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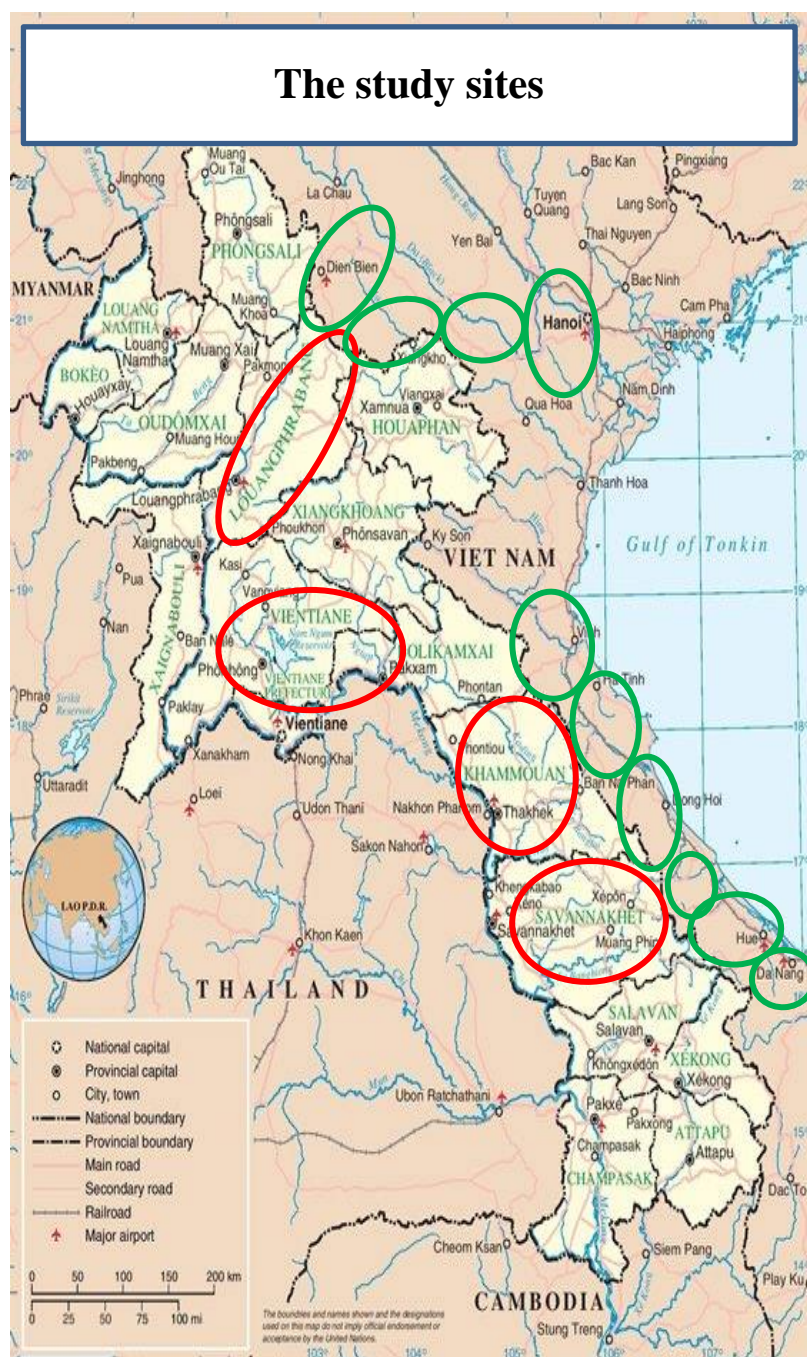
GOAT PRODUCTION SYSTEMS AND MARKETING

IN LAO PDR AND VIETNAM

ACIAR PROJECT - LS/2017/034



Thi Nga Bui⁽¹⁾, Huu Van Nguyen⁽²⁾, Xuan Ba Nguyen⁽²⁾, Van Nam Le⁽²⁾, Thi Mui Nguyen⁽²⁾, Thi Kim Cuc Ngo⁽³⁾, Thi Le Quyen Ngo⁽³⁾, Nam Hoang⁽⁴⁾, Emilio Morales⁽⁴⁾, Viet Don Nguyen⁽⁵⁾, Luisa Olmo⁽⁵⁾, Stephen Walken-Brown⁽⁵⁾



Project objectives

- Evaluate goat production system in Lao PDR to develop technical, social and economic benefits against which improvements can be assessed
- Assess major constrains, and identify and evaluate potential solutions
- Reduce market risk and increasing marketing opportunities through improved understanding of the factors affecting demand and pricing of goats in Lao PDR and Vietnam, and of the associated value chains**
- Build capacity for research and development of goat production in Lao PDR and initiate scaling out of project findings

Study sites

3 provinces of Laos (Khammounane, Luang Prabang, Savannakhet) produced the most goats, share a border and have regular goat exchange with 7 provinces of Vietnam (Dien Bien, Son La, Nghe An, Ha Tinh, Quang Binh, Quang Tri, Thua Thien Hue); Vientiane – the capital of Laos, and 3 provinces with high-consumption demand for goat in Vietnam (Hanoi, Hoa Binh, Da Nang), were chosen to explore the destination for goat chain.

Sampling method

Farmers: non-probability sampling method

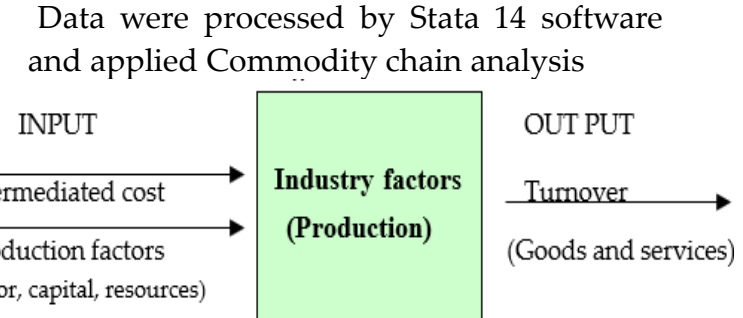
$$SS = \frac{Z^2 \times p \times (1 - p)}{e^2} = \frac{1.96^2 \times 0.05 \times (1 - 0.05)}{0.03^2} = 202.75$$
 Other actors: all abattoirs, all possible traders and goat restaurants or restaurants that have goat dishes in the surveyed provinces were interviewed

Research

Data collection

	Province	Farmer	Trader	Abattoirs	Restaurant owner	Consumer	Total
Laos	Khammouane	59	1	2	4	57	123
	Luang Prabang	65	3	2	5	88	163
	Savannakhet	83	2	6	8	82	181
	Vientiane	14	1	5	5	61	86
Laos total		221	7	15	22	288	553
Vietnam	Da nang		1		4	11	16
	Dien bien		5	5	6	50	66
	Ha tinh		3		10	51	64
	Hanoi			7	7	104	118
	Nghe an		2		9	47	58
	Noa binh		4	4	10	52	70
	Quang bing		1		10	42	53
	Quang tri		5		10	53	68
	Son la		5	2	9	45	61
	TT-Hue		3	3	8	48	62
Vietnam total			29	21	85	503	638
Total		221	36	36	107	791	1,191

Data processing and analysis



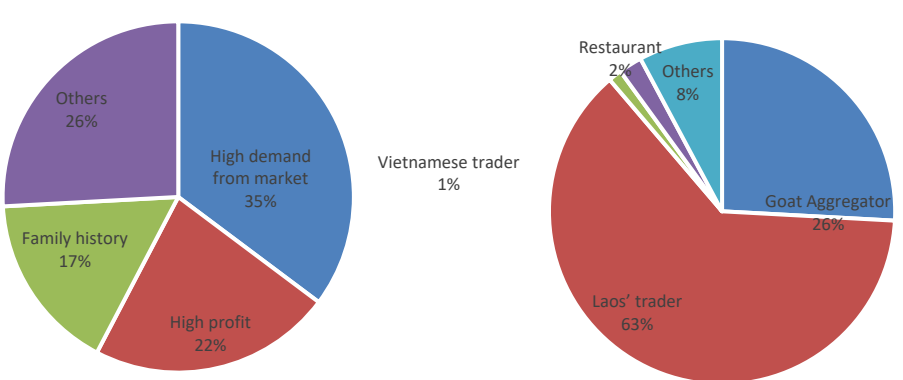
Results

Goat production*: Small-scale holders with high risks

Table 1. Mean annual key production indicators of smallholder goat production systems in Lao PDR

	Number of kids/doe/year	Number of kids/litter	Annual rate of sales (%)	Annual total mortality rate (%)	Annual kid mortality rate (%)	Annual missing goat rate (%)
Mean	1.9	1.6	65.4%	37.5%	26.3%	7.9%
Median	1.8	1.5	56.3	30.0%	20.0%	0%
Range	0.2–3.9	1–3	0–327.4%	0–143.3%	0–84.7%	0–55.7%

This is a kind of export market demand-driven chain originating from Vietnamese customers



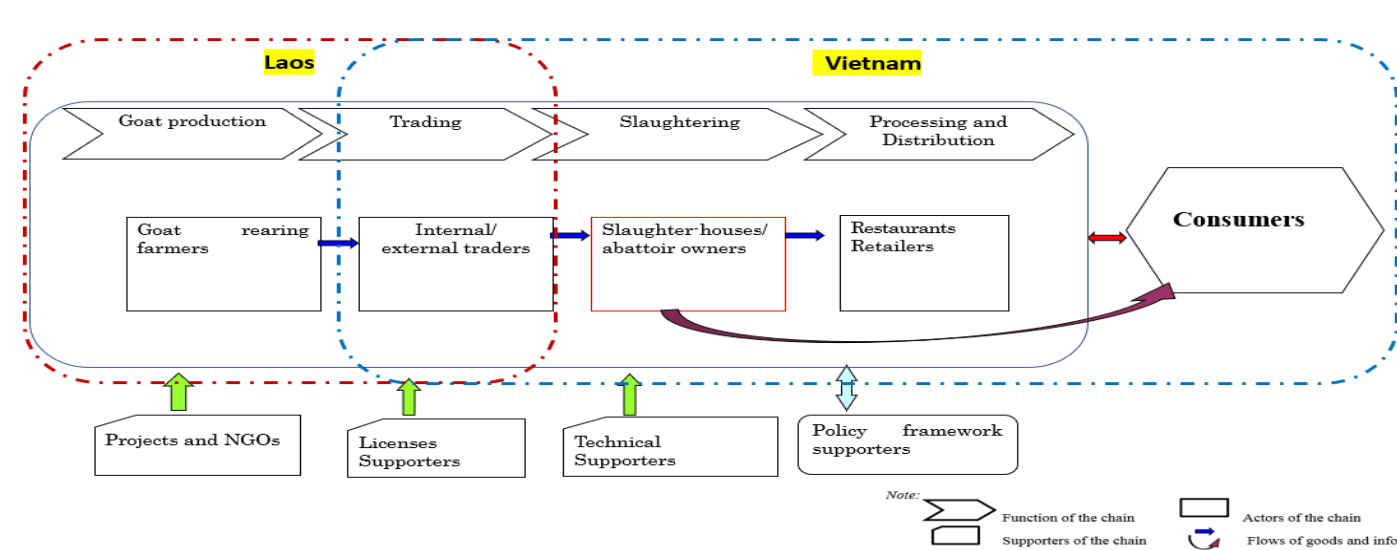
The chain created job opportunities and income to improve living standards, especially for disadvantaged groups in society such as women, the middle-aged, people with low level of literacy and in rural area.

Table 8: Willingness to Pay Extra - Food Motive

Dependent Variables: Extra amount paid for Laos Goat	Fixed-Effects		Random-Effects	
	(1)	(2)	(1)	(2)
Intercept				-37.54 (37.20)
Age	0.19 (0.34)		0.14 (0.32)	
Marriage	11.14 (12.31)			
Family members	-2.09 (2.79)		-2.00 (2.75)	
Gender	11.35* (6.36)		7.60 (6.20)	
Urban	13.41 (8.67)		12.65 (8.39)	
Monthly income	5.67*** (1.61)		5.94*** (1)	
Healthy belief	9.31** (4.52)		10.76*** (4)	
Good tastes	4.09 (6.25)		9.19 (5.7)	
Familiar	4.85 (4.22)			
Feeling relax	7.83* (4.14)			
Availability	-3.93 (3.59)			
Natural ingredients	-1.78 (4.72)			
Not expensive	3.11 (3.21)			
Animal welfare	-13.80*** (4.29)		-14.75*** (4.22)	
Observations	448		448	

Note: *p<0.1; **p<0.05; ***p<0.01

Goat value chain from Laos to Vietnam: Both vertical and horizontal linkages existed but mainly verbal; no declaration of leading actors, goat processing industry, and traceability system

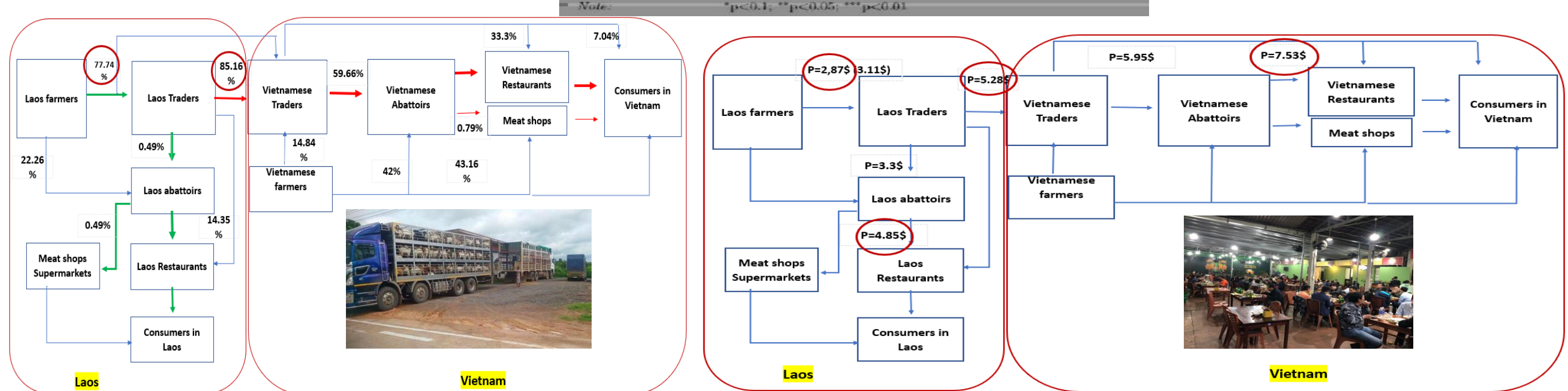


The commercialization of goats yields positive net income in Lao and all actors got the benefits, especially traders and restaurant owners.

Recommendations

- Lao and Vietnamese governments should improve the legal framework status, licenses supports for the official export of goats from Laos to Vietnam.
- The local government of Laos should have a policy to promote goat husbandry, Farmers had better upgrade their herd management capacity
- Other chain actors should enhance formal linkages and official marketing channels
- Other stakeholders should provide technical supports, technologies, science application in goat rearing, capacity building.

Domestic and international marketing channels



(1) Faculty of Tourism and Foreign Languages, Vietnam National University of Agriculture, Trau Quy, Gia Lam, Hanoi, Vietnam. Email: htnga@vnu.edu.vn or hieu0306@gmail.com; (2) University of Agriculture and Forestry, Hue University, Vietnam; (3) National Institute of Animal Science, Hanoi, Vietnam; (4) UNE Business School; (5) School of Environmental and Rural Science, University of New England, Armidale NSW 2351, Australia; (Team objective 3); (*) A. F. Colvin, L. Olmo, A. Phengvilaysouk, J. Millar, C. G. D. Gray, P. Phengsavanh and S. W. Walkden-Brown (Team Objective 1)