

[10.1071/AN23368](https://doi.org/10.1071/AN23368)

Animal Production Science

Supplementary Material

The role of goat production in smallholder systems in Lao PDR: implications for improving productivity and scaling up production

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Appendix S1. Main characteristics of village subset selected for household sampling

Village, (district)	Proximity to nearest town (km)	Human population	Goat population	Proportion of HH keeping goats (%)	Average number of goats per HH	Schools in village	Presence of health clinics	Presence of fresh food market	Financial institutions	Ethnicities present
Napo, (Phin)	3.0	500	150	34.0	3.8	Primary school	No	No	Informal savings / credit group	Lao Loum, Phu Tai, Mong khong, Ta Oi
Xaloi (Phin)	7.0	505	400	89.0	5.0	Primary school	No	No	None	Mong khong, Brou
Nhomsomphou, (Songkhone)	5.0	1010	80	8.0	5.0	Primary school	No	Yes	None	Lao Loum, Phu Tai
Sebangiang, (Songkhone)	28.0	2685	320	10.0	8.0	Primary school, secondary school, high school	Yes	Yes	Informal savings / credit group	Lao Loum, Phu Tai
Kanglouang, (Sepon)	N/A	N/A	N/A	N/A	N/A	No school	No	No	None	Mong Khong
HH: Household, N/A: Data not available										

Appendix S2

SEMI-STRUCTURED INTERVIEW GUIDE

1. *Prior to raising goats, were you aware of other goat raisers or goat traders within or outside your community?*

Probe:

- Relationship to other goat raisers & traders.
- Perceptions of other goat raisers/traders prior to raising goats themselves.
- How long has goat raising been practiced in the village?

2. *What motivated your household to begin raising goats?*

Probe:

- Whether other goat raisers/traders had influence over their decision to begin raising goats.

3. *How did you acquire the goats?*

Probe:

- Who they sourced goats from.
- How they financed the goats.
- Did they make a trade? Pay in cash? Was the goat gifted?
- Are they in cash or gift debt to whoever they acquired from?

4. *Can you please describe the typical daily activities you carry out when raising goats?*

Probe:

- What times of the day is each task carried out?

5. *Since you began raising goats, do you find that you have more or less free time for other activities? If so, how do you spend this free time?*

Probe:

- Leisure
- Childcare
- Other enterprises

6. *Who spends the most time on goat raising activities within your household?*

Probe:

- Which activities are the most time-consuming and why?
- If a particular house member is named, why do they spend the most time on goat raising? Is it a matter of convenience? Knowledge? Ease of management? The value of

the enterprise? Other HH members are working off-farm or pre-occupied with another enterprise?

7. *Does anyone from outside your household help you raise your goats?*

Probe:

- Hiring of labourers?
- Farmer's groups?
- Friends/neighbours/family?
- Traders?
- How do they assist them? Labour? Advice?
- Outside household... in the same village? Nearby town?

8. *How did you learn to raise goats?*

Probe:

- Advice received
- Extension services
- Sources of information
- Trial and error
- Early doubts/mistakes
- Early successes
- Process of gaining confidence around the enterprise

9. *Since you began raising goats, what new management strategies have you heard about or adopted since you began raising goats?*

Probe:

- What have they heard about but not adopted (why not?), what have they actually adopted?
- Disease prevention/treatment, nutrition, reproduction etc... How they learnt about them and from whom
- Extensions services
- Livestock production projects
- Farmer's groups
- Traders
- Neighbours / family members
- Village elders (e.g. traditional medicines)
- Internet
- How did they gain access to the above materials? Word of mouth? Did they have to pay for advice?
- What was their experience with the new management strategy? Good or bad

10. *Have you developed or modified any of these management strategies or technologies?*

Probe:

- If they have, why?
- How did they modify the strategy/technology?
- What were the results?
- Have they shared this experience (positive or negative) with others? If yes, who?

11. *What are the benefits to raising goats?*

Probe:

- Financial security
- Food security
- Easy management

12. *What is the income from goat sales spent on?*

Probe:

- Household goods
- School costs
- Clothing
- House repairs / upgrades
- Fuel for vehicles
- Buying other livestock
- Medical expenses
- Agricultural inputs (e.g. feed, fertilisers etc.)

13. *Who has access to and makes decisions around the use of income generated from goat sales?*

Probe:

- Who communicates with and receives money from the trader?
- Is cash saved or spent straightaway?
- Who looks after cash?
- Who has access to cash?
- Who decides how the money is spent?

14. *Do you use or keep goats for anything else other than selling them for income?*

Probe:

- Gifts
- Dowry
- Cash storage
- Home consumption etc.
- Manure
- Eating weeds

15. *What do you think are the worst aspects of raising goats?*

Probe:

- What about these ‘aspects’ makes them the worst?
- Difficulty/complexity
- Time consuming
- Disruptive/frustrating
- Uncertainty (e.g. variable goat prices)
- Disease

16. Has raising goats caused any changes in your lifestyle, family or household?

Probe:

- Income
- Security (financial & food)
- Prioritisation of different enterprises?
- Damage to crops, problems with neighbours

17. How dependent are you on goats to maintain your way of life?

Probe:

- How important it is in comparison to other livelihood activities

18. Are you aware of any superstitions, taboos or religious beliefs that exist around goats? If so, please describe them.

Probe:

- Are there particular beliefs associated with ethnic groups? Age cohorts?

19. Are you aware of goats being kept or used for any special occasions or ceremonies? If so, please describe them.

Probe:

- Time of year?
- Who participates?
- What they symbolize / celebrate

20. What are your plans and goals for raising goats in the future?