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Introduction

Hanoi's suburban area played an important role in supplying meat for Hanoi capital and providing chicks and ducklings for other provinces in the North-Vietnam. Since early 2004, the producers had to adapt to the context of highly pathogenic of avian influenza (HPAI) for a better responding to the demand of market.

This research aimed at analyzing the explicative factors of poultry development at local level in Hanoi Suburb through an identification of poultry farming systems and supply chains with their various constraints, including the disease caused by H5N1 virus and how the breeders responded to the epidemic disease.

Results

Table 1. Typology of poultry farming systems (1 sào = 360m²)

Poultry farming systems (FS)	Sub-systems	Farms	Percent of farms (%)	Areas of (sào)	
				Plant production	Pond fish
Chicken integration by farming contract between farmers and enterprises	Young hens	5	0.1	6	1
	Broiler chicken	15		7	3
Layer/reproductive poultry at commercial scale	Layer hens	21	4.8	5	12
	Layer ducks	28		12	15
	Mixed reproductive hens and ducks	24		8	6
Broiler production at commercial scale	Broiler chickens	17	15	11	4
	Broiler ducks	18		7	5
Village/backyard poultry production		32	80	8	3
Total		160			

Methodology

280 households involved in poultry production at different scales were selected based on the agro-ecological patterns and the diversification of poultry farming systems.

100 intermediary agents (poultry traders, abattoirs and hatching incubators) were interviewed. The research was conducted for two years between 2009 and 2010 in three districts (Thuong Tin, Phu Xuyen and Chuong My).

250 households consumed poultry meat in inner and suburban districts were interviewed and record keeping book from January to October, 2010 [1].

Financial analysis method was based on the value-added concept. The whole production process involving the flow of inputs and outputs.

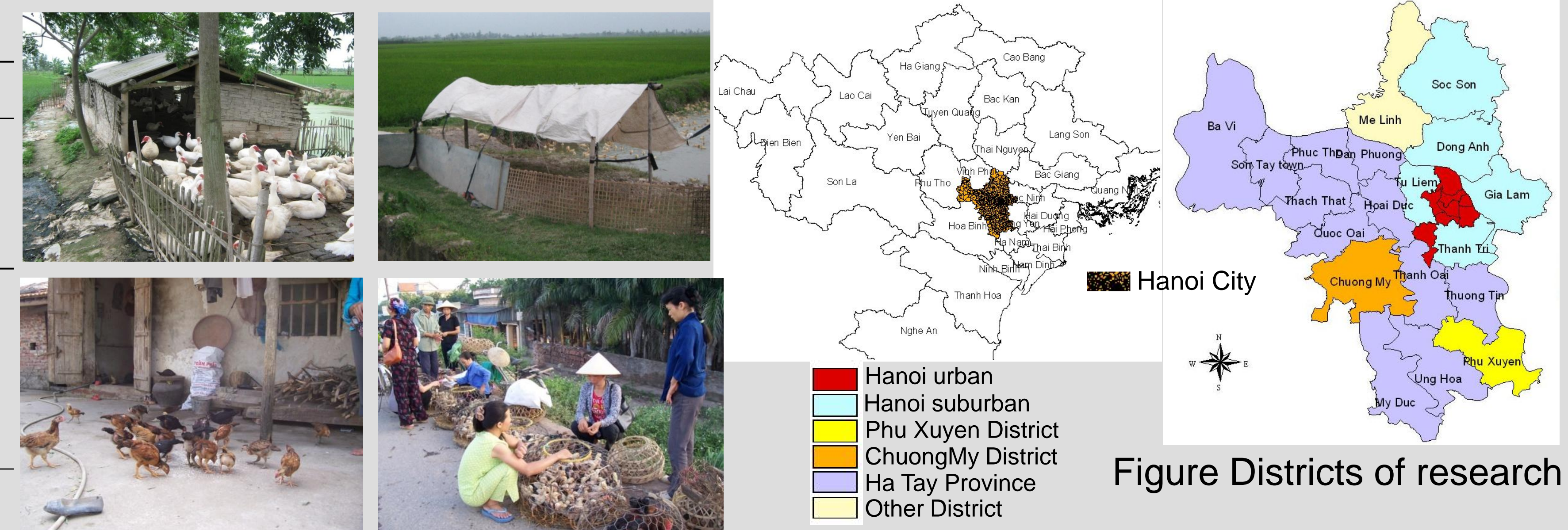
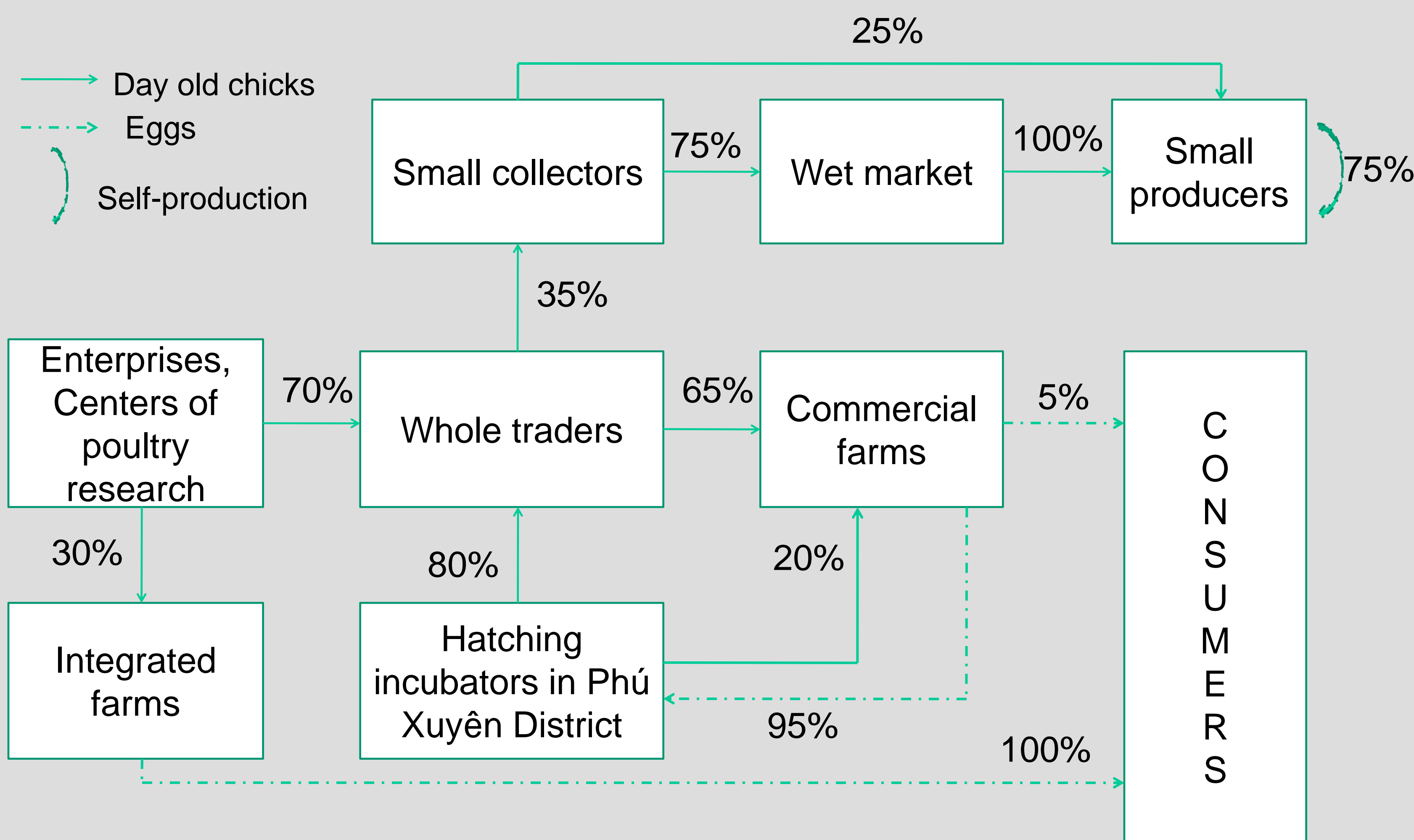
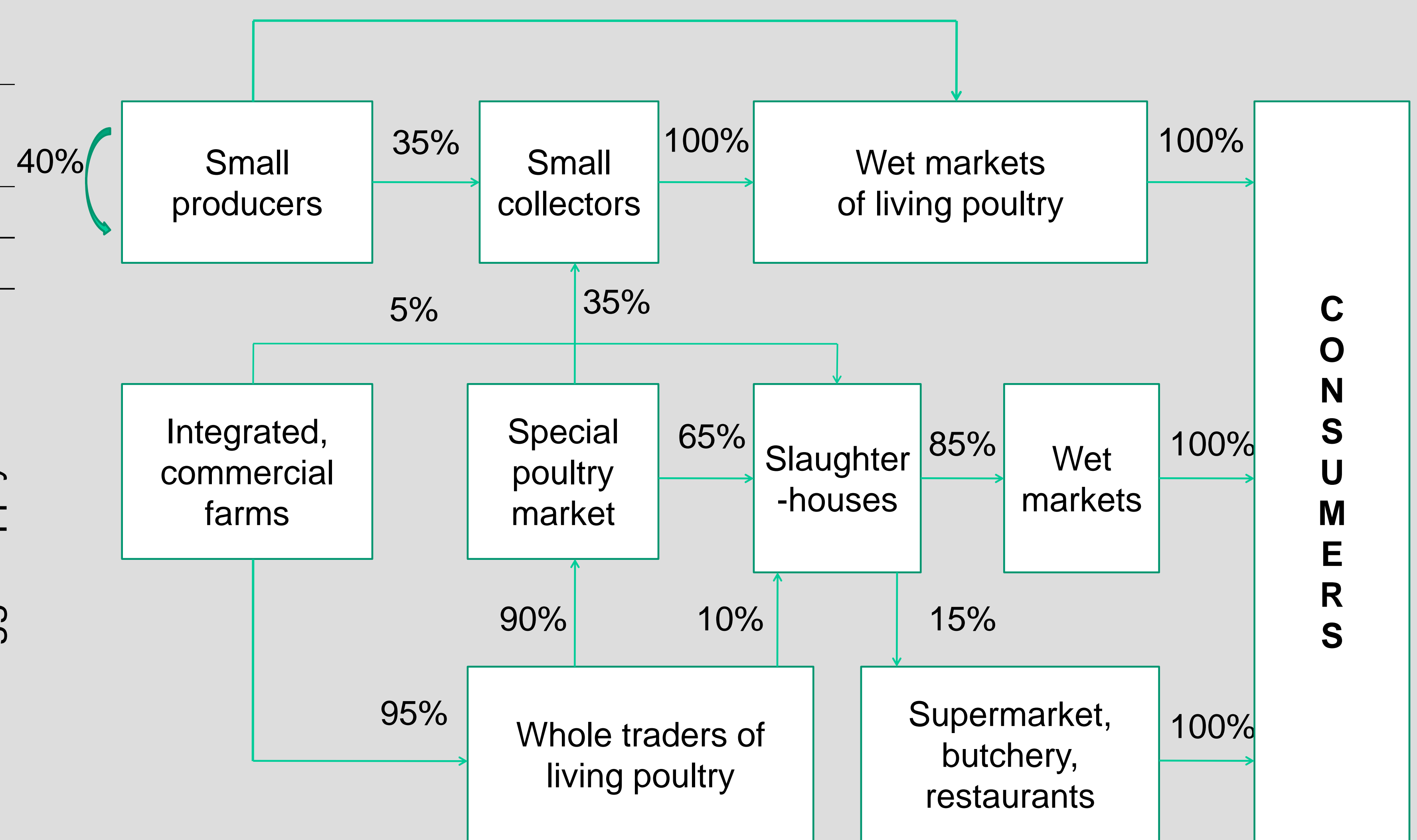


Figure Districts of research



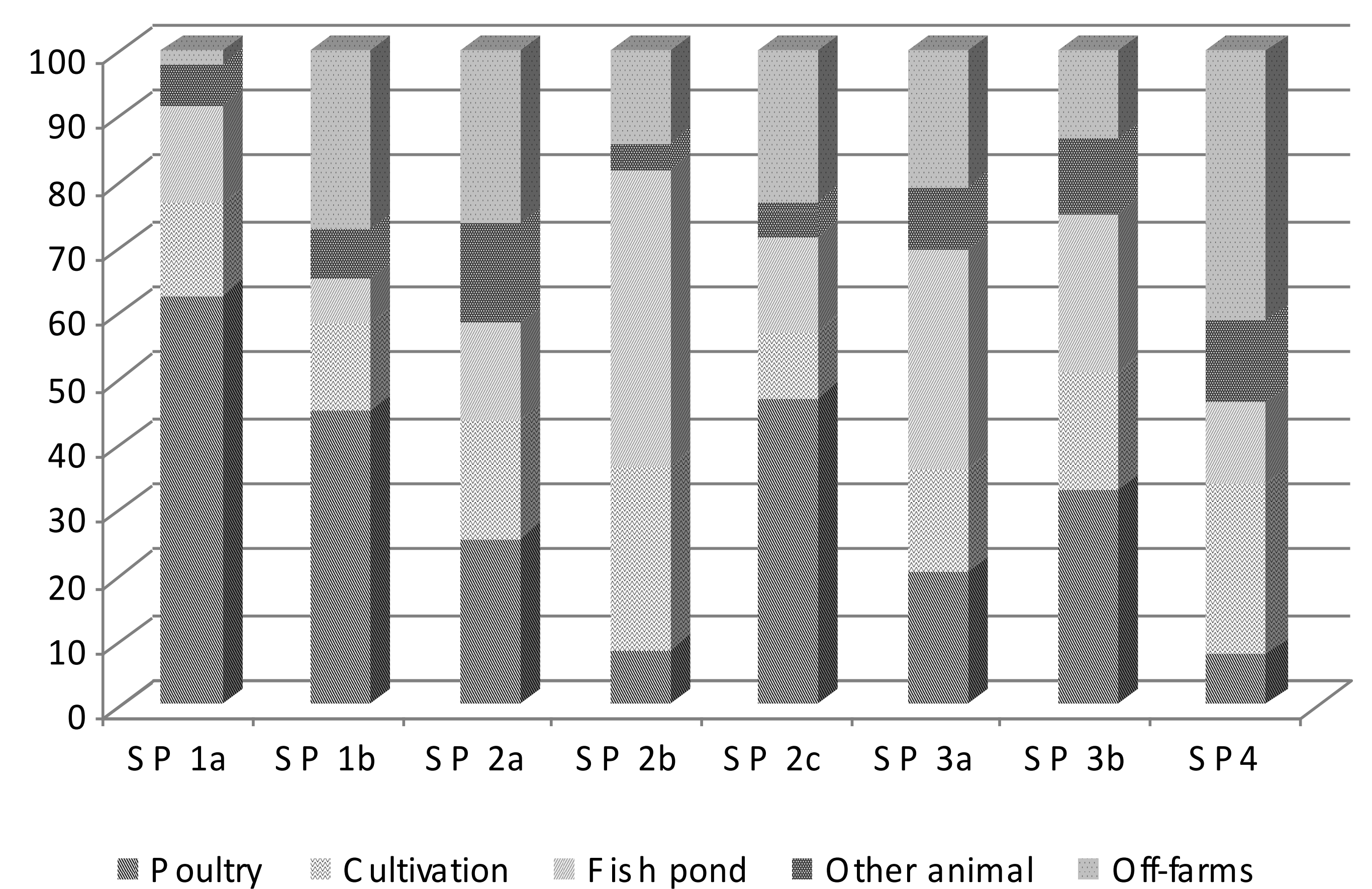
Schema 2 Day old chicks and eggs supply chains



Schema 1. Broiler poultry supply chains in region of research

Table 2. General economic results of poultry farming systems (1,000 Vnd)

	FS 1		FS 2			FS 3		FS 4
	Broiler chicken	Young hens	Layer hens	Layer ducks	Mixed	Broiler chicken	Broiler ducks	
Cultivation	9,435	7,735	8,763	14,198	10,356	8,069	9,493	11,605
Fish pond	10,000	4,000	7,229	22,661	14,167	17,000	12,778	5,469
Other animal	4,267	4,300	7,524	2,000	5,479	4,853	6,056	5,648
Off-farms	1,333	15,876	12,887	7,136	23,057	10,659	7,139	18,398
Poultry	41,610	25,920	12,439	4,162	46,721	10,369	17,336	3,471
Total	66,645	57,831	48,842	50,156	99,780	50,950	52,801	44,590
VAN/labour	29,345	19,760	15,973	24,054	47,922	26,603	24,323	20,105



Schema 3. Structure of income according to poultry farming systems (%) [2]

Conclusions

Poultry supply chains is really complex with many different factors. Economical results in these systems are very unsettled, the color reproductive hens production has a good economic performance but layer duck, Muscovy duck and broiler duck production are loss-making by a large fluctuation of inputs/outputs and epidemic diseases on birds. These are the main reasons influencing the "not sustainable" income in poultry production in this region and in Vietnam today.

References

- (1) Ton et al., 2009. Sci. report of Proj. HUA – CUD Cooperation
- (2) Thang et al., 2010. HUA Sci. & Dev. Vol.8 (Eng.Iss.2) 203-215