



## Oudomxay NTFP Exchange Meeting 14-17 March 2005

### Workshop Report

#### Participating Organizations:

PAFO Oudomxay, DAFO Xay, DAFO Nam, DAFO Nga,  
DAFO La, DAFO Pak Beng, DAFO Beng, DAFO Houn  
CIAT-PRDU, CIAT-SADU, DED, NAFRI/FRC, LSUARFP,  
IFAD-OCISP, GAA, NUOL, SNV

#### Report written by:

Joost Foppes (SNV) and Thouthone Vongvisouk (NUOL)

## Summary

This is the report of a four-day exchange meeting between organizations working on Non-Timber Forest Products (NTFPs) in Oudomxay Province. The goal of the meeting was to promote learning from existing experience, to identify possibilities for future co-operation and further exchange. A total of 40 people participated in this meeting, 29 from Oudomxay (13 district, 5 province, 11 project staff), 11 from outside. Besides district and province forestry officers, the following organizations were involved: CIAT-PRDU, CIAT-SADU, DED, NAFRI/FRC, LSUARFP, IFAD-OCISP, GAA, NUOL, and SNV.

During the first day, the status of NTFPs in Oudomxay province was reviewed. NTFP activities are on-going in 112 target villages in all 7 districts. The key activities are:

- Planting of NTFPs in gardens, e.g. po sa (paper mulberry), peuak meuak (incense bark), rattans, chinese cardamom, bitter bamboo shoots and medicinal orchids;
- Sustainable management systems and village regulations on harvesting of products such as bitter bamboo shoots, cardamom;
- Marketing groups who sell and process bamboo shoots, peuak meuak bark, grass brooms.
- Studies on monitoring of impact of NTFPs on livelihoods and income of local communities

There were also six presentations on various on-going project activities:

- 1 Overview of the status of NTFPs in Oudomxay Province, PAFO, Mr. Houmpheng Mannithai
- 2 Social Development for Food Security Project, Nga and Xay, GAA. Mr. Vannaphoud
- 3 NTFP research in relation to poverty alleviation, NAFRI/FRC-LSUARFP. Kamphone Sengdala
- 4 Family Nursery Gardens, IPRDP Mai District, Phongsali, DED-GAA Henning Wehebrink
- 5 Experience with beekeeping and honey marketing in Oudomxay, DED-GAA. Horst Wendorf
- 6 Experience of RRA/PRA for NTFP activity planning in Oudomxay. CIAT/PRDU. Keith Fahrney

On the second and third day, participants visited field sites in Na Mo and Nga districts. They identified a great number of lessons learned by operating in small teams, each team focusing on a specific theme, e.g. domestication, management, marketing.

On the last day, there were three additional presentations:

- 1 Small Scale Agriculture Enterprise Development. CIAT-SADU, John Connell
- 2 The Learning Alliances Concept. CIAT, Xaysana Xayarath
- 3 Applying Social Network Analysis (SNA) in agricultural value chains. CIAT, Thomas Oberthur

Participants also reviewed lessons learned from the field trips in small groups. After that each organization presented what it could offer and what it expects from networking on NTFPs. In a summary discussion, a number of follow-up co-operative activities were identified:

- 1) **Capacity Building:** for district staff and village communities on:
  - a. Nurseries, production of planting materials, NTFP plantations
  - b. Marketing and processing of NTFPs
  - c. Regulations for sustainable management of NTFP resources
  - d. Regular data collection, NTFP information system
- 2) **Networking and information exchange meetings:** organize one province level exchange meeting every year at a fixed time and place, to exchange experiences and improve networking and cooperation
- 3) **Knowledge Development** (NTFP trials and demonstration plots with NAFRI support)
- 4) **Exchange visits:** organize study-tours and exchange visits for district staff and villagers, both in and outside the country

Participants evaluated the workshop as very useful. They felt they had learned many new things from each other, that a good basis for future co-operation has been laid. The main comments were on the length of the field trips, one day would have been enough for most participants. OCISP will follow-up in arranging work-plans for support to district activities, as well as making arrangements with NAFRI-FRC and NUOL for future training support. CIAT will follow-up with networking and other learning activities on linking NTFP producers to markets. DED/GAA will expand its range of capacity building support activities for NTFP based income generation and community based natural resource management.

# 1 Introduction

This is the report of an exchange meeting between organizations working on Non-Timber Forest Products (NTFPs) in Oudomxay Province. The goal of the meeting was to promote learning from existing experience, to identify possibilities for future co-operation and further exchange. This introductory session explains the background of the workshop and presents a list of participants as well as the program of the workshop. The remaining sections summarize the events of each of the four days of the workshop. A summary of the main outcomes and possible follow-up activities is given in the final section. A total of 40 people participated in this meeting, 29 from Oudomxay (13 district, 5 province, 11 project staff), 11 from outside.

## 1.1 List of participants from Oudomxay Province

No	Name	Position	Organization
1	Mr. Khamseng	Technical staff	DAFO Beng District
2	Mr. Sonephet	Deputy-chief	DAFO Beng District
3	Mr. Duangchit Mingboupaha	Chief of Agriculture	DAFO Houn district
4	Mr. Kanphay	Forest	DAFO Houn district
5	Mr. Oudone Sounethonethavy	Chief cabinet	DAFO La district
6	Mr. Somehak	Forest	DAFO La district
7	Mr. BouneChou Duangphachit	Chief cabinet	DAFO Na Mo District
8	Mr. Siphone	Forest	DAFO Nga district
9	Mr. Souvanh Chinthilat	Chief cabinet	DAFO Nga district
10	Mr. Chanthay Inthavong	Deputy-chief	DAFO Pak Beng
11	Mr. Thekphathai	Forest technical staff	DAFO Pak Beng
12	Mr. Bouavane	Chief of Unit	DAFO Xay District
13	Mr. Sisouphane Sinphavone	Chief cabinet	DAFO Xay District
14	Mr. Houmpheng Mannithai	Deputy Director	PAFO Oudomxay
15	Mr. Somphone Vilaychit	Capacity Building Unit	PAFO Oudomxay
16	Mrs. Bouavone	Finance	PAFO Oudomxay
17	Mrs. Konemany	Administrator	PAFO Oudomxay
18	Mr. Daovien Sitthirat	Technical staff	PAFO Forestry Section
19	Mr. Somsamoune	Counterpart	Province News Agency
20	Mr. Tou	Technical staff	Province News Agency
21	Mr. Henning Wehebrink	Advisor (NTFP)	DED GAA M Mai (PSL)
22	Mr. Horst Wendorf	Advisor	DED GAA Oudomxay
23	Mrs. Ursula Schmit	Coordinator Rural Development	DED Oudomxay
24	Mr. Bounethome	Forest	GAA Mai District
25	Mr. Souphy	Forestry Officer	GAA Nga District
26	Mr. Vannaphoud	GAA Nga NIFA	GAA Nga District
27	Mr. Bounesong Singnamvong	APM GAA	GAA Xay District
28	Mr. Kaothong	Advisor	IFAD-OCISP/PAFO
29	Mr. Keo Phetsomphou	Deputy-chief of Unit	IFAD-OCISP/PAFO

## 1.2 List of participants coming outside of Oudomxay province

No	Name	Position	Organization
1	Dr. Douglas White	Resource Economist	CIAT-PRDU
2	Dr. Keith Fahrney	Agronomist, Project Coordinator	CIAT-PRDU
3	Dr. Thomas Oberthur	Spatial Analysis Coordinator	CIAT-PRDU
4	Mr. Lao Thao	Project Assistant	CIAT-PRDU
5	Ms. Maria Miguel Ribeiro	PhD candidate Spatial Analysis	CIAT-PRDU
6	Mr. John Connell	Community Development Consultant	CIAT-SADU
7	Mr. Xaysana Xayarath	Research Assistant	CIAT-SADU
8	Mr. Khamphone Sengdara	Chief of NTFP Research Unit	NAFRI-FRC
9	Mr. Phetsamone	Director Forestry Research Centre	NAFRI-FRC
10	Mr. Thoumthone Vongvisouk	Counterpart of NUOL	NUOL
11	Mr. Joost Foppes	NTFP Advisor	SNV-FRC

### 1.3 Program Oudomxay NTFP Exchange Meeting, 14-17 March 2005

Monday 14 March

Time	Topic	Who?
8.30- 9.00	Opening speech by head of PAFO	PAFO
9.00- 9.15	Presentation of agenda of the workshop	Thoumthone, Joost
9.15-10.30	Getting to know each other - names, expectations, - knowledge mapping	Thoumthone, Joost
10.30-10.45	Coffee break	PAFO/ IFAD
10.45-12.00 10.45-11.00 11.00-12.00	Preparing for field trips: -explaining process, tasks, itineraries -splitting into task groups -preparatory discussions in groups on key questions	Thoumthone, Joost
12.00-13.30	Lunch	
13.30-15.00 13.30-13.55 13.55-14.20 14.20-14.45 14.45-15.10	Short presentations on NTFP actions, results, plans: 1. PAFO 2. GAA FSP (Nga) 3. FRC-LSUARFP agro-forestry/ NTFP trial 4. DED/GAA cultivation, domestication	Houmpheng Vannaphoud Kamphone Henning & colleague
15.10-15.30	Tea break	
15.30-15.55 15.55-16.20	Short presentations continued: 5. DED beekeeping 6. CIAT PRDU program	Horst & Souphi Douangchit, Thephathai
16.20-16.30	Summary of the day	Chansamone (FRC)

Tuesday 15 March

Time	Topic	Who?
8.00 – 16.00	Field visit to Namo: -morning: visit DAFO, visit FRC field trials, GAA villages: B. Mixai-cardamom, B.Minatao-peuak meuak -afternoon: Nam Pheng , bamboo shoots marketing	PAFO, SNV/ FRC/ GAA

Wednesday 16 March

Time	Topic	Who?
8.00 –16.00	Field visit to Nga district DAFO, visit GAA activities:NTFP nurseries, village groups, demonstration plots	PAFO, DED/ GAA

Thursday 17 March

Time	Topic	Who?
8.30- 9.00	Introduce agenda of today, Split up into thematic groups	Thoumthone, Joost
9.00-10.00	Prepare posters with lessons learned, possibilities for learning alliance in each group, hang them on the walls	Three thematic groups
10.00-10.15	Coffee break	PAFO, IFAD
10.15-11.15	Short presentations of each group with discussions: 1) planting/domestication 2) marketing/processing 3) Training/social aspects	Group representatives
11.15-12.10	Overview of SADU marketing systems development model and success story	John Connell (CIAT)
12.10-12.30	Examples of CIAT spatial analysis research applied to marketing of NTFPs in Laos	Thomas (CIAT)
12.30-13.30	Lunch	PAFO, IFAD
13.30-13.45	Introduction to CIAT Learning Alliance on Linking Farmers to Markets	Xaysana (CIAT)
13.45-14.45	Each organization produces its own poster: - Who we are, what we do on NTFPs - What we can offer to networking in the province - What we expect from networking in the province	Each organization separately
14.45-15.00	Tea break, hanging posters on the wall	PAFO, IFAD
15.15-16.00	Information market: exchanging by walking around	All
16.00-16.30	Conclusions and closure	PAFO

## 2 Presentations and Discussion of Day 1

### 2.1 Overview of activities of Day 1 (Monday 14 March 2005)

The first day of the workshop was aimed at introducing participant organizations and individuals to each other. After an official opening by Mr. Houmpheng Mannithai, deputy head of the Province Agriculture and Forestry Office (PAFO), each participant introduced his or her self. A short exercise on mapping NTFP activities was followed by a session where participants broke up into teams to prepare for the field visits on day 2 and 3. The rest of the day was filled with six presentations on various project activities.

### 2.2 Mapping NTFP activities in Oudomxay province

All participating organizations were asked to list their NTFP target villages in all seven districts of Oudomxay. Participants arrived at a number of 112 target villages where NTFP where NTFP activities are taking place (see table 1).

**Table 1: List of villages with on-going NTFP activities in Oudomxay Province**

No	La	Na Mo	Xay	Beng
1	Ban Tat Mouan	Ban Nam Pheng	Ban Vang Nyan	Ban Lay Noy
2	Ban Ta Ngeui	Ban Na Home	Ban Houay Toum	Ban Bong
3	Ban Phon Savanh	Ban Na Kham	Ban Khon Kaen	Ban Kam
4	Ban Houa La	Ban Mai Na Tao	Ban Houay Va	Ban Tang Sone
5	Ban May Houa Sing	Ban Mou Teun	Ban Nok Kot	Ban Nang
6	Ban Mok Lahang	Ban Phou Pat	Ban Na Ngiu	Ban Kai Gnay
7	Ban Talo Lom	Ban Vang Ang	Ban Houay Houn	Ban Tang Khou
8	Ban Kok Mai Nyai	Ban Phou Euad	Ban Houay Sa	Ban Pom
9	Ban Akang	Ban Phou Hom	Ban Nok Kok	Ban Tha meun
10	Ban Nong Boua	Ban Hom Xay	Ban Km 32	Ban Na Home
11		Ban Phou Om	Ban Tha Sa Leuang	Ban Sa Vang
12		Ban Na Mo	Nam Nga zone (10 Villages)	Ban Phia Houa Nam
13		Ban Pan Thong	Nam Bak zone (5 Villages)	Ban Na Long
14		Ban Phang Khou	Phone Home zone (4 Villages)	Ban Phon Sa-art
15		Ban Mixay	Ko Noy zone (3 Villages)	Ban Na Pa Neua
16			Ban Chom Seng	Ban Kan Vang
17			Ban Na Say Thong	
18			Na Hong zone (5 Villages)	
<b>Tot:</b>	<b>10</b>	<b>15</b>	<b>13+27= 40</b>	<b>16</b>

No	Nga	Houn	Pak Beng	Summary:	No:
1	Ban Mai	Ban Phou Lao	Ban Kone Xang	<b>La</b>	<b>10</b>
2	Ban Phone Kham	Ban Phou Lat	Ban Kong Vong	<b>Na Mo</b>	<b>15</b>
3	Ban Nong Tao	Ban Kone Theuy	Ban Mak Chong Nyai	<b>Xay</b>	<b>40</b>
4	Ban Na Kok	Ban Chan Vang	Ban Mak Choy Noy	<b>Beng</b>	<b>16</b>
5	Ban Kone Toy	Ban Som Xay	Ban Xay Sana	<b>Nga</b>	<b>9</b>
6	Ban Seng Chod	Ban Na Xieng Di	Ban Khiou Kou	<b>Houn</b>	<b>16</b>
7	Ban Keo	Pha Kham zone (4 Villages)		<b>Pak Beng</b>	<b>6</b>
8	Ban Phou Houad	Phou Xae zone (6 Villages)			
9	Ban Done En			<b>Grand Total</b>	<b>112</b>
<b>Tot</b>	<b>9</b>	<b>6+10=16</b>	<b>6</b>		

On a separate sheet, all organizations were asked to arrange their activities into five classes:

- 1) planting/domestication/nursery work
- 2) village forest management/land use planning/sustainable harvesting systems
- 3) marketing/processing
- 4) role of NTFPs in livelihoods
- 5) any other topics

Table 2 summarizes the outcomes of this exercise.

**Table 2: Main themes of NTFP work in Oudomxay Province**

<b>Organization</b>	<b>Theme 1: Domestication</b>	<b>Theme 2: Regulations, Management</b>	<b>Theme 3: Marketing/ Processing</b>	<b>Theme 4: NTFPs and Livelihoods</b>
GAA Xay	a) Planting cardamom, peuk meuak, rattan, b) nurseries of peuk meuak, rattan	Setting up village harvesting rules for NTFPs	Organizing NTFP selling groups for bamboo shoot selling, export to China	Villagers set up village development fund from NTFP income
IFAD-CISP	Planting of peuk meuak, mak kha by cuttings in farmer fields	-Organizing village groups for planting NTFPs -Setting village use rules for NTFP harvesting		Studying income from NTFPs at village level
LSUARFP	Planting of nor khom, rattan, cardamom in B. Pangthong Planting of orchids by cuttings, peuk meuak and po sa in B, Namo Neua			
NAFRI-FRC (IUCN)	Cardamom gardens in M. La	Selling group in Ban Nam Pheng, Na Mo Bitter bamboo-shoot forest management rules system, same village	That Mouan village group to making and selling brooms, bitter bamboo selling group in Ban Nam Pheng, Na Mo	
GAA Nga	Planting of peuk meuak, po sa, rattan. agarwood in nurseries and gardens		Processing of bitter bamboo shoots with selling groups	Study on income of villagers from NTFP
NAFRI-FRC (Asean-EU)	Planting trial of cardamom in Ban Nam Pheng, Na Mo			

### **2.3 Preparing field trips: thematic groups**

Participants were asked to choose for a particular theme to study during the field trips of days 2 and 3. They were asked to specifically gather information on each theme and report back to the general group after the field trips. There was a lot of interest in policies and regulations.

Four groups were established:

- 1) Domestication
- 2) Marketing and Processing
- 3) Policies and regulations (I)
- 4) Policies and regulations (II)

Each group was then asked to discuss and prepare:

- 1) a list of key questions to answer during the field trip
- 2) division of tasks within the team: interviewer, note-taker, observer, etc.
- 3) clear agreements on buying lunch and other preparations for the trip

This exercise provided a good preparation for the field work.

### **2.4 Presentation 1: PAFO- Overview of the status of NTFPs in Oudomxay Province. By: Mr. Houmpheng Mannithai, deputy head PAFO.**

Oudomxay Province has 7 Districts. It borders to the north with Phongsaly Province, to the South with Xayabouly Province, to the East with Luang Prabang Province and to the West with Luang Namtha and Bokeo Province. The population is 253,047 people, Female: 124,770. There are three main ethnic groups: Khamu 60%, Lao Loum (low land) 25%, Hmong 15%. The total surface area is 15,370 km<sup>2</sup>, 80% is covered by uplands, only 15% by flat land. Forests cover 11% of the Province. Average of temperature: 18-20° C, Maximum 33° C, Minimum 6.8° C. The average annual rainfall is 1,011 mm.

Status of tree multiplication:

- Production of seedlings: 1,689,580 in the year of 2003-2004
- Ketsana (agarwood): 112,350
- Rubber: 1,190
- Tea 100 hectare
- other NTFP seedlings 19,400

Extension of NTFP plantations:

peuak meuak bark	176 ha (protected wild stands)
mak neng (cardamom)	300 ha (protected wild stands)
po sa paper mulberry	261 ha
kha wild galangal	7 ha
ketsana agarwood	3.6 ha
rattans	6 ha
normai khom bitter bamboo	520 ha (protected wild stands)
mulberry for silk	4 ha

The main problems in NTFP extension are:

- people do not use proper techniques
- forest was slashed and burned to plant new plantations
- Forest fires still damage new NTFP plantations every year

Solutions:

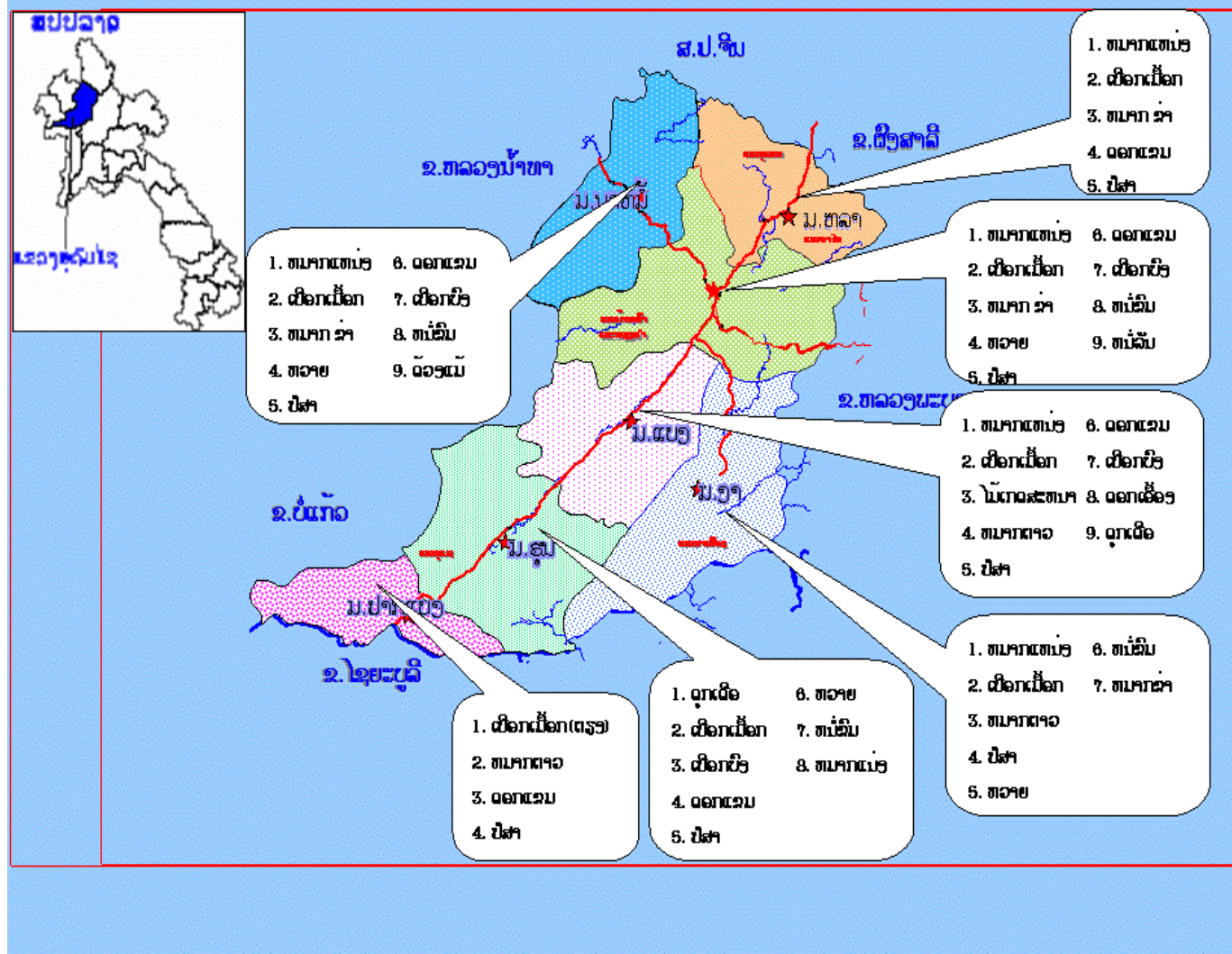
- Technical training on sustainable harvesting techniques for villagers
- Stricter regulations on harvesting of NTFPs
- Protection of wild stands and planting of NTFPs in gardens

Future planning:

- Support villagers to delineate areas for harvesting and planting in designated "regeneration forest" areas
- Delineate NTFP production areas for those villages who did not yet do so
- Exchanges of experiences with places where successful cases were developed
- Processing raw materials to produce higher value export products
- Protect and manage natural NTFP resources in a sustainable manner
- Fund raising from other organizations to support NTFP extension work



Figure 1: Map of Oudomxay province, its seven districts and key NTFP villages (source: PAFO Oudomxay).





**2.5 Presentation 2: Social Development for Food Security Project in Xai and Nga District, Oudomxai province, GAA. Presented by : Vannaphoud.**

**1: Planning of NTFP activities**

NTFP activities are planned according to two planned project outputs (2 and 4):

**Outcome 2:** Villagers who are living in all target villages are successful in gaining additional income from NTFPs' activities.

**Indicators**

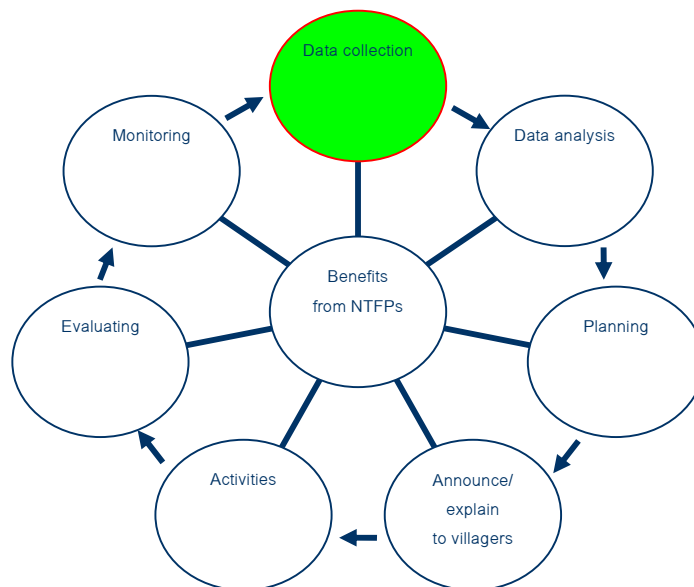
1. 20% of poor households and 10% of middle income households can get benefits from agriculture activities and natural resources management issues in every year .
2. Village's fund organized for livestock and cropping, are used 40% by poor households and 20% by middle income households.
3. A village recycling fund is organized supporting female activities in three villages, each fund can increase at least with 5% per year.
4. At least 50% of villagers participated in the activities and are happy with the outcomes

**Outcome 4:** Natural resources Management in sustainable were participated by villagers.

**Indicators:**

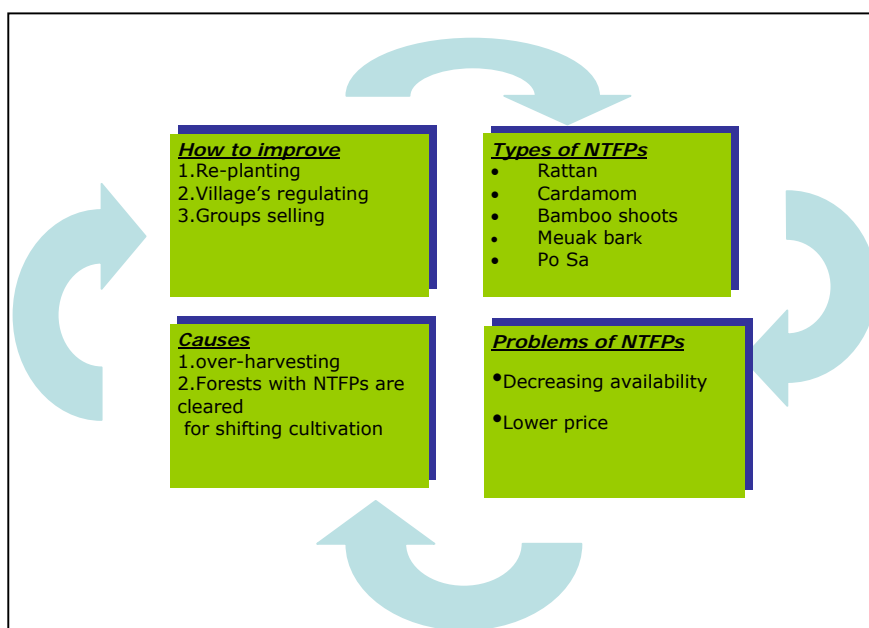
1. Declining of deforested by villagers in 11 target villages.
2. Natural resources use regulation was organizing by the villagers in 11 villages.
3. At least 5 villages could separate two different zone of natural resources such as conservation and usage zones.
4. At least 30 ha of NTFPs plantations have been established by villagers in the target villages.
5. Distribution knowledge on natural resources conservation to students at primary school level (at least 2 primary schools).

**2: Process of supporting villagers to get benefits from NTFPs**



**3: Data collection (PRA)**

- There are 11 target villages of the project, we collected data in 7 villages. Key outcomes:
  - 1: Villagers collected in 51 species of NTFPs:  
29 species of plants, 22 species of wildlife
  - 2: the most useful NTFPs are:  
1) Peuk meuk bark, 2) Po Sa, 3) Cardamom, 4) Mark Kha, 5) Rattan, 6) Bamboo shoots, 7) Fish, 8) Wildlife
  - 3: Villagers participated for NTFPs analyzing (see diagram below)



#### 4: Support to villagers for NTFPs nursery establishment:

2004:	2005:
7 nurseries, 6 villages and 12 families Production of NTFPs seedling about 27,860 seedlings	7 nurseries, 6 villages and 12 families Production of NTFPs seedling about 35,980 seedlings, of which 200 Kg of rattan seedling.

#### 5: Activities on NTFPs plantation in 2004:

##### A: NTFP Plantations

NTFPs were planted from nurseries to gardens in 3 villages and 97 families, 43,38 ha, 6 species of NTFPs:

- Mai ketsana
- Cardamom
- Mak Kha
- Posa
- Peuak Meuak bark
- Rattan



##### B: Groups on NTFPs selling and harvesting regulations

- 1 village 76 families
- 10 committees

##### C: Natural resource conservation groups:

- 6 villages and separate to 6 fish protection zones.
- Each zone covers 2,740 meters length of stream

#### 6: Future plan:

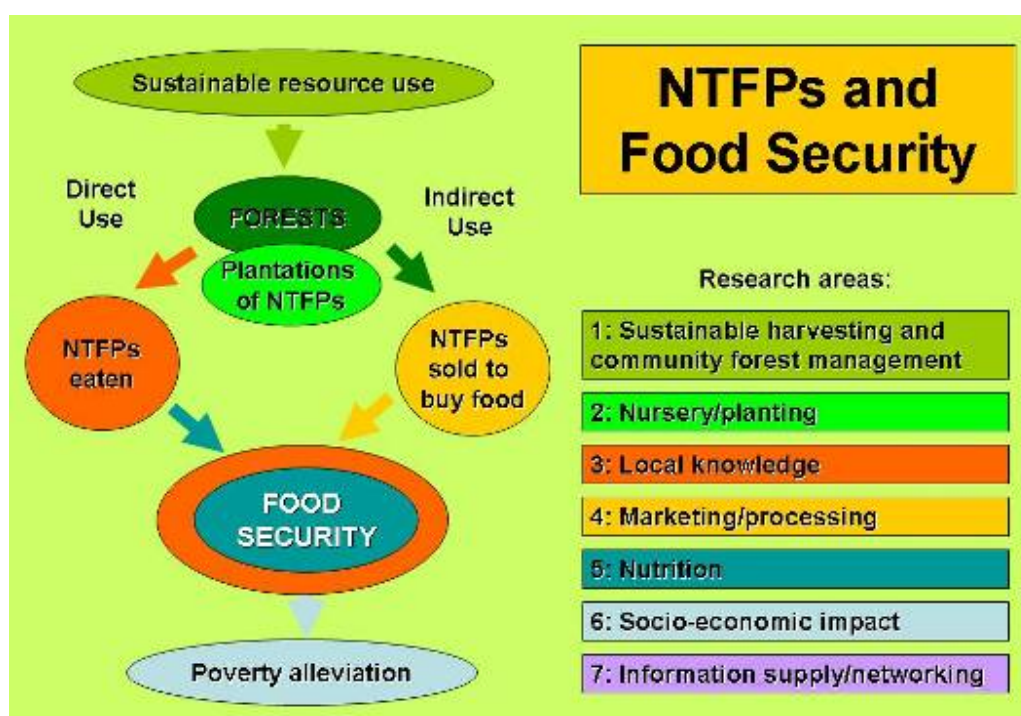
- Nursing NTFPs at 6 villages and 12 families
- Planting NTFPs at 6 villages, 150 families and 70 ha
- Marking regulation of NTFPs at 3 villages
- Grouping sale of NTFPs at 3 villages
- Improving NTFPs quality at 4 villages



**2.6 Presentation 3: NAFRI/LSUARFP: NTFP research in relation to poverty alleviation. By: Kamphone Sengdala, NAFRI-FRC/LSUARFP**

Non-Timber Forest Products (NTFPs) contribute both directly and indirectly to food security for rural communities in Lao PDR (see picture below). People manage NTFP resources in forests and gardens, they consume forest food products directly or they sell forest products to buy food. Analyzing these steps produces a range of research areas (see picture below). The NTFP unit of the Forest Research Centre (FRC) is a part of the National Agriculture and Forestry Research Institute (NAFRI). Details of each NTFP research area are presented below.

The NTFP unit offers research support to field organizations and also provides information services and networking support. Presently FRC is implementing on-farm trials in Na Mo district of Oudomxay Province with support of the Lao-Swedish Upland Agriculture and Forestry Research Program (LSUARFP). These trials include various agro-forestry models for intercropping NTFPs with other plants.



<p><b>Research area 1: Sustainable harvesting/ community forest management studies</b></p> <ul style="list-style-type: none"> <li>• <i>On-going studies at NAFRI</i> <ul style="list-style-type: none"> <li>– Agroforestry systems study, Somphachanch Vongphaxouvane</li> </ul> </li> <li>• <i>Completed studies</i> <ul style="list-style-type: none"> <li>– Various rattan studies, Khamphone Sengdala, Tom Evans e.a. 2001</li> <li>– Bitter bamboo case study, Viloune Soybara and Sounthone Ketphanh, 2000</li> <li>– Wild frog management study, Rachel Dechaineux, 2001.</li> </ul> </li> <li>• <i>Links to other sustainable harvesting studies</i> <ul style="list-style-type: none"> <li>– NUOL bamboo harvesting studies, Sangtong training forest.</li> </ul> </li> </ul>	<p><b>Research area 2: Nursery/plantation trials</b></p> <ul style="list-style-type: none"> <li>• <i>On-going studies at NAFRI</i> <ul style="list-style-type: none"> <li>– Cardamom planting study, Sounthone Ketphanh</li> <li>– Edible rattan shoots planting study, Kamphone Sengdala and Oulathong</li> <li>– Orchids planting study, Kamphone Sengdala and Bounlieng</li> <li>– Pheuak meuak planting study, Houmchitsavath Sodalack</li> </ul> </li> <li>• <i>Completed studies</i> <ul style="list-style-type: none"> <li>– Silviculture by villagers, Joost Foppes and Sounthone Ketphanh, NAFRI/IUCN/RECOFTC, 1999.</li> </ul> </li> <li>• <i>Links to other plantation trials</i> <ul style="list-style-type: none"> <li>– Domestication of ketsana and bong bark by various PAFO nurseries in south Lao PDR</li> </ul> </li> </ul>
<p><b>Research area 3: Local knowledge studies</b></p>	<p><b>Research area 4: NTFP marketing studies</b></p> <ul style="list-style-type: none"> <li>• <i>On-going studies at NAFRI</i></li> </ul>

<ul style="list-style-type: none"> <li>• <i>On-going studies at NAFRI</i> <ul style="list-style-type: none"> <li>– Study on traditional agroforestry systems, Houmchitsavath Sodalack and Olle Forshad</li> </ul> </li> <li>• <i>Completed studies</i> <ul style="list-style-type: none"> <li>– The use of NTFPs in Lao PDR, Joost Foppes and Sounthone Ketphanh, NAFRI/IUCN, 1997</li> <li>– Handbook of NTFPs in Lao PDR, Vichit Lamxay and Sounthone Ketphanh, NAFRI/NUOL 2000.</li> </ul> </li> <li>• <i>Links to other local knowledge studies</i> <ul style="list-style-type: none"> <li>– Medicinal Plants Research Institute, Ministry of Health, Dr. Bounhong</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>– Private Sector Development Survey, Kamphone Sengdala</li> <li>• <i>Completed studies</i> <ul style="list-style-type: none"> <li>– Case study on constraints in marketing of NTFPs in Champasak Province, N.J. Enfield, Bandith Ramangkoun and Vongvilay Vongkhamasao, NAFRI/IUCN, 1998.</li> <li>– Case study on marketing of bitter bamboo shoots, Viloune Soybara and Sounthone Ketphanh, NAFRI/IUCN, 2000.</li> </ul> </li> <li>• <i>Links to other marketing studies</i> <ul style="list-style-type: none"> <li>– FAO NAFRI NTFP marketing systems analysis and small enterprise development project (to be started 2004)</li> </ul> </li> </ul>
<p><b>Research area 5: Nutrition studies</b></p> <ul style="list-style-type: none"> <li>• <i>On-going studies at NAFRI:</i> <ul style="list-style-type: none"> <li>– none</li> </ul> </li> <li>• <i>Completed studies:</i> <ul style="list-style-type: none"> <li>– Kate Clendon with Sangthong Phommakhot, 2001, The Role of Forest Foods in Village Livelihood Systems, NAFRI/IUCN.</li> </ul> </li> <li>• <i>Links to other nutrition studies:</i> <ul style="list-style-type: none"> <li>– National Cultural Research Institute, Research on role of forest foods in culture an nutrition, Dakchung district, Sekong. Jutta Krahn and Bounphanh Rattanavong.</li> </ul> </li> </ul>	<p><b>Research area 6: Socio-economic impact studies</b></p> <ul style="list-style-type: none"> <li>• <i>On-going studies at NAFRI</i> <ul style="list-style-type: none"> <li>– Socio-economic diagnostic surveys, Lingkham and John Raintree</li> </ul> </li> <li>• <i>Completed studies</i> <ul style="list-style-type: none"> <li>– NAFRI/IUCN, Forest extraction or cultivation? Case study, 2001, Joost Foppes and Sounthone Ketphanh</li> </ul> </li> <li>• <i>Links to other socio-economic studies</i> <ul style="list-style-type: none"> <li>– WWF/IUCN valuation study of forests in Sekong Province, 2003,</li> <li>– IUCN: Bitter bamboo and sweet living, evaluation study, Jason Morris and Sounthone Ketphanh, 2003</li> </ul> </li> </ul>

## **2.7 Presentation 4: Family Nursery Gardens. By: Henning Wehebrink, DED-GAA Integrated Poverty Reduction Project in Mai District, Phongsali Province**

Family Nursery Gardens are seen as an important facility to enable farmers in mountainous areas improving and diversifying their land-use systems for income generation and subsistence farming. We are now in the 2nd year of nursery activities, now ca.55 Families (1st year 5 families). Nursery gardens have sizes of between 15 and 50 m<sup>2</sup> per family.

The project is strengthening local capacities by:

- Training committed farmers in site selection, establishment and maintenance of nursery gardens
- Supporting the initial establishment with essential materials (Shade Cloth, Poly-bags, Hoes & Shovels, Watering Cans, Soil Sieves, Shears)
- Identify and support key-farmers as future resource-persons for village and district
- Farmer to Farmer exchanges of already gained experiences

Layout and species selection are in accordance to farmers interests; the project is assisting in identification and testing of potentially viable species Farmers Preferences in Mai district are:

- Peuak Meuak
- Po Sa
- Fruittrees (Maak Lamuth, Lamnjai, Lintchi, Khai, Khaam)
- Multipurpose Trees (Mai So, Sak, Hian, Duu, Thaekha, Kadau, Khilek, Khae Hom, Ketsana, Njaan)
- Rattan Species

What are the lessons learnt?

- Don't make farmers grow something that you think could be good for them; most farmers know already what they want.
- Don't put pressure on farmers to run nurseries on community or group level if they prefer their own garden.
- Encourage and involve women in all activities and decision-making processes, since they are doing a large share of the work

## **2.8 Presentation 5: DED/GAA experience with beekeeping and honey marketing.**

**By: Horst Wendorf, DED-GAA**

Bees are insects, which feed on pollen and nectar. Honey bees are social insects which live in colonies and have a division of labour. All honey bee colonies store honey and pollen in combs as food reserves. How much honey they will generate is dependent on climate, season and flowering of plants.

There are four honey bee species existing in the world:

- The Western honey bee "*Apis mellifera*"
- The Asian dwarf honey bee "*Apis florea*" (mim)
- The Asian giant honey bee "*Apis dorsata*" (poeng hang)
- and the Asian or oriental honey bee "*Apis cerana*" (poeng gkoon)

Out of the three Asian honey bee species only "*Apis cerana*" (poeng gkoon) can be kept in bee hives. In Laos "*Apis cerana*" has been kept for hundreds of years in log hives. Log hives are wooden hollow logs, which are put in upright position with an entrance hole for the bees.



Beekeepers take the empty log hive to the forest or to their shelters in the rice field to wait for bees to come. If bees have occupied the hive, it is carried to the village and placed at the rice store. Between March and May, when most trees are flowering, the bees make honey.

Usually in May, when the honey is ripe, the beekeeper opens the hive and removes the honey. Honey is ripe, if the bees have sealed the honey cells with a wax layer. When opening a log hive and harvested, the combs are all destroyed, the queen often gets killed and the bees abscond. Before the next bee season the now empty log hives are taken again to the forest.



This system of beekeeping has been appropriate to the natural environment and to the economy of small farmers.

However, nowadays log hive beekeeping has many disadvantages:

- ❑ Harvesting pure or good quality honey is difficult because the combs are crushed.
- ❑ Once the hive is opened it has to be cropped, even if the honey is not ripe.
- ❑ The brood is destroyed and the bees cannot stay for the next year in order to start early brood rearing and to produce more honey.
- ❑ Growing villages do not provide sufficient bee forage, because *Apis cerana* has only a flight range of 500 m
- ❑ Wild bee swarms are becoming rare and many log hives do not get occupied by bees.

Therefore the GAA-project in Oudomxai started to introduce top bar hive beekeeping. Top Bar Hives are simple wooden boxes covered with wooden slats, which are called top bars. The top bar hives can be made out of timber or wooden off-cuts. Instead of expensive wood, baskets covered with cow dung may also be used as top bar hives.



However, in advanced beekeeping, all hives should be of equal measurement in order to allow the exchange of top bars and combs between different hives.

- ❑ The top bars must have a width of exactly 28 mm.
- ❑ They should have a groove in its center, which need to be filled with beeswax.
- ❑ Bees built their combs beneath and along the bars
- ❑ The combs can be moved and inspected.
- ❑ Ripe honey can be harvested of good quality



Top Bar hive beekeeping can only be successful if the beekeeper knows about bee biology and bee behavior and practices bee management methods. Bees usually do not occupy the top bar hive. The beekeeper has to get bees and transfer them into the hive. The best way is to catch a swarm of bees clustering in a tree. Brush the bees into a box, find the queen and cage her for a few days and shake the bees into the new hive. With successful management the bees will stay throughout the year.

Let's look at the beekeepers work throughout the year. Usually in January and February, the bees start flying in greater numbers. The colony expands because the first plants are flowering. In February the beekeeper should open and check his hive. If the hive is almost full with combs and plenty of drones can be seen, there is a danger of swarming. Swarming is a natural process, in which the bees rear new queens and divide themselves in two or more new colonies. The knowledgeable beekeeper knows how to prevent swarming. If not, most of his bees will go.

In February the beekeeper may split his colonies himself in order to increase the number of his hives. Advanced beekeepers are also able to rear new queens themselves. In March and April, during the main flowering season, the bees turn the nectar into honey and in May the beekeepers usually harvest the hives.

Not every hive is occupied by bees and not every occupied hive generates honey. Between 2 to 5 kilograms per hive may be expected from a well developed colony. It is most important, that the beekeeper leaves at least 2-3 brood combs with some honey on top for the bees' survival.



The comb honey has now to be processed into liquid honey. Only ripe honey comb pieces without brood or pollen should be processed. The liquid honey must have a water content below 20 %, which can be measured with a refractometer, otherwise it will ferment soon. The honey should be stored in plastic buckets for at least one week until wax residues have surfaced, which will be skimmed off. Honey must always be stored safe from ants. Beekeepers, who want to go into formal marketing, must bottle and label their honey.



The following time, from June to December, are the most difficult months for the bees' survival and the beekeeper has to help the bees to stay in the hive. When the rain starts end of May, the queen reduces egg-laying and the colony becomes very small. The beekeeper has to check the hive at least once in a month in order to remove old and unused combs. If this is not done, the wax moth may enter the hive and spread until the bees abscond.

In case of long periods of rain and cold, when no plants are flowering, some colonies cannot survive without feeding. Water and refined sugar mixture half and half is the best food for the bees. The bees must constantly maintain a temperature of 35 degrees Celsius on the brood combs. Sufficient ventilation must therefore be provided, otherwise the hive gets too wet inside.



Predators like wasps and ants are a permanent danger. Queen excluders may prevent the wasps from entering. They can be made out of metal, plastic baskets or local materials. The excluder may also prevent the bees from absconding because they will rarely leave the queen behind. Once the beekeeper has managed to pass the rain and the cold, he can look forward to the next honey crop.

We have seen now the advantages of the top bar hive system. However, this type of beekeeping needs investment and considerable skills and knowledge. The beekeepers should experiment, calculate and decide, which system is the most appropriate for them!



**2.9    *Presentation 6: Experiences with RRA/PRA for NTFP activity planning in Oudomxay. By: Lao Tao and Keith Fahrney, CIAT/PRDU.***

### 3 Field trips of Day 2 and Day 3

#### 3.1 Day 2 field trip to Namo district



Presentation by Na Mo District Forestry Officer



Arriving in Namo Neua

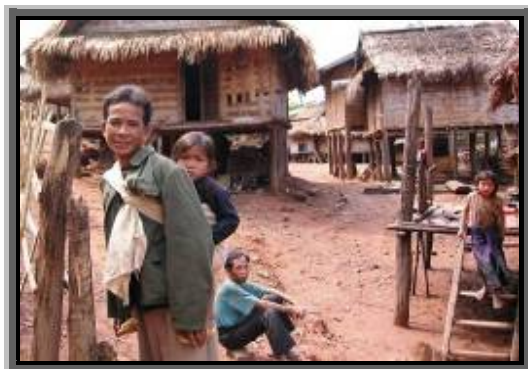


Bitter bamboo selling group, Ban Nam Pheng



Group discussions with villagers in Mai Na Tao

#### 3.2 Day 3 field trip to Nga district



NTFP gatherers, Ban Vang Nyan



NTFP nursery, Ban Vang Nyan



Visit new rattan garden, Ban Vang Nyan



Hedgerows in NTFP gardens, Ban Vang Nyan

## 4 Presentations and Discussions of Day 4

### 4.1 Findings from the field trips: results of four discussion groups

#### Group 1: Planting and propagate seedling of NTFPs (GAA/SIDA)

-GAA/SIDA had supported to villagers in 5 villages for planting following NTFPs species:

- Meuak bark
- Posa
- Rattan
- Cardamom
- Mark Kha
- Mai Ketsana
- Bamboo (Norkhom)

- 1) Sources: Most of sources of NTFPs species are from natural forest
- 2) Techniques of propagate seedling
  - Nursing in the villages
  - Propagation (Stem, root, and seed)
- 3) Planting techniques
  - Planted in bare areas and in the gaps
  - Distance of planting (1x1, 2x2, 3x3, 3x6 matters)
- 4) Techniques for taking care (Kane boua labat hak sa)
  - Cleaning 2--4 time per year
- 5) Harvesting
- 6) Sources of funding

#### Group 2: Marketing and processing NTFPs

1) Marketing in Namo district: <ul style="list-style-type: none"> <li>- Selling group (goom shuo Khay)</li> <li>- Traders had given fund to villagers before harvesting NTFPs</li> <li>- Internal and external market (China and Thailand)</li> </ul>	2) Marketing in Nga district <ul style="list-style-type: none"> <li>- Buying and selling group in district level</li> <li>- Traders from another districts and provinces</li> <li>- Internal and external market (China and Thailand)</li> </ul>
★ Products exported: <ol style="list-style-type: none"> <li>1) Meuak bark</li> <li>2) Dork Khaem</li> <li>3) Bamboo soot</li> <li>4) Posa</li> <li>5) Cardamom</li> <li>6) Peuak bong</li> <li>7) Dork pueng</li> <li>8) Red mushroom (Het daeng)</li> <li>9) Douang mae (a kind of young insect)</li> </ol>	NTFPs species collected for selling: <ol style="list-style-type: none"> <li>(1) Meuak bark</li> <li>(2) Dork khaem</li> <li>(3) Posa</li> <li>(4) Cardamom</li> <li>(5) Mark kha</li> <li>(6) Mark tao (a kind of palm fruit)</li> <li>(7) Bai lai</li> <li>(8) Rattan soot</li> </ol>
3) Processing of NTFPs <ol style="list-style-type: none"> <li>a. Processing of NTFPs organized in 2 districts (Namo and Nga district)               <ul style="list-style-type: none"> <li>- Bamboo soot (make them sour, dry, and sale directly)</li> <li>- Cardamom (make it dry and no bark)</li> <li>- Posa (make it dry and no bark)</li> <li>- Meuak bark (make it dry)</li> <li>- Dork khaem (make it dry in order to make brooms)</li> <li>- Mark kha (make it dry)</li> <li>- Peuak bong (make it dry)</li> <li>- Mark tao (Steam and no bark)</li> <li>- Rattan soot (sale in directly)</li> </ul> </li> </ol>	

### Group 3: NTFPs regulations

Village	Kinds of regulation Existing in the village	How the regulations are implemented	Supported by organizers
Namo Neua	1) Regulation for NTFPs, wildlife and fishes regulation 2) Regulation for controlling livestock	- <u>Zoning</u> + -Conservation zone + -Harvesting zone - <u>Strict</u> + Dating for forest opening and closing + to obey with people who are violated - <u>Benefiting to people who are followed by regulation</u> + Provide land for families that would like to plant NTFPs, and no customs until 3 years + Announce regulation to other villages	- DAFO - SIDA - Village authorities and villagers
Mai na tao	1. Regulation for NTFPs 2. Regulation for forest management 3. Regulation for controlling livestock 4. Regulation for selling and NTFPs	- <u>Zoning</u> + Conservation zone + Harvesting zone + -Production zone (2000) - Grouping sale + Organizing committees to monitor	- DAFO - GAA - Village authorities and villagers
Nam Pheng	1. Regulation for forest management  2. Regulation for NTFPs  3. Regulation for selling NTFPs	- Zoning + NTFPs zone + Protected area + -Utilization area + Conservation area + Harvesting zone - <u>strict (illegal controlling)</u> + Dating for forest opening and closing + Elements controlling for harvesting NTFPs + Contracting with traders - <u>Benefits from implementation regulation of NTFPs</u> + Organize village fund + Villagers can get benefit form NTFPs	- DAFO - IUCN - Village authorities and villagers
Vang Gnan	1. Regulation for NTFPs  2. Regulation for terrestrial animal and fish  3. Regulation for controlling Livestock  4. Regulation for forest management  5. selling group	- <u>Zoning</u> + -Conservation area + -Harvesting zone - <u>Strict (Illegal controlling)</u> + Dating for forest opening and closing + To do something for people who do illegal - <u>Benefits from implementation of regulation</u> + No customs for NTFPs plantation + Villagers who are followed by regulation can get benefit from NTFPs - Organize selling group - Contracting with traders	- DAFO - GAA - Village authorities and villagers

#### ★ Suggestions from group 3.

1. Director/leader from project/PAFO should do a monitoring field activities
2. Methodology for interviewing is not following by step like plan.
3. If we need to interview to get specific information, we should spend more time
4. Villagers in some villages still lack of experiences for implementing regulations.
5. Regulations in the village wasn't with each others
6. If possible, Lao government should continue land and forest allocation in all villages
7. Some regulation is still needed editing and printing out in order to distribute to all villagers who are related.

#### **Group 4. Capacity building for NTFPs management /conservation**

1e

★ Following are some causes for NTFPs planting/management/conservation:

- 1) NTFPs in natural forest is decreasing dramatically.
- 2) Villagers can get income from NTFPs
- 3) Villagers learnt some experiences from project and outside
- 4) After land and forest allocation, villagers have limited area for finding NTFPs

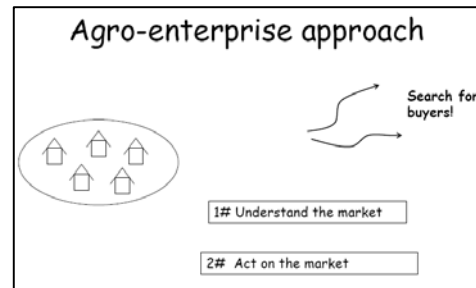
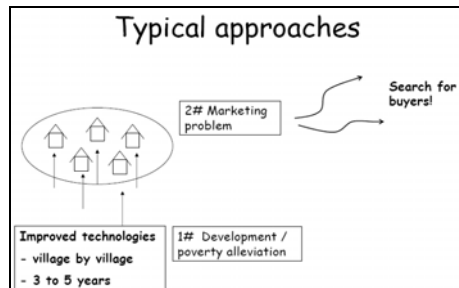
<b>Before project</b>	<b>During project</b>	<b>After project</b>
1) Nobody controls on NTFPs harvesting	1) NTFPs surveying and participated by villagers	1) Villagers understanding that NTFPs can be high income to families
2) No techniques for NTFPs harvesting	2) Study tour and exchange experiences	2) Villagers can be trainers (teach their experiences to others)
3) No idea for planting NTFPs	3)Take some training course (Theories and field practice)	3) Improving village fund from NTFPs by themselves
4) No techniques for planting NTFPs	4) Many NTFPs activities in some villages (Target villages)	4) Transfer Knowledge on NTFPs from elders to children
5) No chance to learn any techniques on NTFPs	5) Organizing village fund from NTFPs	5) They are strong on NTFPs management
6) No supporters/donors	6) Donor support	6) They can support themselves

#### **4.2 Networking expectations from each organization**

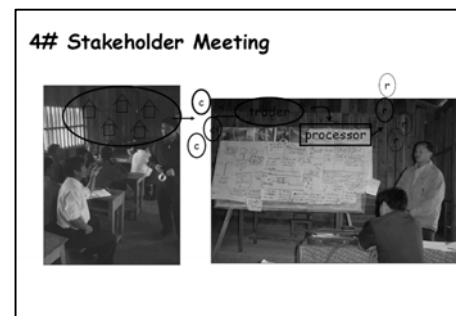
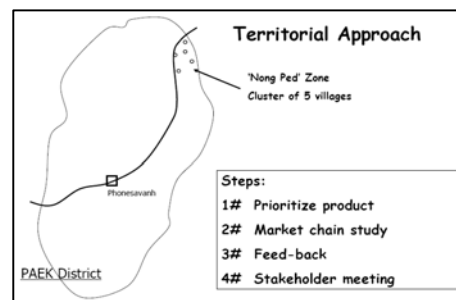
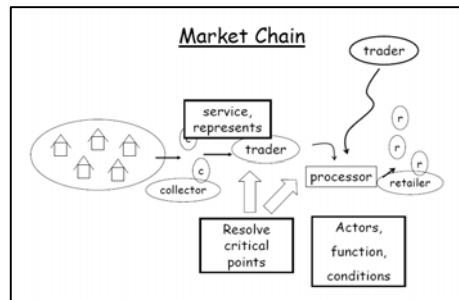
(all posters in Lao language, not translated here)

#### 4.3 Presentation: Small Scale Agriculture Enterprise Development for Uplands. By: John Connell, CIAT/SADU.

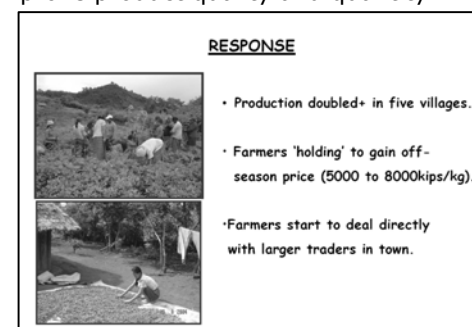
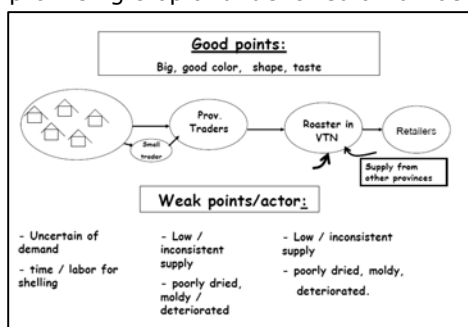
Typical agricultural extension approaches are often focused on improving farmer technologies. Improved technologies often take 3-5 years to develop. Once they are developed, marketing problems start to occur and start being addressed when it is too late. CIAT's Agro-enterprise works the other way round: it starts with an understanding of markets and acts upon it.



Instead of working village by village, CIAT used a territorial approach, working with a cluster of villages, which set up a committee of villager representatives. The CIAT researchers work with this committee to prioritize products, analyze market chains and determine possible actions in a participatory manner. The case presented here is located in Xieng Quang Province.



In stakeholder meetings, villagers and local entrepreneurs focused on peanuts as the most promising crop and identified a number of ways to improve product quality and quantity.






The response was impressive. Within one season, all five villages in one cluster were able to double their production of peanuts. They were able to delay selling to get a better price for their products and started to deal directly with larger traders in town.

Following a farmer field trip to another province, some farmers started setting up their own peanut shelling units. This is a good example of the emergence of new business development services. A local machine maker started a new enterprise by making peanut shelling machines.

**Emergence of new BDS**




Issue: Time for shelling

Study Trip: peanut shellers in Kasi

KEY: Participants included;  
Farmers /Trader/ Machine maker

**New Enterprises**



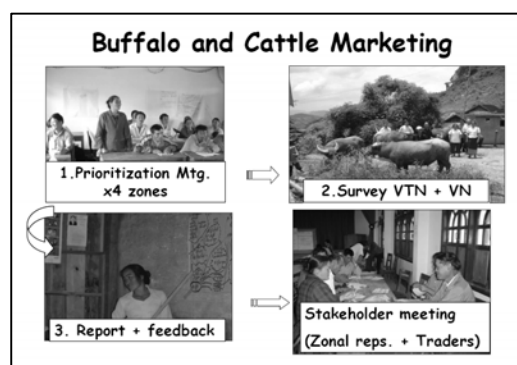
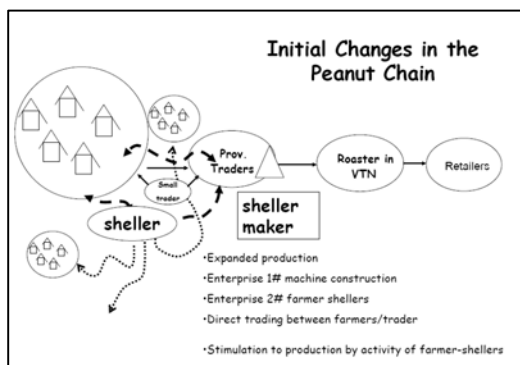
**1# Farmer- Shellers,**  
- local collectors (2 x 2-6 MKip)  
- expanding production  
(farmer - sheller visits 6 extra villages)

**2# Machine maker,**  
2 machines sold already +  
orders for more

In short, a number of changes occurred in the marketing chain of peanuts:

- production was expanded
- two new types of enterprises occurred: 1: machine construction, 2: farmer/shellers
- direct trading occurred between farmers and traders
- the activity of specialized shellers stimulated more farmers to get into peanut farming

Now farmers in the areas are trying to apply the same approach to cattle and buffalo marketing.



The agro-enterprise approach provides many good lessons learned:

- Working with village clusters to select products. Zonal representatives participate in market chain surveys and in meetings with traders.
- Linking village clusters with traders ensures rapid expansion of production through improved understanding of market requirements and production constraints.
- Rapid expansion of production created a demand for improved technologies. Farmers were quick to engage in participatory technology development (PTD).

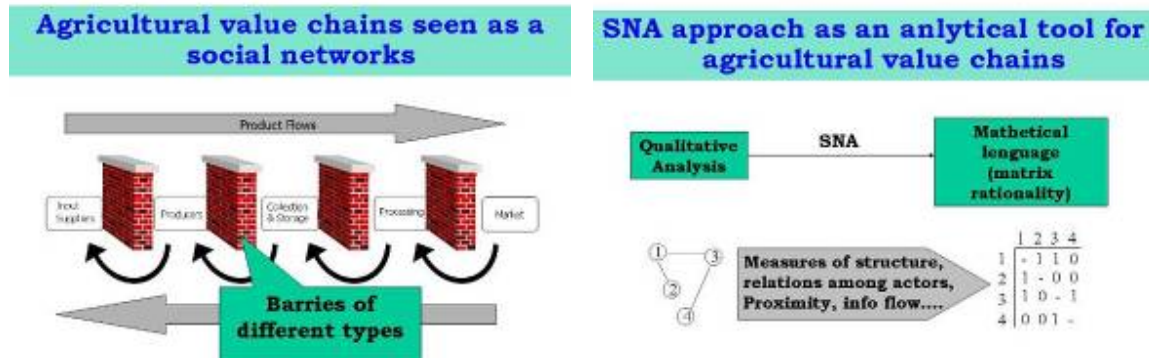
The main challenge that remains is for villagers, district and province staff to adapt this new approach. Start working with village clusters, focus more on traders and markets. Extension staff need to become confident in applying this approach and bring traders and farmers together. CIAT will continue to apply the lessons learned from this approach to new sectors (e.g. livestock) as well as to new provinces (Luang Prabang).

**4.4    *Presentation: Learning Alliances Concept, By: Xaysana Xayarath, CIAT/SADU.***

#### 4.5 Presentation: Applying Social Network Analysis (SNA) in agricultural value chains. By: Thomas Oberthur, CIAT.

##### Why applying SNA approach to agricultural value chains

- Actors in a chain (e.g. Producers, processors or traders) build ties and relations = a social network
- The analysis of its **structure** and **function** could be used to **measure** the flows of goods, resources and information
- Social relations **create** or **constrain** opportunities for actors in the chain



##### Need to analyze spatial aspects of social networks

- Ties and relations between actors are influenced by opportunities and barriers to contact
- Spatial attributes like proximity, topography and land use can influence access goods, resources, information and power in a the chain, creating asymetries among actors

##### An example of the coffee chain in Caranavi, Bolivia

- Boosting the production and marketing of High-Value Crops through enhanced Information Networks

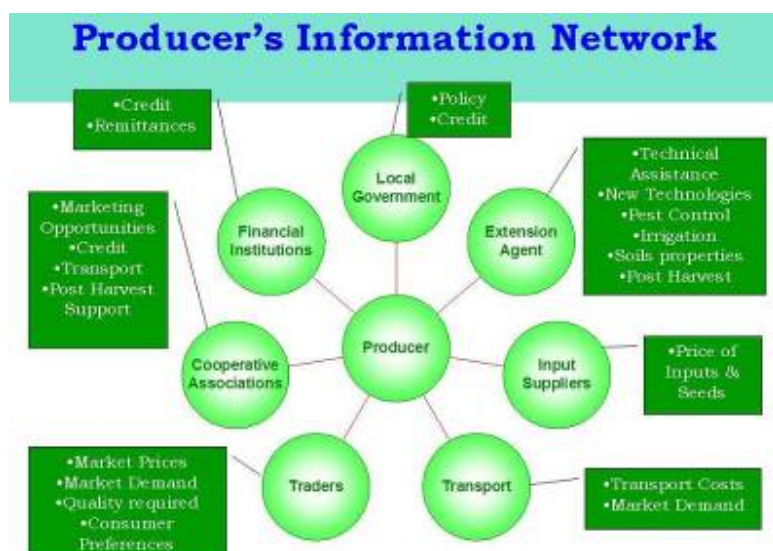
- Hypothesis: spatial distribution influences the type of information and canals

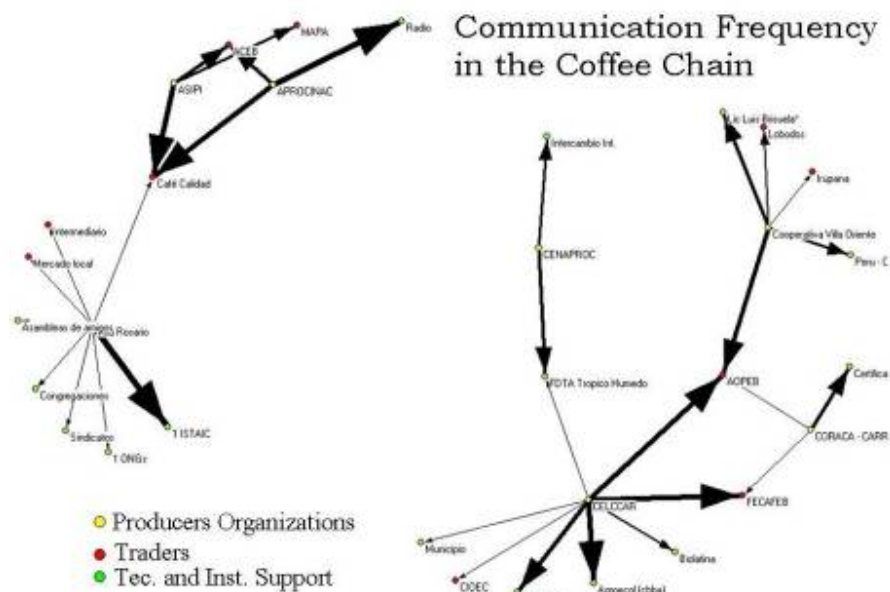
Need to characterize the supply chain to:

—know the information flowing and information required

—Identify information canals (roads, radio, internet, phone, etc.)

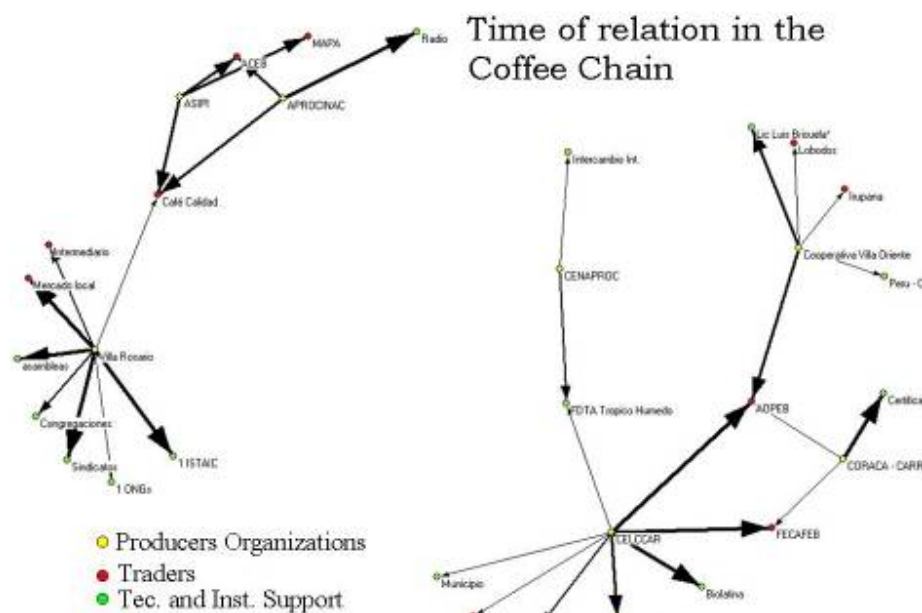
—Prioritize areas of common interest to enhance information flows (e.g. competitive)





#### Questions rising from the graph?

- Why the two networks in the same municipality are not connected?
- According to the normalized highest input degree the most important actors are AOPEB and Café Calidad, why is it so?
- Why CORACA is not connected to the FDTA (technical support agency)? Which path is the best to do so?
- And many more....



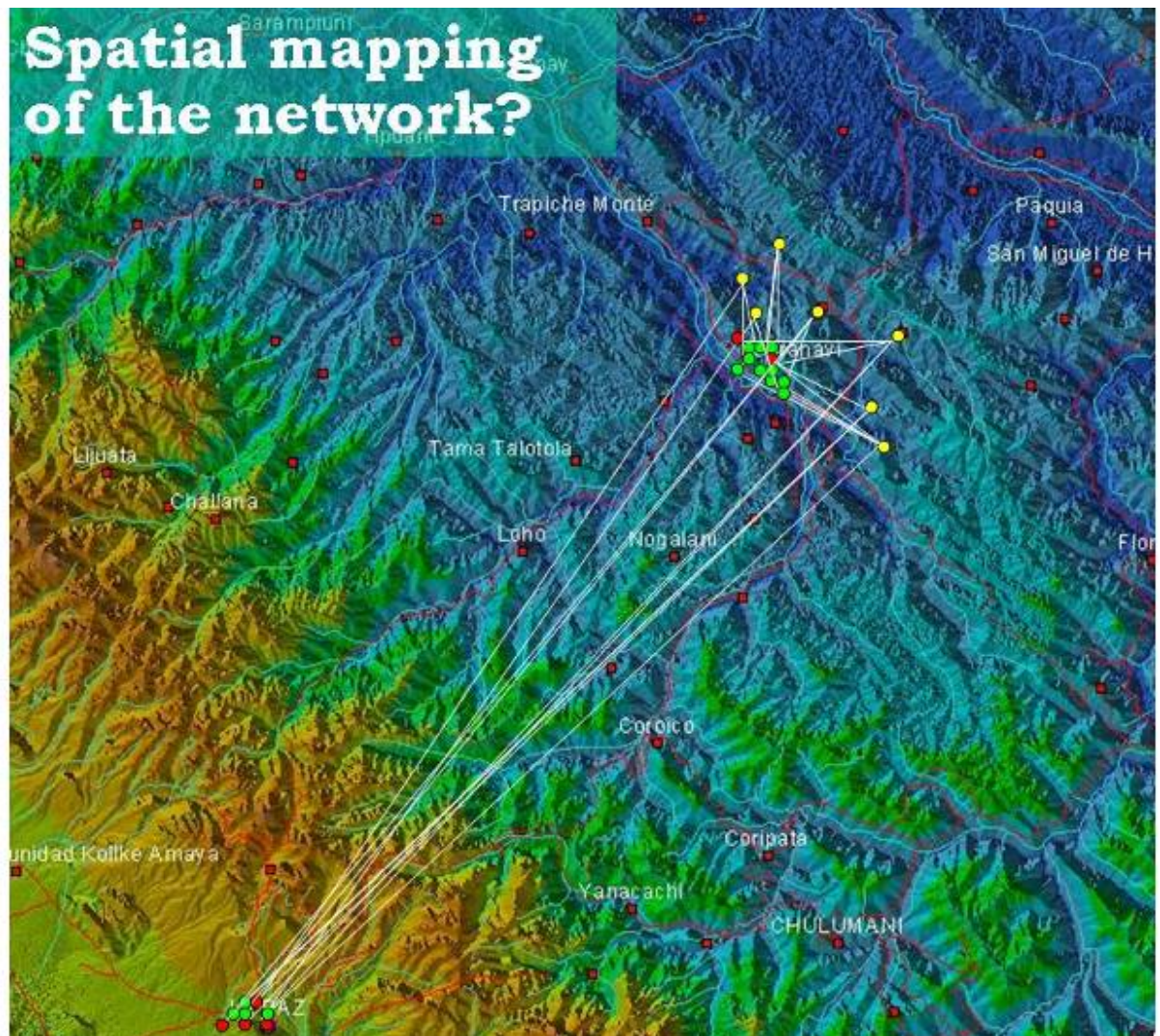
#### Questions rising from this graph?

- Has the time of relation some implications with exported volumes?
- Villa Rosario named more "informal" organizations, why it doesn't have strong links with important brokers?
- Why the governmental agency for technical support is not that well positioned in the region?



### Who has access and controls information? (quantitative analysis)

	Access	Control
Organization	Closeness Centrality	Betweenness Centrality
CELCCAR	0.2988	0.2151
AOPEB	0.2813	0.1484
Villa Rosario	0.2708	0.1355
Café Calidad	0.2473	0.0903
Cooperativa Villa Oriente	0.2277	0.1247



#### **4.6 Proposals for future co-operation**

All district agriculture and forestry officers present gathered together and presented a proposal for NTFP promotion to be undertaken in every district (see box below). They requested support from the OCISP project for this activity program. Representatives from the OCISP project also discussed possible follow-up training events with NUOL and NAFRI/FRC-LSUARFC.

##### **Box 1: NTFP activities proposed by all seven districts in Oudomxay for 2005-2006**

###### Objectives:

- 1) to promote sustainable management of NTFPs throughout Oudomxay Province
- 2) to increase family income from NTFP selling
- 3) to establish regular information exchange and networking meetings

###### Proposed Activities 2005-2006:

- 1) set up village and district regulations on sustainable NTFP harvesting
- 2) build capacity of district staff and villagers in sustainable management of NTFPs
- 3) organize study-tours and exchange visits for district staff and villagers, both in and outside the country
- 4) organize one province level exchange meeting every year at a fixed time and place, to exchange experiences and improve networking and cooperation

###### Inputs requested:

- Technical support and training
- Materials and budget support

At the end of the workshop, all participants agreed on five key activities to be followed up (see box 2).

##### **Box 2: Agreed conclusions of the workshop: key follow-up activities**

- 5) Capacity Building for district staff and village communities
  - a. Nurseries, production of planting materials, NTFP plantations
  - b. Marketing and processing of NTFPs
  - c. Regulations for sustainable management of NTFP resources
  - d. Regular data collection, NTFP information system
- 6) Networking and information exchange meetings
  - a. Regular exchange meetings
  - b. Group exchange visits
- 7) Knowledge Development
  - a. NTFP studies, research trials on methods of planting NTFPs
  - b. Demonstration plots
- 8) Study tours
  - a. Study tours within Oudomxay province and other provinces
  - b. Study tours to neighboring countries

Participants evaluated the workshop as very useful. They felt they had learned many new things from each other, that a good basis for future co-operation has been laid. The main comments were on the length of the field trips, one day would have been enough for most participants. IFAD-CISP will follow-up in arranging work-plans for support to district activities, as well as making arrangements with NAFRI-FRC and NUOL for future training support. CIAT will follow-up with networking and other learning activities on linking NTFP producers to markets. DED/GAA will expand its range of capacity building support activities for NTFP based income generation and community based natural resource management.



