Farmer to Farmer Learning & Adoption of Livestock Production

A report on the flow on effects of Farmer Cross Visits in 2007 and 2008

Anne Stelling and Joanne Millar
Institute for Land, Water and Society
Charles Sturt University, Australia
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Research by
Mr Boualy Sengdala (NAFES),
Mr. Hongvilay Keuthphannavong (NAFES),
Mr. Neuakhom Theppanid (DAFEO, Nong Het)
Mr. Sombath Vannaphoun (NAFES)
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Farmer to Farmer Learning & Adoption of Livestock Production

Introduction

The EASLP project is aimed at “assisting the Lao government to foster further adoption of improved livestock production by adapting extension methods and staff development approaches in northern Lao PDR.” One of the extension methods that the project has focussed on between 2007 and 2010 is farmer cross visits, as this approach has proven very effective in stimulating farmer to farmer learning and improved livestock management systems.

In 2007 two introductory cross visits were held to demonstrate best practice elements of farmer to farmer learning. Trainee staff then organised cross visits for farmers in their own districts totalling 180 farmers. In all, these cross visits involved 220 farmers and 24 staff from 6 districts.

Evaluation of the 2007 cross visits indicated that an additional 163 farmers had been stimulated to adopt these practices in their own villages in Huaphan, Xieng Khouang and Luang Prabang provinces. It also identified a need for cross visits on more advanced livestock production. In 2008, two Advanced Livestock Production farmer cross visits were held, one on cattle feedlot fattening to Nonghet district, and one on pig breeding and management to Pak Ou district.

Interviews with 25 farmers who had attended cross visits in 2007 and 2008 were held in 2009 to assess the relative influence of cross visits on farmer motivation, decision making and livestock production. Results showed that the cross visits were instrumental in stimulating farmers to take action. Follow up advice by district staff enabled them to implement the new technologies and was a major influence identified by farmers. All had made significant progress with fattening a range of livestock and had increased their income from livestock. Over 100 other farmers had started improving livestock production after talking to the cross visit farmers.

In 2010, the project undertook research to further investigate the flow-on effects of cross visits. The research aimed to determine the influences on farmers who took up the new technologies without attending a cross visit themselves, as well as those farmers who did not take up the new technologies, but were aware of them.

Methodology

The research was carried out in Khoun district, Xiengkuang province, Phonxai district, Luangprabang province, and Viengxai and Viengthong districts, Huaphan province. Three project staff visited two villages in each district, interviewing 20 farmers in total. Eight of these farmers had followed the new technologies introduced to their village by cross-visit farmers, and were still actively using them. Six had followed the cross visit farmers but had since stopped. Six were aware of the new technologies but did not follow the cross visit farmers themselves.

Project staff followed an interview guide specific to each class of farmer (see Appendix 1) with instructions to probe for further information at any stage during the interview. Farmers were asked about their initial sources of information on the new technologies, the influences on their decisions to take up the technologies themselves, their livestock situation and...
management techniques and issues, plans for the future, information needs and preferred source of information. Interviewers took notes which were later compiled interview by interview (see Appendix 2).

Results

1. Farmers who followed Cross Visit farmers and still actively use the new technologies.

The initial source of information for seven of these eight farmers was a farmer in their area who had attended a Cross Visit. One farmer had been introduced to the technologies by DAFO and Kumban staff only (see table 1). The motivation of all eight active farmers to begin using the technologies themselves was to increase their family income. Four of these 8 farmers had been further motivated by advice from district extension staff, and two of them had also received seed from the LDP project to begin their forage planting. Three farmers also expressed additional motivating factors; one was keen because she was interested in new technologies in general, one because he had space available which he wanted to put to good use, and one because he wanted to be able to feed his livestock properly.

<table>
<thead>
<tr>
<th>Initial Source</th>
<th>Mr Vankuha</th>
<th>Mr Baoveauther</th>
<th>Mr Linthong</th>
<th>Ms Phonesy</th>
<th>Ms Toumsone</th>
<th>Ms Mane</th>
<th>Mr Oudom</th>
<th>Mr Somthong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Visit Farmer</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td>✓</td>
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<tr>
<td>CIAT staff</td>
<td>✓</td>
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<tr>
<td>DAFO staff</td>
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<td>✓</td>
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<tr>
<td>Kumban staff</td>
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</tr>
</tbody>
</table>

Table 1: Initial source of information about the new technologies

These farmers had forage plots ranging from 550m² to 1.3ha growing grasses and stylo, and all were intending to expand their plots in future. They were using the forages to feed and fatten their livestock, often in combination with traditional feeds. They were also housing their animals. The farmers were raising varying combinations of fish, chickens, pigs, goats, cattle and buffalo. Combinations of three species were the most common (total five farmers). Two farmers raised four species and one only two. All eight farmers raised chickens. Five farmers had cattle. Five farmers had pigs. Four farmers had goats. Two had buffalo and one had fish. Altogether these farmers owned 452 chickens, 31 cattle, 11 buffalo 40 goats, 44 pigs and 2 fish ponds. Figure 1 shows a range in household wealth in livestock.
Seven farmers were also collecting animal manures to fertilise their paddy rice, and two expressed being able to eat chicken as an additional benefit (see table 2). All had increased their family income significantly from selling animals and all intended to expand their animal production in future. Family incomes from selling livestock ranged from 2 million kip in one year (cattle) to 45.6 million kip over two years (buffalo, pigs and chickens). The average income per year from livestock selling was 7.5 million kip.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Mr Vankuha</th>
<th>Mr Baoveuthor</th>
<th>Mr Linthong</th>
<th>Ms Phonesy</th>
<th>Ms Toumsone</th>
<th>Ms Mane</th>
<th>Mr Oudom</th>
<th>Mr Somthong</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collecting manure</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Chicken for family to eat</td>
<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>❌</td>
<td>✔</td>
</tr>
<tr>
<td>Increased income</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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</tr>
</tbody>
</table>

Table 2: Benefits from using forage and livestock technologies

All farmers said they needed to learn more about animal health – particularly the use of antibiotics - and animal diseases, and technical production aspects of fattening animals for sale. Technical information via CD or written materials, with visits from experienced staff 3-4 times per year were the preferred methods of learning. Training courses – held in the village - were requested by two farmers.

Five of these farmers had introduced the technologies to 14 other farmers in their villages. They had passed on methods of pasture growth and management, animal housing, vaccination and livestock raising.

2. Farmers who followed Cross Visit farmers but stopped.

Of the six farmers who had followed cross visit farmers but stopped, one had initially gained information from the cross visit farmer and one had advice from a DAFO staff only. The other four farmers had encountered these technologies from two or three sources, including District extension staff (4), Cross Visit farmers (1), the village head (2), the village livestock group (1), and other farmers using the technologies (1).
All were motivated to begin using the new methods to increase family income. Four were able to begin because they received seed and/or livestock from the DAFO (3) or the LDP project (1). Four were further motivated by follow-up visits by DAFO staff, and two reported the additional motivation of enjoying raising animals.

<table>
<thead>
<tr>
<th>Initial Source</th>
<th>Mr Wamayang</th>
<th>Mr Bounta</th>
<th>Mr Sayphone</th>
<th>Ms Muangvane</th>
<th>Ms Viengsy</th>
<th>Mr Onechane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Visit Farmer</td>
<td>✔</td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>DAFO staff</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Village head</td>
<td></td>
<td></td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>livestock group</td>
</tr>
<tr>
<td>noticed other farmers</td>
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</tbody>
</table>

Table 3: Initial source of information about the new technologies

These farmers raised goats, pigs, chickens and ducks, in combinations of chickens alone (1 farmer), chickens and pigs (2), chickens, pigs and ducks (1), chickens pigs and goats (1). Altogether these six farmers owned 7 goats, 12 pigs, 240 chickens and 12 ducks. All had pastures growing, ranging from 200m² to 2000m². Five no longer use the pasture at all, but one has been able to sell the pasture to nearby farmers raising cattle. Only one farmer had used animal housing, and only one had fed forages to her livestock. All used traditional feeds. Only one (who owned 150 chickens) vaccinated. All reported livestock diseases and deaths. Figure 2 indicates a much poorer wealth status of these farmers.

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![Livestock diversity of farmers who followed but stopped](image)

Figure 2: Livestock raised by farmers who followed but stopped using new technologies

All six farmers had stopped using the technologies for livestock. The most common reason for ceasing was being unable to afford to buy either initial or replacement stock. Three farmers also lacked the labour they needed, and one lacked land to plant forages. Four had lost their livestock through disease and could not replace them, one lacked the feed required.

<table>
<thead>
<tr>
<th>Reasons for stopping</th>
<th>Mr Wamayang</th>
<th>Mr Bounta</th>
<th>Mr Sayphone</th>
<th>Ms Muangvane</th>
<th>Ms Viengsy</th>
<th>Mr Onechane</th>
</tr>
</thead>
<tbody>
<tr>
<td>No funds to buy or replace stock</td>
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<td>✔</td>
<td></td>
<td>✔</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>No labour</td>
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<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>No land</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>Stock died</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>✔</td>
</tr>
<tr>
<td>Other enterprises</td>
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</tbody>
</table>

Table 4: Farmers reasons for stopping using the new technologies
Four of the six farmers felt they had not benefited from livestock. Only 3 farmers reported an income from livestock, at 800, 000, 1 million and 3.7 million Kip per year. One collected manure for fertilizer, and one was able to eat chicken. Nevertheless, three farmers planned to increase their forage areas in future, and all were intending to buy livestock. Three farmers wanted cattle, one buffalo, one pigs and the farmer with 150 chickens wanted to increase them. Two also intended to improve their animal housing.

Their information needs were basic livestock production methods, and animal health and diseases. Four wished to attend training course in these topics, with three of these farmers also wishing to attend a cross visit. Two felt that information on CD or written materials would help, with one also wanting follow-up from experienced DAFO staff. One farmer felt that she could learn from more experienced farmers. Of the six farmers, two had influenced six other farmers to take up the technologies. All but two of these new farmers had since stopped.

3. Farmers who did not follow Cross Visit Farmers

Of these six farmers, four had heard of the new technologies from DAFO staff, two from cross visit farmers, one from a cousin, and one from the village head. Three had two sources of this information, three only one.

<table>
<thead>
<tr>
<th>Initial Source</th>
<th>Mr Wangyearkeu</th>
<th>Ms Boualin</th>
<th>Mr Sonethong</th>
<th>Ms Ken</th>
<th>Mr Khammanivong</th>
<th>Mr Sivixai</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Visit Farmer</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAFO staff</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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<tr>
<td>Village head</td>
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<td>✓</td>
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<tr>
<td>Other</td>
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<td></td>
<td></td>
<td>✓</td>
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</tbody>
</table>

Table 5: Introduction to the new technologies

Of the reasons they did not take up the new technologies, lack of land combined with lack of money was foremost (3 farmers). Three farmers had no labour, and one – as a small trader – had no time.

<table>
<thead>
<tr>
<th>Reasons did not start</th>
<th>Mr Wangyearkeu</th>
<th>Ms Boualin</th>
<th>Mr Sonethong</th>
<th>Ms Ken</th>
<th>Mr Khammanivong</th>
<th>Mr Sivixai</th>
</tr>
</thead>
<tbody>
<tr>
<td>No funds for seed/stock</td>
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<td></td>
<td>✓</td>
<td>✓</td>
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<td></td>
</tr>
<tr>
<td>No labour</td>
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<td>✓</td>
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<tr>
<td>No land</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Stock died</td>
<td></td>
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<td></td>
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<tr>
<td>Concentrating on other enterprises</td>
<td>✓</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Table 6: Farmers reasons for not using new technologies

All of these farmers kept chickens (total 99 chickens). Two also kept pigs (total 7). These were fed traditional feeds. None had improved housing. One of the six vaccinated her stock and she was the only one who did not lose animals from disease. Figure 3 shows the very poor wealth status of these farmers compared to farmers who followed and/or stopped.
Livestock diversity of farmers who didn't follow

Two of these farmers received no income or other benefits from livestock. Other's incomes from selling livestock ranged from 500,000 kip per year to 3 million kip per year. They reported no other benefits.

All of these farmers wanted to keep or increase livestock in the future; cattle, buffalo, goats, pigs and chickens. Five farmers wished to plant forages and one intended to improve her chicken housing. Their information needs included feeding systems and formulas, animal health and diseases, general livestock production, pasture growing and animal housing. Their preferred methods to learn more were by attending cross visits (4 farmers) and attending training courses (4 farmers). They also mentioned CD's, written information, support from DAFO staff and practice as ways they could learn about livestock production.

Discussion

Pathways to introduction of new technologies

Most of the farmers who were still active had learnt about growing forages and managing livestock directly from cross visit farmers (87.5%) (see Figure 4). Farmers who stopped or did not adopt the technologies were more likely to learn from other sources such as DAFO staff or the village head (66.7%). Whilst this finding highlights the value of direct farmer to farmer learning, it also indicates social systems at play within villages. The cross visits farmers may have passed on their knowledge and skills to peers and family members who have the capacity to produce livestock. The poorer farmers had to rely on other sources of information. The lesson here is to make sure cross visits involve poorer farmers who can share their experience within their networks.
Follow-up by DAFO staff also seems important for farmers to harness the initial motivation and begin using the new technologies. Fifty per cent of continuing farmers and 66% of farmers who took up the technologies but later stopped had received follow-up support from DAFO. Given the importance the original cross visit farmers placed on extension staff support, it may be worth investigating whether there was some difference in the quality or timeliness of DAFO support between these farmer categories.

The provision of initial seed and/or livestock by the DAFO or LDP project also played a role in motivating farmers to begin using the new technologies, but not necessarily to continue to use them. Two of the eight continuing farmers (25%) received seed initially. Four of the six farmers who later stopped (66%) received seed and/or livestock initially. **Hence, provision of inputs does not guarantee farmer adoption or ongoing production.**

**Benefits for farmers**

The farmers who took up the technologies all recognized an opportunity to increase their family income. They have significantly greater areas under forage (Figure 5) and raise significantly more livestock in each category than those farmers who didn’t take up the technologies (Figures 6-9). These farmers clearly have much greater potential for increased income from livestock, as is borne out by the comparison of income in Figure 10. They also benefit from the manure provided by their livestock, which they use as fertilizer, and their families are able to eat meat more often.
A comparison of livestock raised by the three farmer groups (Figures 1-3) shows that the farmers who continue to use the technologies also have a much greater diversity of livestock enterprises than the other two groups, which will in turn bring them benefits of increasing their income options, spreading their income throughout the year and mitigating their exposure to disease risk. Those farmers raising only chickens or chickens and pigs, and who in addition do not vaccinate, obviously run an extreme risk of losing their entire livestock base from common diseases. Figure 11 indicates the direct correlation between vaccinating and disease occurrence in the interviewed farmers experiences.

Reasons for not starting, or starting but then stopping
Lack of funds to buy seed or livestock was mentioned by 58% of the farmers not using the technologies. In some cases, they did not have the funds to begin, their livestock had died and they were unable to replace them, or they had had extra family expenses after selling livestock and had not been able to keep replacement funds. One farmer stated that he had been waiting for a project to give him funds to start, but none had been forthcoming. Four of these farmers also had no land on which to grow forages. Six farmers (50%) had inadequate labour to grow forages and raise livestock.

These farmers were all living from a range of other activities, including shopkeeping, trading in livestock, producing handicrafts and growing paddy rice, upland rice and horticultural crops. Although 8 of them said they wanted to grow forages in future, 3 of these have no land on which to do so, and while all 12 said they wanted to increase their livestock, 7 have no funds to do so, and only 3 proposed any alteration to their management methods (by improving
housing for goats, pigs and chickens). These farmers need commitment from village authorities to assist them in getting started by entering revolving funds, leasing land, pooling resources with other families and learning how to manage finances.

Information needs and preferred sources of information
The greatest information need was in the area of animal health and diseases, with 15 of the 20 farmers interviewed stating this specifically. Many wanted both theory and practical instruction from experienced extension staff in aspects such as treating sick animals and giving injections.

A comparison of the information needs reported by the different categories of farmer shows more sophisticated information requirements by those farmers who have been using the technologies. For example, these farmers stated that they needed information on such subjects as the correct use of antibiotics, feed formulas and improved breeding methods, as well as general animal health and diseases. The farmers who had never taken up the technologies described themselves as having ‘no skill’ in livestock raising. Their information needs were much broader; livestock production, pasture growing, feed systems and formulas and animal health and diseases. Those farmers who had started, but then stopped, fell between the other two groups, needing information from livestock production and animal health to feed formulas, fattening stock and using antibiotics.

When questioned as to how they felt they could best gain the information they needed, differences again arose between the farmer categories. The farmers actively using the technologies largely preferred learning through training courses held in the village and the distribution of audio-visual materials (digital stories on CD), with regular follow up by experienced extension staff (3-4 times per year). Only one of the eight active farmers stated written information as a source. The farmers who had commenced but stopped wanted to attend cross visits as well as training courses. They placed less emphasis on DAFO staff support (only 1 of 6 farmers stated this) than on CD’s and written information (2 of the 6 for each). Sixty seven percent of the farmers who had not started with the new technologies wanted to attend cross visits and training courses. The others felt that they could learn with a combination of CD’s and written information and the support of experienced extension staff.

From this data it is evident that information providers need to discriminate between different categories of farmer in order to be able to provide the level of sophistication required; perhaps even needing to co-ordinate several different levels of information within one village. It also appears that training courses and DAFO support are a mainstay for all farmers, with audio-visual and written information as secondary support. In addition, farmer cross visits are needed for those farmers with little or no experience in livestock technologies.

Future plans
It is interesting to note the future plans of the different categories of farmer. All of the farmers wished to increase their livestock numbers. Those actively using the new technologies all intended expanding forage areas which will in turn support expansion of livestock numbers. However, only 58% of the other 2 categories intended planting forages, meaning that any increase in livestock will mean increased time in gathering traditional feeds and/or increased cost in buying feeds.

The active livestock farmers all intended increasing existing animal species, whereas 67% of the farmers in the other categories wanted to begin with large livestock; cattle and buffalo. Only 4 of these farmers stated that they would build on livestock familiar to them; chickens and pigs. Given that the farmers in these categories were not able to either start or continue
raising livestock due chiefly to lack of funds, labour or time, and their lack of skills and knowledge of livestock raising, their aspirations to begin with large livestock are perhaps more ‘wishful thinking’ than realistic. However, all of these farmers do keep chickens (and some, pigs) at least for their families, and with the right motivation, these may be a starting point for generating income.

**Influencing other farmers**

Of the 8 farmers active in using new technologies, 6 of them felt they had influenced 1-4 farmers each (a total of 16) in their villages to grow pastures, feed fodder to livestock, vaccinate and improve livestock housing.

Of the 6 farmers who began to use technologies but later stopped, 2 felt that they had influenced 6 other farmers. However 4 of these farmers had also stopped using any new technologies.

These findings indicate the success of farmer to farmer learning when active farmers are willing to demonstrate to others their practices. It would appear that momentum creates further momentum, just as the faltering example of farmers who stopped led to more farmers also failing.

**Conclusion**

This research confirms the effectiveness of farmer to farmer learning as a scaling out mechanism, showing the success of transfer of the new technologies to farmers once removed from the original cross visit farmers. These farmers are actively growing forages and raising livestock, and receiving significant livelihood benefits. That these farmers have also influenced other farmers indicates that the ripple created by the original cross visits continues to flow outwards. However, there appears to be a limit to their influence on poorer farmers who face land, labour and funding constraints. Poorer farmers need to be exposed to success stories of other poor farmers and given opportunities to invest in and maintain livestock.

Comparisons also highlight the different information needs of the different categories of farmer; more precise technical information for the active farmers, broader and more basic livestock and fodder production information for those who have not previously successfully raised livestock. This can be achieved through training courses for farmers, with supporting audio visual and written materials. Training courses need to be designed to satisfy the information needs of the different categories of farmer, and backed up by regular extension staff visits.

It is recommended that:

- Farmer to farmer learning activities match the capacities of the farmers, ie poor farmers interact with other poor farmers successfully using the technologies.

- Extension officers plan for regular training courses and staff visits to farmers as the backbone of their support for farmer to farmer learning.

- Quality audio-visual and written materials, presented in the language of the farmers, be given to farmers to back up training.
• Technical training on animal health issues be a priority, followed up with the whole range of forage and livestock production and management topics as required by the different farmer groups.

• Village authorities assist poor farmers to begin using new technologies by initiating mechanisms such as revolving funds, leasing land, managing common resources and training in managing finances.
Appendix 1 Interview Questions

QUESTIONS FOR FARMERS WHO HAVE FOLLOWED, STOPPED OR NOT FOLLOWED CROSS VISIT FARMERS

Questions for 8 farmers who have followed the cross visit farmers and are still active (1 per village)

1. When and how did you first hear about using forages and livestock fattening?

2. Why did you decide to follow Mr/Mrs………?

(Use probing questions to get many reasons, e.g. personal reasons, community/village expectations or regulations, economic reasons, influence of extension staff and advisors, project funds, influence of family, influence of friends etc) **Allow lots of time for this question**

3. What have you done since deciding to follow Mr/Mrs ….?

4. How many animals do you have? How do you feed and manage them?

5. What problems have you had with your animals?

6. What area do you have planted to forages?

7. What income and profit do you usually get from livestock production?

8. What other benefits do you get from livestock production?

9. What do you plan to do in the future?

10. Have you influenced any other farmers? Who? How?

11. What information do you need on livestock production?

12. How do you get information about livestock production?

13. Do you have any suggestions on how to encourage more farmers to fatten livestock for income?
Questions for 8 farmers who started following cross visit farmers and have stopped growing forages and/or fattening livestock (1 per village)

1. When and how did you first hear about using forages and livestock fattening?

2. Why did you decide to follow Mr/Mrs………?  
   (use probing questions to get many reasons, eg personal reasons, community/village expectations or regulations, economic reasons, influence of extension staff and advisors, project funds, influence of family, influence of friends etc.) Allow lots of time for this question

3. What did you do?

4. Why did you stop growing forages and/or fattening livestock?

5. How many animals do you have now? How do you feed and manage them?

6. What problems have you had with your animals?

7. What area do you have planted to forages now?

8. What income and profit do you usually get from livestock production?

9. Do you get any other benefits from having livestock?

10. What do you plan to do in the future?

11. Have you influenced any other farmers? Who? How?

12. Do you need any more information on livestock production? If yes, what kind of information?

13. How do you get information about livestock production?
Questions for 8 farmers who have not followed cross visit farmers and do not grow forages and/or fatten livestock (1 per village)

1. Have you heard about growing and using forages for livestock fattening?

2. If yes, why did you decide not to grow forages to fatten livestock?

3. If you have livestock, how many animals do you have now? How do you feed and manage them?

4. What problems have you had with your animals?

5. What income and profit do you usually get from livestock?

6. What do you plan to do in the future?

7. Do you need any more information on livestock production? If yes, what kind of information?

8. How do you get information about livestock production?
Appendix 2 Farmer Interviews

Khoun district:

The farmer who have followed cross visit farmers and are still active:

1. Mr. Vangkuha is Hmong ethnic minority in Namlane village, Khoun district, Xiengkhuang province. He heard about using forages and livestock fattening from Mr. Yongkakeu and Mr. Thongsia in 2008.

2. He has decided to follow Mr. Yongkakeu and Mr. Thongsia because in the previous he did not use the technologies and his animals can not grow well, after Mr. Yongkakeu and Mr. Thongsia and district staff suggested him about the livestock production by using the new technologies, he is very interesting because he want to increase his family income, the LDP project gave him the seed to grow the pasture and the district staff advised him to grow the pasture and technique animals fattening.

3. After he has grown the pasture and bought 1 cattle 2,000,000 kips to fatten, he spend for 3 months and he sold and got 5,400,000 kips.

4. He had 12 chicken, 8 cattle and 1 buffalo, but now he fatten 3 cattle by using 40 kg of grasses mixing with 3 kg of cassava, 15 kg of banana stem and 5 kg of rice bran to feed his cattle 3 times per day, he constructed the pen and injected the vaccine 2 times per year. For the buffalo he left it in the field and chicken he fed them by rice bran, broken rice cassava root 2 time per day.

5. His animals have no problem because his animals had vaccination.

6. Now he has 1 ha of pasture.

7. In 2008-2010 he sold 1 cattle and got 5,400,000 kips that I mention in title 3, he think in the next few month he will sell 3 cattle that fatten now.

8. Sometime he kill the chicken for meal, he also collect the manure.

9. He plan in the next future, he will expand the pasture areas 1 ha more and increase numbers of cattle 5-6 heads for fattening.

10. He did not influenced the other farmers.

11. He need to know the information as how to use the antibiotic when the animals get sick and he also want to know the animals diseases.

12. He need the district staff to advise him about the theory and practice in animals fattening system as pigs and poultry at least 3-4 time per year.

13. He did not suggest the other farmers.

Interviewed by Hongvilay
The farmer who have followed cross visit farmers and are still active:

1. Mr. Baoveuthor is Hmong ethnic minority in Sankhing village, Khoun district, Xiengkhuang province. He heard about using forages and livestock fattening from Mr. Yongnengthor and district staff.

2. He has decided to follow Mr. Yongnengthor because he want to increase his family income.

3. After he has grown the pasture and he fed the animals by using the grasses and stylo, his animals are fat and grow very well.

4. He had 8 cattle, 6 goats and 10 chicken, but now he fatten 2 cattle by using grasses mixing with stylo, he said, he will expanse the number of chicken to be 100 heads in the future.

5. Before his goats were stomach ache, but now they have no problem because his animals were vaccinated.

6. Before he had 3,000 square meters of pasture, this year he will expanse the pasture to be 1 ha.

7. In 2009 he sold the cattle and got 7,000,000 kips, he think in the next few month he will sell some goats, for the chicken he raise for food.

8. He also collected the manure to fertilize the rice field.

9. In the next future, he will expanse the pasture areas and increase numbers of animals and improve the goats and cattle housing.

10. He suggested the other farmers to use the new technologies as vaccine injection. Animals sick treatment.

11. He want to know about the animals production technologies as how to feed the animals, how to use the antibiotic when the animals get sick.

12. He need to have the booklet, poster, CD and he said the district staff should come to advise him in animals production technologies.

13. He suggested the other farmers as Mr. Choatai, Mr. Yeuatha, Mr. Kaveu and Mr. Yeartu to grow the pasture and fatten the cattle.

Interviewed by Sombath
The farmer who started following cross visit and stopped:

1. Mr. Wamayang is Hmong ethnic minority in Namlane village, Khoun district, Xiengkhuang province. He heard about using forages and livestock fattening from Mr. Yongkakeu and Mr. Thongsiha in 2008.

2. The reason that he has decided to follow Mr. Yongkakeu and Mr. Thongsiha, because the tow farmers suggested him when they came back home after finish cross visit, The district staff and the head of village also suggested him, he want to increase his family income, but he had no money to buy the cattle to fatten, he think, he should get the fund from some project, but now he don’t get.

   He said if he can get the money from some project he can fatten the cattle.

3. Now he grown paddy rice, ground nut, vegetable, banana.

4. He grown the pasture and now his pasture still grow but he had no money to buy the cattle to fatten and he sell the grasses to other farmers who had the cattle in amount 200,000 kip per year.

5. He had 10 chicken, 12 ducks, 5 pigs 3 months old, he use the local feed to feed them as rice bran, cassava root, he constructed the poultry and pig housing, but he didn’t give the vaccine.

6. His animals as poultry and pigs are dead by diseases.

7. In 2008 he grown 1,000 square meters and 2009 he grown 2,000 square meters, he said, if he received the fund from some project he can expanse his pasture.

8. In 2008 he sold the buffalo and got 7,000,000 kips, he bought the medicine and small rice mill, in 2009 and 2010 he didn’t get money from livestock selling.

9. Sometime he kill the chicken and duck for meal, he didn’t collect the manure.

10. He plan in the next future, if he had the money he will buy the cattle to fatten.

11. He didn’t influence the other farmers.

12. He need to know the information as how to raise the animals to be fast growing, animal health.

13. He want to train and the training course will be held at the village, and need more practice as vaccine injection, using the antibiotic when the animals get sick.

Interviewed by Boualy
The farmer who started following cross visit and stopped:

1. Mr. Bounta is Loa Lum in Sankhing village, Khoun district, Xiengkhuang province. He is grown the paddy rice, he has 0.5 ha of rice field. He heard about using forages and livestock fattening from district staff and he has look the farmers who are growing the pasture and fattening the cattle.

2. The reason that he has decided to grow the pasture and fatten the animals, because he want to increase his family income, the district staff explain him about the new technologies by using the new species of grasses and stylo to feed the animals and he received the seed from DAFO.

3. Now he grown the paddy rice and he has small shop, he also raise the chicken.

4. The reason that he stop to grow the pasture and fatten the cattle, he is inadequate the labour and after he sold the cattle he did not have the money to buy the cattle to continue fatten.

5. He had 50 chicken, he did not use any technologies as he did not improve the pen, not inject the vaccine, he use the local feed to feed them as rice bran or paddy rice.

6. His chicken are dead by diseases, inadequate the feed and he had no skill in chicken raising.

7. he had 1,200 square meters of pasture but he did not use.

8. Before he raise the chicken but he got around 800,000 per year, now he fatten the cattle and he get the benefits around 500,000 per 3 months, he said, cattle fattening is better than chicken raising.

9. He collected the manure for fertilizing.

10. He plan in the next future, if he had the money he will expanse the pasture and buy the cattle to fatten.

11. He didn’t influence the other farmers.

12. He need to know the information as how to manage the animals raising and how to treat when the animals get sick.

13. He want to attend the train course on animals production, and want to cross visit the farmers who have good benefits

Interviewed by Neuakhom
The farmer who have not followed cross visit farmers:

1. Mr. Wangyearkeu is Hmong ethnic minority in Namlane village, Khoun district, Xiengkhuang province. He has heard about using forages and livestock fattening from Mr. Yongkakeu and Mr. Thongsiha in 2008.
2. He didn’t grow the pasture because he had many activities, he said the main activity is small trader.
3. He had 24 chicken, he use the local feed to feed them, he did not give the vaccine and did not use any technical.
4. He said in 2009 his buffalos 6 head are dead by disease, and he said when he raise the cattle and buffalos, they are dead every time, he can say, he had no lucky.
5. He raised the poultry for meal.
6. In the future he think, he want to raise the cattle and buffalos if he has the money, but he don’t belief that the animals do not die like in the year 2009, he lost 6 buffalos.
7. He want to know the technical as pasture growing, animal housing system, feeding system and animal health (antibiotic using, animal diseases).
8. He need to cross visit, training on animal health.

Interviewed by Boualy
The farmer who have not followed cross visit farmers:

1. Ms. Boualin in Sankhing village, Khoun district, Xiengkhuang province. She has 0.5 ha of paddy rice field 0.4 ha of shifting cultivation areas. She heard about using forages and livestock fattening from district staff some Hmong people, she got the seed from district staff in 2006.

2. She didn’t grow the pasture because she did not have the husband and she has 2 small sons, inadequate the labour.

3. She did not have the large animals, she had only 30 chicken, she use the local feed as rice bran, paddy rice to feed them, she did not give the vaccine and did not use any technical.

4. Her chicken are dead and not enough feed, she has no skill in livestock production.

5. She got around 500,000 kips per year by chicken selling.

6. She think, in the future she will increase the number of chicken and improve chicken housing, if she has the fund, she will buy 2 cattle and grow the pasture at least 2,000 square meters.

7. She want to know the technical as pasture growing, animal housing system, feeding system and animal health (antibiotic using, animal diseases).

8. She need to attend the training course on livestock production, cross visit the farmers who have achievement in livestock production.

Interviewed by Neuakhom
Viengxai district:

The farmer who have followed cross visit farmers and are still active:

1. Mr. Linthong is Lao lum in Kangpabong village, ViengXai district, Huaphan province. He heard about using forages and livestock fattening from Ms. Pinseng who had cross visit in year 2008.

2. He has decided to follow Ms. Pinseng because Ms. Pinseng suggested him when she came back home after finish cross visit, The district staff and the head of village also suggested him, he is very interesting in livestock production by using the new technologies because he did not have the skill before and he want to increase his family income, the LDP project gave him the seed to grow the pasture and the district staff advised him the new technologies in animals fattening system.

3. After he has grown the pasture and took the animals to fatten, from 2008 – 2010, he got 7,019,000 kips from animals selling, he said, in the past, it is very difficult to collect the local feed in the forest to feed the animals, but now he spend around 30 minutes to cut the grasses and stylo to feed his animals and his animals are fat and grow very fast and he said, the pasture can use for many year to feed the animals.

4. He had 50 chicken, 2 pigs and 8 cattle, he used the grasses and stylo to feed his cattle, stylo and rice bran to feed the chicken, for the pigs he used rice bran mixing with stylo and bon to feed them, he constructed the pen and give them the vaccine.

5. His animals have no problem, but he has not enough money to make the fence for expanding more pasture.

6. In 2008 he grown the pasture 2,400 square meters and he can expanse his pasture in the future.

7. In 2008-2010 he sold the animals and got 7,019,000 kips.

8. Sometime he kill the chicken for meal, he also collect the manure.

9. He plan in the next future, he will expand the pasture areas and numbers of animals.

10. He influenced the other farmers as Mr. Khambouane, Mr. Vienesone, Mr. Somsack. He suggested them to use the new technologies as pasture growing, vaccine injection, pen construction.

11. He need to know the information as how to improve the breed, how to use the antibiotic when the animals get sick and he also want to know the animals diseases.

12. He want to train and the training course will be held at the village, and need more practice as vaccine injection.

13. He encouraged 3 farmers as Mr. Khambouane and Mr. Vienesone to fatten the poultry, pigs and cattle and Mr. Somsack to raise the turkey.

Interviewed by Boualy
The farmer who have followed cross visit farmers and are still active:

1. Ms. Phonesy is Lao lum in Buck village, ViengXai district, Huaphan province. She heard about using forages and livestock fattening from Ms. Bounthone who had cross visit in year 2007.

2. She has decided to follow Ms. Bounthone, because Ms. Bounthone suggested her about the new technologies that had look the activities of the host farmers. The district staff and the head of village also suggested her, she want to increase her family income.

3. In 2008 she grown the pasture and she used the grasses and stylo to feed the animals, from 2008 – 2010 she got 45,600,000 kips by animals selling, she said, now her family has good income.

4. She had 200 chicken, 15 pigs and 8 buffalos, she used the grasses and stylo to feed her buffalos, and used stylo and rice bran to feed the pigs and chicken, she constructed the pen and give them the vaccine.

5. Her animals have no problem.

6. She grown the pasture 400 square meters and she will expanse the pasture in the future.

7. In 2008-2010 she sold 4 buffalos and got 26,000,000 kips, 12 pigs and got 9,800,000 kips and 9,800,000 from chicken.

8. She kill also collect the manure to fertilize the rice field.

9. She will expand the pasture areas and numbers of animals in the future.

10. She influenced the other farmers as Ms. May, Mr. Oath and Ms. Som, she suggested them to use the new technologies as pasture growing, vaccine injection, pen construction.

11. She want to know the information as how to use the antibiotic when the animals get sick and he also want to know the animals diseases.

12. She want to learn from technician staff who has more experiences.

13. She suggested 3 farmers as Ms. May, Mr. Oath and Ms. Som to grow the pasture to feed the animals.

Interviewed by Sombath
The farmer who started following cross visit and stopped:

1. Mr. Sayphone is Loa Lum in Kangpabong village, ViengXai district, Huaphan province. He heard about using forages and livestock fattening from district staff and head of village in year 2006 and he started pasture growing as Guinea, Mulato Brizentha and stylo in 2008.

2. The reason that he has decided to grow the pasture, because the LDP project will give him the fund to purchase the animals to fatten and like the animals raising.

3. Now he make the handicraft and get around 15,000 kips per day and grow paddy rice 1,600 square meters and grow rice by shifting cultivation 1 ha.

4. He stopped pasture growing, because he did not the money to buy the animals.

5. He had 1 piglet, he got from his cousin, he use the local feed to feed them as rice bran and pumpkin.

6. His animals as poultry and pigs are dead by diseases.

7. He grown grasses and stylo 15x20 m.

8. Now he did not have the income by animals selling.

9. He did not get any benefits from livestock.

10. He plan in the next future, if he had the money he will grow the pasture and buy the cattle to fatten.

11. He suggested Mr. Lianthone, Mr. Chanesamone, Mr. Bounseua and Mr. Bounthone, but these farmers stopped like him.

12. He need to know the animals raising technical.

13. He can learn by CD watching or book reading.

Interviewed by Hongvilay
The farmer who started following cross visit and stopped:

1. Ms. Muangvane is Thaideng ethnic group in buck village, ViengXai district, Huaphan province. She heard about using forages and livestock fattening from district staff in year 2007 and the district staff gave him the seed and the farmers who have cross visit suggested him.

2. The reason that she has decided to grow the pasture, because she will increase the family income and the district staff gave her the seed.

3. Now she produce the Lao whisky by sticky rice, make the handicraft and raise some chicken and pigs, grow paddy rice.

4. She stopped pasture growing, because her cattle was lost and dead by diseases, she don’t have no more the land for pasture growing.

5. She had 150 chicken, 4 pigs, she use the local feed to feed them as rice bran, cassava root, broken rice and sometime she use the stylo mixing with the local feed, she also gave them the vaccinate.

6. She animals as poultry and pigs are dead by diseases and inadequate the feed and she did not have the knowledge in animals rearing.

7. She grown the stylo 10x20 m.

8. She sold the chicken and got around 1,000,000 kips per year.

9. She collected the manure from to fertilize the vegetable.

10. She plan in the next future, she will increase the number of chicken and improve the pen.

11. She suggested all of people in the village, when they has village meeting, she said, chicken raising can increase the family income and spend for short time.

12. He need to know the animals raising technical as animal health and management.

13. He can learn by training, cross visit and suggested by people who has more experiences.

Interviewed by Neuakhom
The farmer who have not followed cross visit farmers:

1. Mr. Sonethong is Loa Lum in Kangpabong village, ViengXai district, Huaphan province. He heard about using forages and livestock fattening from district staff that they have the meeting to suggest the villagers to grow the pasture for animals raising.

2. He didn’t grow the pasture because he had no land and money to buy the animals.

3. He had 17 chicken and 2 pigs, he use the local feed as rice bran mixing with cassava root to feed them, he did not give the vaccine and did not use any technical.

4. His animals are dead but he did not know the reason.

5. In 2008 he sold the cattle, buffalo, pig and chicken and he spend these money for his brother school.

6. In the future he think, he want to raise the cattle, if he has the money and he will grow the pasture.

7. He want to know the animals raising technical as vaccine injection, treat the sick animals, animals feeding system and animal health.

8. He can learn by book reading and suggested by staff.

Interviewed by Hongvilay
Vienthong district

The farmer who have followed cross visit farmers and are still active:

1. Ms. Toumsone is Lao Lum in Nanom village, she heard about using forages and livestock fattening from Ms. Winkham, before she left her animals in the forest.
2. He has decided to follow Ms. Winkham because she would like to increase her family income and she is interesting the new technologies in animals fattening system.
3. After he has grown the pasture and took the animals to fatten, from 2008 – 2010, her family income is increasing by animals selling.
4. She had 60 chicken and 15 pigs, she used rice bran mixing with stylo to feed her pigs and chicken.
5. Her animals have no problem, because her animals were vaccinated.
6. She grown the pasture 6,000 square meters.
7. In 2009 she got 5,000,000 kips by pigs and chicken selling.
8. She also collect the manure.
9. She plan in the next future, she will expand the pasture areas and numbers of animals.
10. She influenced the other farmers as Mr. Phayvane and Mr. Onthong. She suggested them to use the new technologies as pasture growing, vaccine injection, pen construction.
11. She want to know the animals production technical as feed formula, animal healt.
12. She can learn by CD watching or book reading.
13. She suggested 2 farmers as Mr. Mr. Phayvane and Mr. Onthong to fatten the pigs.

Interviewed by Sombath
The farmer who have followed cross visit farmers and are still active:

1. Ms. Mane is Lao Lum in Samphanthong village, she heard about using forages and livestock fattening from Ms. Vanesy in 2008 and she started pasture growing and cattle fattening.

2. The reason that she has decided to grow the pasture, because the district staff and Ms. Vanesy suggested her to use the new technologies to raise animals by using grasses and stylo to feed the animals.

3. After she has grown the pasture and took the cattle to fatten, her family income is increasing by animals selling.

4. She had 3 cattle, 4 pigs, 40 chicken and 2 fish pond, she used the grasses and stylo to feed her animals.

5. Her animals as poultry are dead by diseases and inadequate the grasses and stylo to feed the animals.

6. She grown 1,260 square meters of grasses and 216 square meters of stylo.

7. She got 1,800,000 kips by chicken selling, 5,800,000 by cattle selling and 1,400,000 kips by fish selling.

8. She collected the manure to fertilize the rice field.

9. In the future she will increase the number of animals and expanse the pasture areas.

10. She took Mr. Boun Ome, Ms. Phane and Mr. hanephet to look her pasture and her animals that she fatten and explain them about the animal fattening system and pasture growing.

11. He need to know the animals raising technical especial animal health.

12. He can learn by CD watching or book reading.

13. She suggest 3 farmers to follow her to increase the family income by selling the animals

Interviewed by Sombath
The farmer who started following cross visit and stopped:

1. Ms. Viengsy is Loa Lum in Samphanethong village, Viengthon district, Huaphan province. She heard about using forages and livestock fattening from district staff and the group of livestock in the village.

2. The reason that she has decided to grow the pasture, because she is interested in livestock producing, the district staff suggested her about the animals raising technical, she would like to increase her family income.

3. Now she grow rice by shifting cultivation and grow the fruit tree.

4. The reason that she stopped pasture growing, because she did not the money to buy the animals and inadequate the labour.

5. Now she had no animals.

6. In the past her animals are dead, she doesn’t know the reason.

7. In the past she grown grasses and stylo 30x30 m and now she do not use it.

8. Now she did not have the income by animals selling.

9. She did not get any benefits from livestock.

10. She think in the next future, if she had the money she will buy the animals to continue raising.

11. She suggested Mr. Saiphet and Mr. Kham, about the feed formula of pig by using 1 bowl of stylo and 2 bowl of rice bran to feed the pigs.

12. She want to know the pigs raising technical as breed improving, pig diseases.

13. She can learn by cross visit, CD watching or book reading and suggested by staff.

Interviewed by Hongvilay
The farmer who have not followed cross visit farmers:

1. Ms. Ken is Thaideng ethnic group in Nasamphane village, Viengthong district, Huaphan province. She heard about using forages and livestock fattening from district staff and her cousin from Xiengkhuang province has to suggest her to grow the pasture for animals raising.

2. The reason that she didn’t grow the pasture because she has no labour.

3. Now she has 10 chicken and he use the local feed as rice bran and paddy rice to feed them, but she gave the vaccine 2 times per year.

4. Her animals are dead but he did not know the reason and inadequate feed.

5. She got the money around 3,000,000 kips per year by selling the pigs.

6. In the future she think, she want to buy 2 buffalos and grow the pasture at least 10x20 m first.

7. She want to know the technologies in livestock production as animal feeding, animal health.

8. She want to attend the training course on livestock production system, cross visit.

Interviewed by Neuakhom
Phonxai district

The farmer who have followed cross visit farmers and are still active:

1. Mr. Oudom is in Donexai village, Phonxai district, Luangphabang province. He heard about using forages and livestock fattening from district staff and Kumban staff in 2006.

2. He has decided to grow the pasture because he want to raise the animals to increase his family income and to reduce the poverty, he had the land to grow the pasture, in 2006 he start grow the pasture and in 2007 he bought 6 goats.

3. In 2008 – 2010, he got 7,650,000 kips per year by selling animals.

4. He had 50 chicken, 2 buffalos and 29 goats, he left the goats in the field, when it rain he keep the goats in the pen and cut the grasses to feed them in the pen. For the buffalos he left them in the field, he use rice bran, broken rice and paddy rice to feed the chicken.

5. The small chicks are dead in the rainy season.

6. He grown the pasture 2 ha (Guinea and Ruzi).

7. In 2008-2010 he sold the animals and got 7,650,000 kips per year.

8. He bough the paddy rice and some clothing, he did not collect the manure.

9. He plan in the next future, he will expand the pasture areas and numbers of goats.

10. He did not influenced the other farmers.

11. He want to know how to use the antibiotic when the animals get sick and he also want to know the animals diseases.

12. He want to attend the training course on livestock production, CD watching, book reading.

13. He did not suggest the other farmers.

Interviewed by Hongvilay
The farmer who have followed cross visit farmers and are still active:

1. Mr. Somthong is in Phackhock village, Phonxai district, Luangphabang province. He heard about using forages and livestock fattening from CIAT project staff in 2002 but did not interest, in 2008 Mr. Sivixai suggested him to grow the pasture to feed the animals.

2. He has decided to grow the pasture because he want to raise the animals to increase his family income and to reduce the poverty, he want to have enough the grasses and stylo to feed the animals.

3. In 2008 – 2010, he got 4,000,000 kips by selling the goats and pigs.

4. Now he has 30 chicken, 4 cattle, 8 pigs and 5 goats, he left the goats and cattle in the field, he cut the grasses to feed the goats and cattle when they are calving and some time he gave them when they come back to the pen in the night.

5. Before the goats are stomach ache and dead, because he did not have the skill in vaccine injecting, but now he is suggested by district staff in animals diseases controlling.

6. He grown the pasture 550 square meter and he want to expanse the pasture to be 10,000 square meters in this year.

7. In 2008-2010 he sold the animals and got 4,000,000 kips.

8. He collected the manure for fertilizing the paddy field.

9. He plan in the next future, he will expand the pasture areas and numbers of animals to increase the family income.

10. He did not influenced the other farmers.

11. He want to know how to use the antibiotic when the animals get sick and he also want to know the animals diseases.

12. He want to attend the training course on livestock production, CD watching, book reading.

13. He suggested the other farmers as Mr. Somlith by looking his activities and Mr. Somlith is very happy and follow him.

Interviewed by Sombath
The farmer who started following cross visit and stopped:

1. Mr. Onechane is Khamu in Donexai village, Phonxai district, Luangphabang province. He heard about using forages and livestock fattening from district staff in 2007 and the district gave him the seed and some goats.

2. The reason that he has decided to grow the pasture and fatten the animals, because he want to increase his family income ,the district staff explain him about the new technologies by using the new species of grasses and stylo to feed his goats.

3. Now he grown the sesame and produce the handicraft and he also raise some chicken, pigs and goats.

4. The reason that he stop to grow the pasture and fatten the cattle ,he is inadequate the labour and he focus on the sesame growing.

5. He had 30 chicken,7 goats and 3 pigs, he left his animals in free land ,no pen, no vaccination, he used the local feed as rice bran and paddy rice to feed the chicken.

6. His animals are dead by diseases and inadequate the feed and he had no skill in animals raising.

7. he had 15x15 m of pasture but he did not use.

8. He had the income from animals as goats and chicken selling around 3,700,000 kips per year.

9. He did not collect the manure for fertilizing .

10.He plan in the next future , he think ,he will improve the goats housing and if he had the money he will expanse the pasture about 5,000 square meters and buy 1 buffalo.

11.He didn't influence the other farmers.

12.He need to know the technique of livestock production and animal health.

13.He want to attend the train course on livestock production, and want to cross visit the farmers who have good benefits

Interviewed by Neuakhom
The farmer who have not followed cross visit farmers:

9. Mr. Oune Khammanivong in Donexai village, Phonxai district, Luangphabang province. He heard about using forages and livestock fattening from farmers who have cross visit and district staff that they suggest in the village meeting to grow the pasture for animals raising.

10. He didn’t grow the pasture because he moved from other village and he did not have the land, inadequate labour, no fund.

11. He had 8 chicken and he use the local feed as rice bran to feed them, he did not give the vaccine.

12. His animals are dead but he did not know the reason.

13. He did not get the money by selling the animals.

14. In the future he think, he want to grow the pasture at least 10x20 m first and buy 2-3 goats to fatten, if there are good benefits, he will expanse more pasture areas and increase the number of goats.

15. He want to know the goats raising technical as vaccine injection, treat the sick animals, animals feeding system and animal health.

16. He can learn by book reading CD watching and suggested by staff

Interviewed by Hongvilay
The farmer who have not followed cross visit farmers:

1. Mr. Sivixai is Khamu ethnic group in Phackhock village, Phonxai district, Luangphabang province. He heard about using forages and livestock fattening from district staff and head of village that they have the meeting to suggest the villagers to grow the pasture for animals raising.

2. He didn’t grow the pasture because he had no land and money to buy the animals.

3. He had 10 chicken and 5 pigs, he use the local feed as rice bran, cassava root and maize to feed them, he did not give the vaccine and did not use any technical.

4. His animals are dead but he did not know the reason.

5. He sold the pigs and chicken and got around 1,000,000 kips.

6. In the future he want to increase the number of pigs, and he will grow the cassava 1,750 square meters to feed his pigs.

7. He want to know the animals raising technical as vaccine injection, treat the sick animals, animals feeding system and animal health.

8. He can learn by training, cross visit and practice.

Interviewed by Boualy