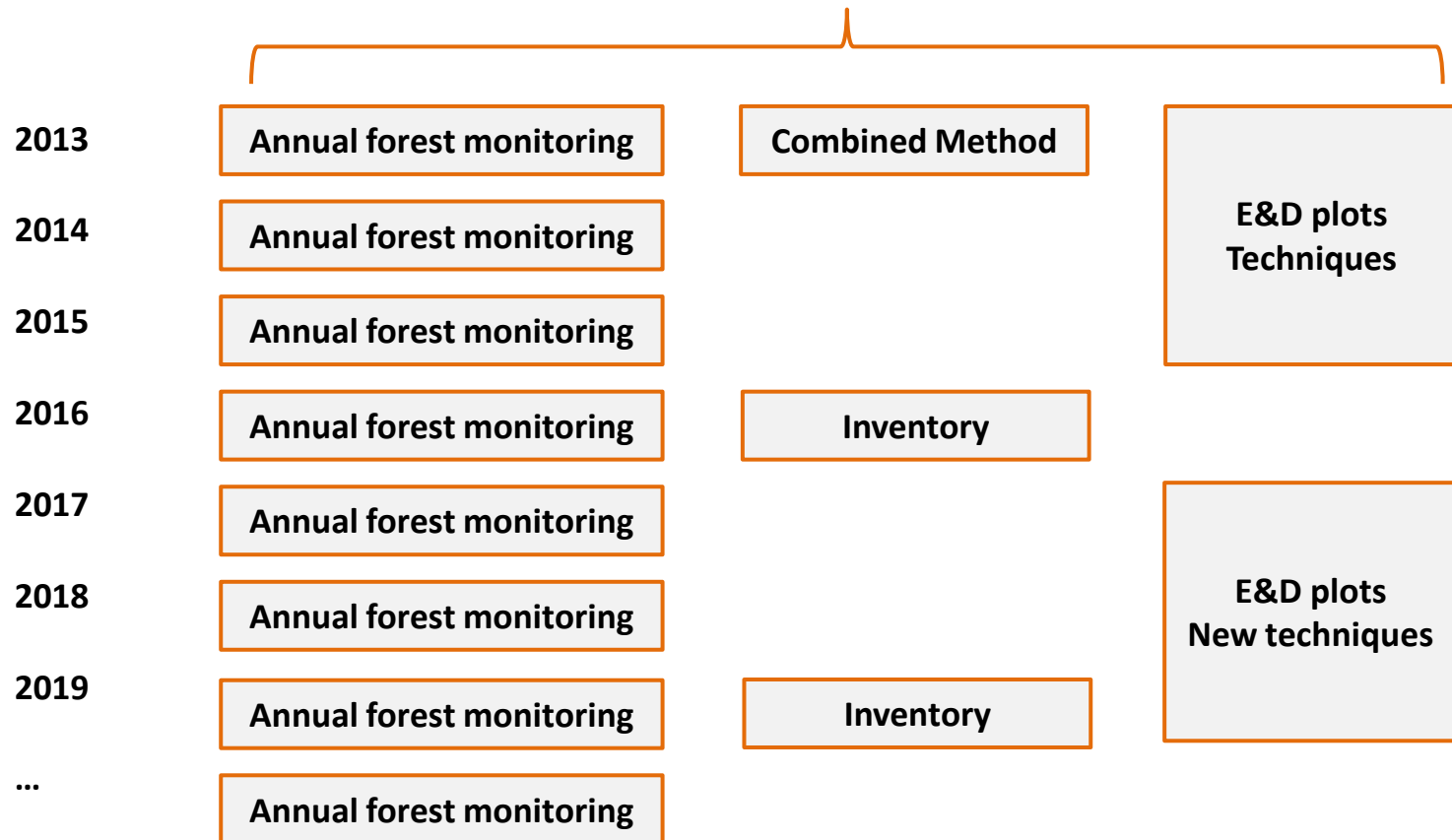
## **Annex 5. Mechanisms in place for the collective learning process**



# Example of mechanism for learning process:

## Combined Method + Annual forest monitoring + E&D plots

- Three complementary mechanisms help to progressively find out the best method for making sustainable bamboo forest monitoring. This involves: PAFO, DAFO, villagers, FRC/NAFRI







## Example of mechanism for learning process: the annual multistakeholder value chain workshops

- At the end of every year, a workshop is organized for each bamboo value chain with all stakeholders involved, for analyzing the results of past year, and discussing key challenges for next year on the value chain. This has been done in December 2012 and 2013. It will be done in December 2014.  
This involve all stakeholders: villages naibans, heads of producer groups, private sector, kumban head, district governor and departments, provincial departments.



## Example of mechanism for learning process: the quarterly District Bamboo Committee meeting

- Every quarter, a meeting is organized with the District Bamboo Committee for assessing achievements, discussing how to solve the difficulties, and validating the action plan. It helps the departments to share information and to coordinate their activities for supporting the bamboo sector.

Main stakeholders: District governor, DAFO, DONRE, DPI, DoIC, DLWU





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