Household pork consumption behaviour in Vietnam: Implications for pro-smallholder pig value chain upgrading

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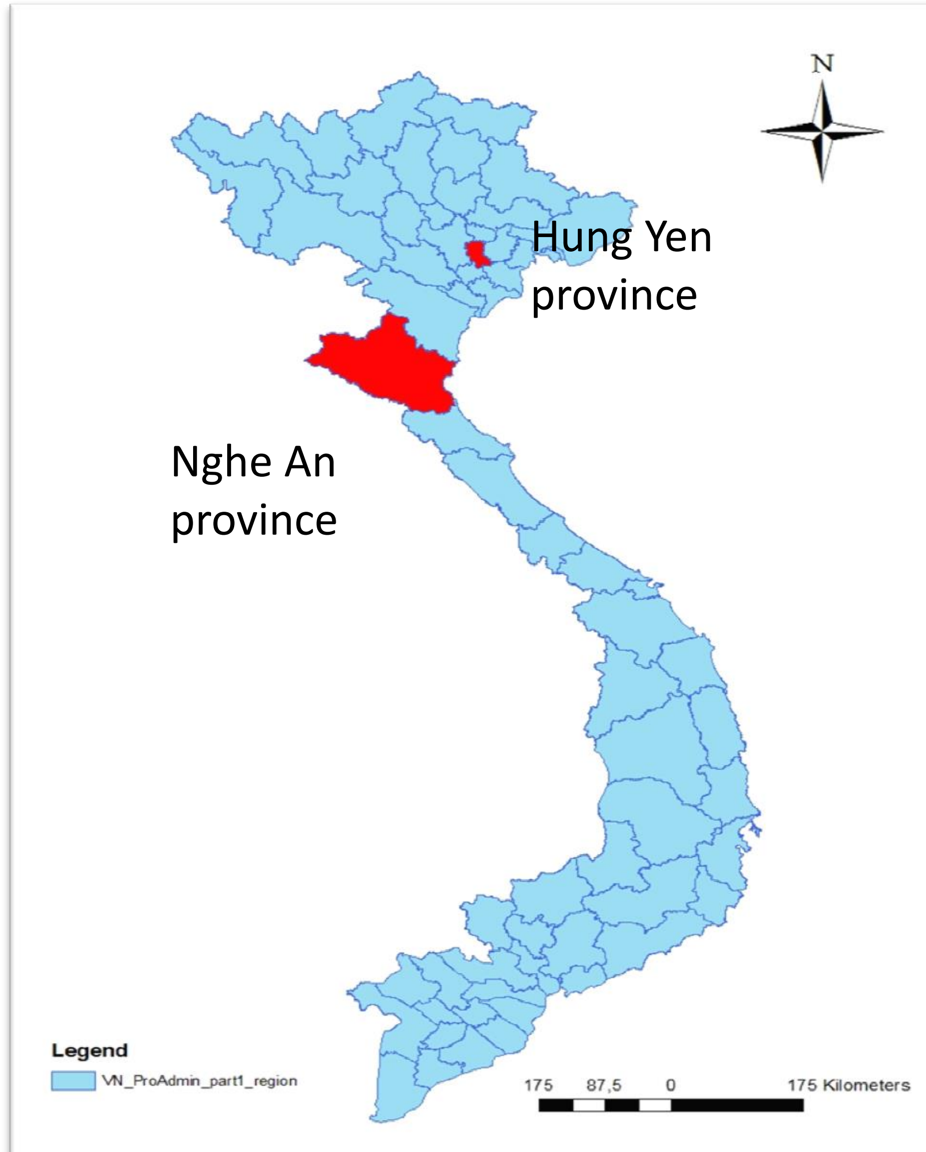
Introduction

- Pig sector is important: supplies ¾ of total meat production; livelihood for about 4.13 million smallholders (providing > 80% of total pork for domestic consumption)
- Increasing trend to world and regional integration: WTO, AFTA, coming TPP; livestock, especially pig sector (smallholders) is likely adversely affected with large reduction in import tax
- How to stabilize consumer demand for domestic pork products and sustain livelihood for smallholders?
- This study aims to provide information on consumer behaviour for pork and draw implications for upgrading smallholder pig value chain in Vietnam

Data collected

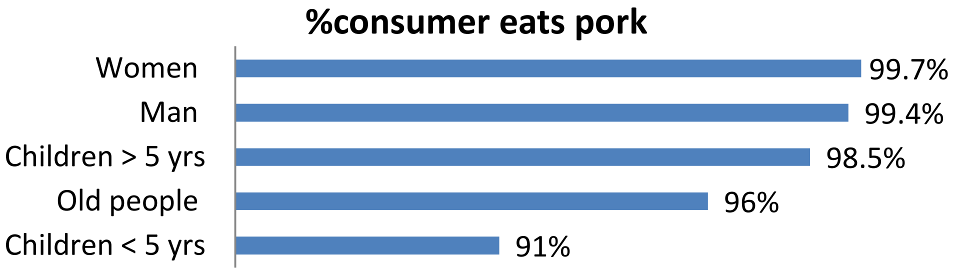
- 416 consumer household (273 rural; 143 urban)
- 420 pig smallholders
- Other actors in the chains
- 2nd - 3rd quarter 2013

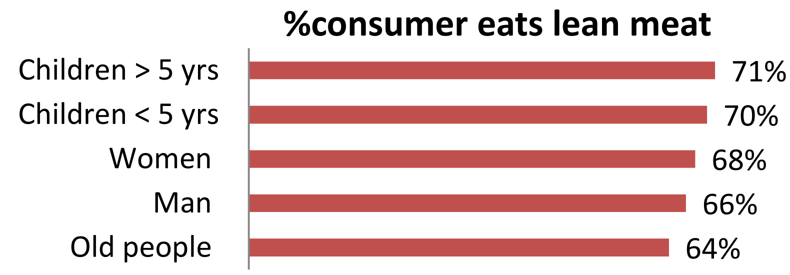


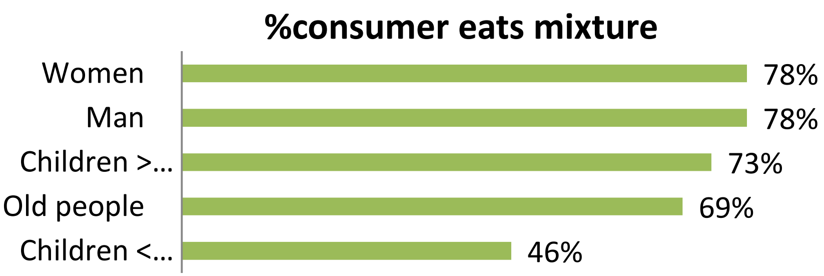
Household profiles

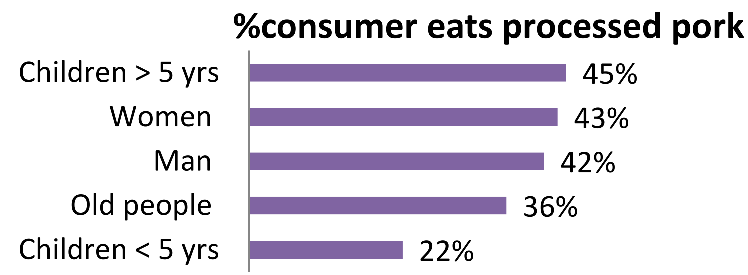
	Rural	Urban	All	Difference
1. Household head education (%)				
High school and lower	***87.2***	***58.8***	*77.4*	
Other	*12.8*	*41.3*	*22.6*	
2. Family size	3.8	3.7	3.8	-0.1^{NS}
3. Per capita income (USD/year)	**1,181**	**1,762**	1,381	-580 ***
4. Per capita food expenditure (USD/year)	**679**	**1065**	810	-386***

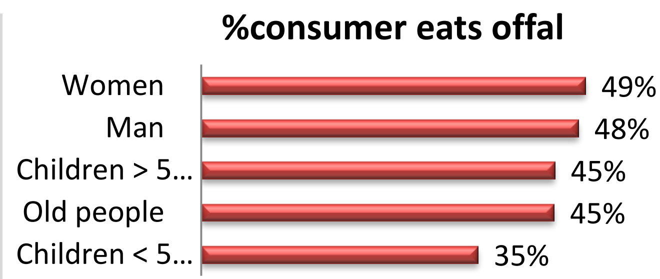
The diversity of pork consumption in households
(by age and gender)











- Pork is commonly eaten by consumers at all ages and gender
- Lean meat is more common for children
- Mixture pork (meat with bones) is more commonly used than lean meat, except for children less than 5
- Processed pork is not widely used; especially children
- Same pattern for both rural and urban consumers

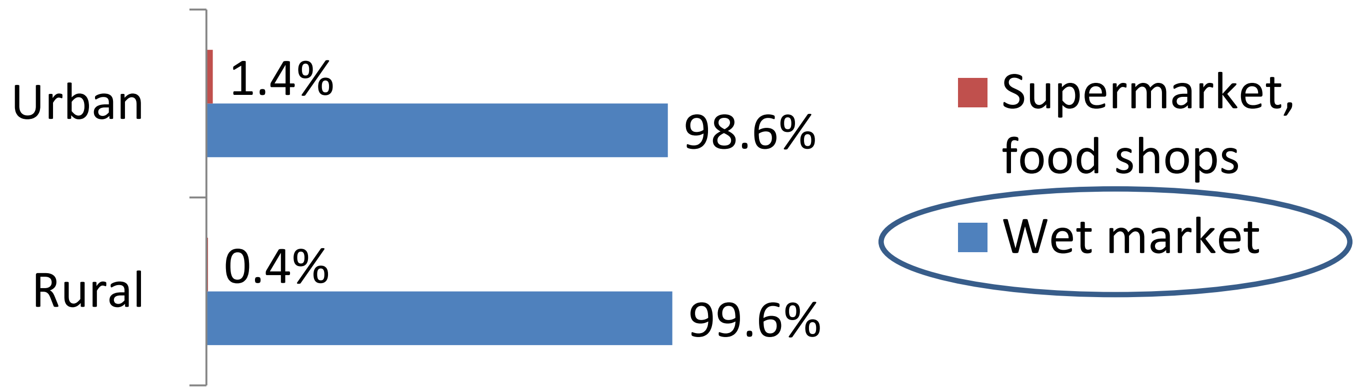
Monthly consumption of pork in 2012

Consumption	Rural	Urban	All	Differences
Per capita consumption(kg)	**2.01**	**2.17**	2.05	0.16^{ns}
Lean	**0.54**	**0.77**	0.61	-0.23***
Fatty	0.10	0.05	0.08	0.05^{ns}
Mixture	0.81	0.65	0.75	0.16*
Bones	0.39	0.48	0.42	-0.09*
Processed	0.09	0.11	0.10	-0.02 ^{ns}
Offal	0.08	0.11	0.09	-0.03 ^{ns}
Household consumption(kg)	7.26	7.64	7.36	-0.38^{NS}
Total household pork expenditure (USD)	29.02	30.58	29.43	-1.56^{NS}
Pork proportion in food expenditure (%)	14.8	9.6	12.4	

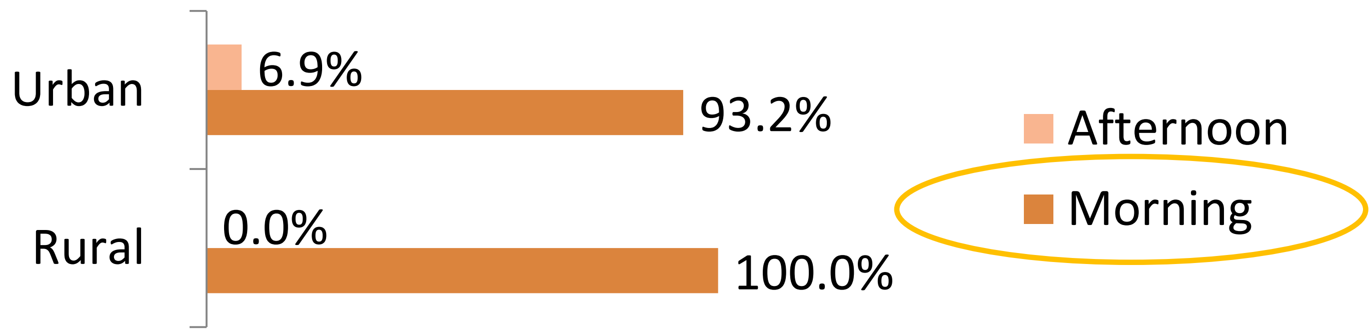
- **No significant difference in pork consumption between rural and urban**, although some differences in types of pork cuts, as below:
- **Urban: more lean meat and bones** (**mainly ribs – highest prices among bones** and can be cooked in various ways than other types of bones)
- **Rural: more mixture meat** (mainly based on cultural preferences & lower prices relative to lean meat)

The most regular sources and time for buying pork (% of households)

Regular source of pork outlet

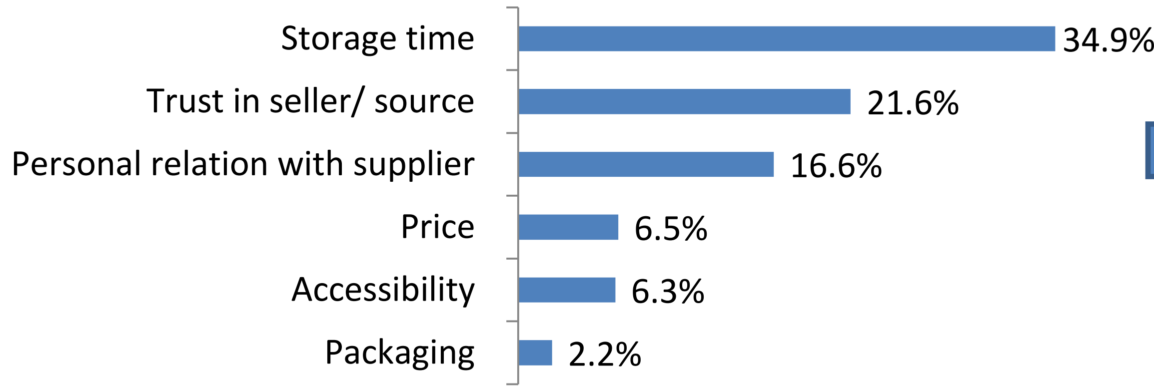


Time for buying pork



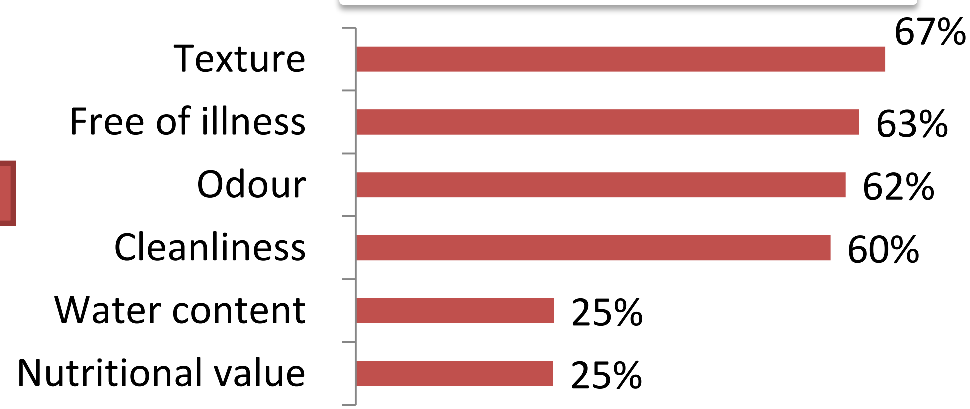
Important concerns in selecting pork outlets and buying pork

In selecting pork outlets



- An **outlet where meat is sold out in short time** is preferred → for freshness
- **Trust** in supplier is very important for selecting an outlet
- **Price, packaging are less important**

In buying pork



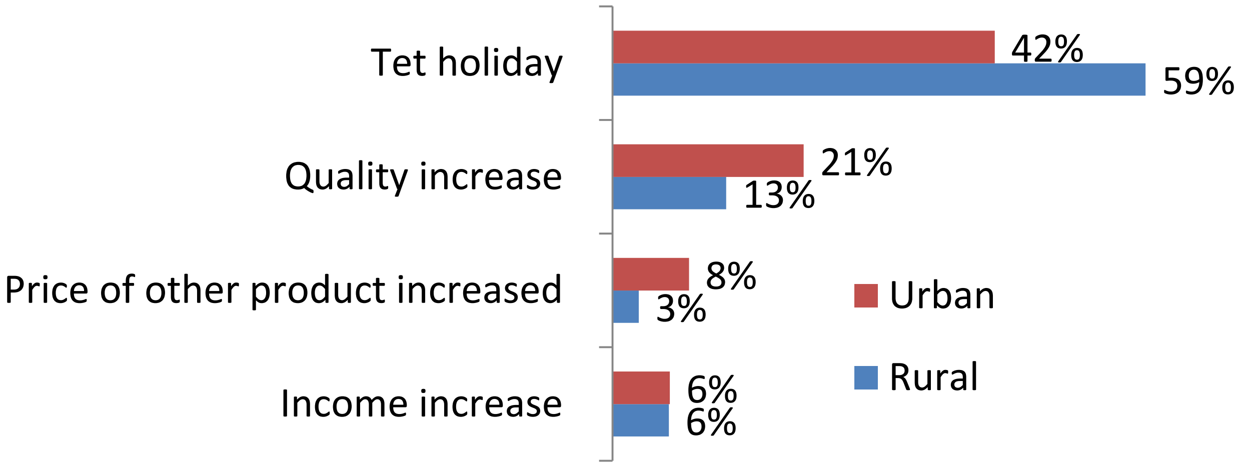
- **Free of illness** (or absence of disease) is very important to consumers, **though unobservable**
- No packaging; **unable to trace the origin**

→ **Trust** in supplier is important

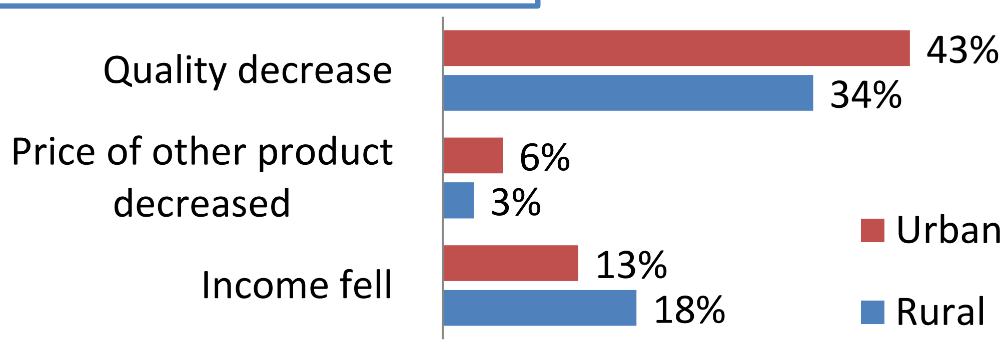
Consumer's response in cases of changes in income, pork quality and related product price

(% household)

Buy more when



Buy less when



- **Holidays**
- **Pork** is **weakly substituted by other meats**: stronger response when price of related products increase

- **Quality is a very strong factor affecting** (negatively) consumer **demand** for pork, esp. when quality is perceived to have decreased

Consumer's response in cases of pork price changes

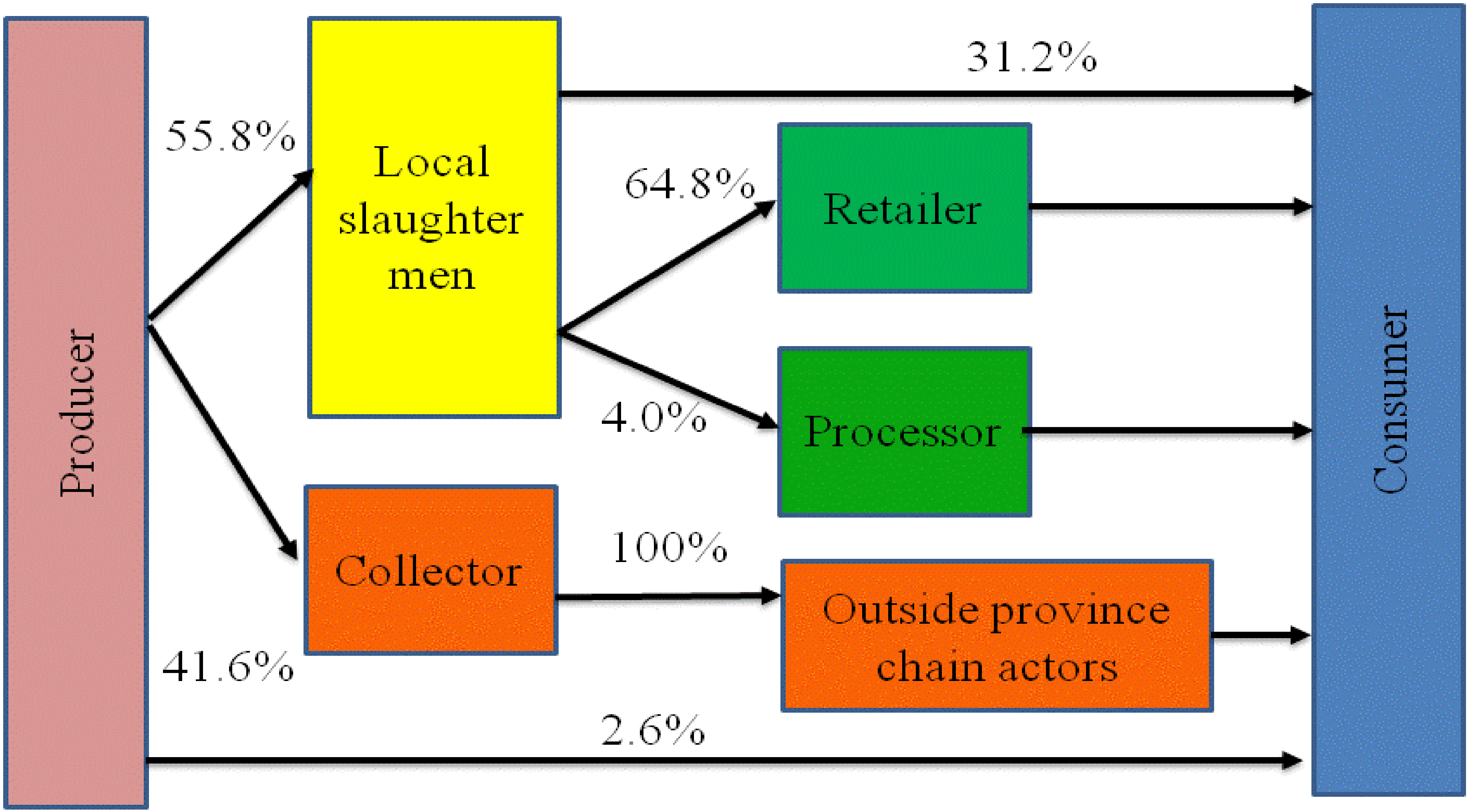
Behavior	Price down by 10%			Price up by 10%		
	Rural	Urban	All	Rural	Urban	All
Unchanged (amount)	83.5	86.0	84.4	76.6	86.7	80.1
Buy more at the same shop	11.7	8.4	10.6	-	-	-
Buy less at the same shop	-	-	-	19.4	11.2	16.6
Amount changed (kg/hh/month)	1.0	0.9	1.0	-1.0	-0.6	-0.9

- **10% change in prices does not influence pork consumption** of the majority of consumers
- **Stronger reaction when the price goes up** than when it goes down

Consumer trust and willingness to pay for safe pork

	Rural	Urban	Total
1. Trust in pork quality and stamp (%hh)			
Believe that pork quality is already safe *in market*	*4.4*	*2.1*	*3.6*
Fully trust in quarantine stamp sign on pork	*22.7*	*21.7*	*22.4*
2. **Willing to pay for safe pork (%hh)**	91.9	93.7	92.6
Price premium (USD/kg)	*1.0*	*1.2*	*1.1*
3. Pork consumption trend of household (%hh)			
Not change	*57.0*	*73.1*	*62.6*
Increase	*2.0*	*6.0*	*3.4*
Decrease	*41.0*	*20.9*	*34.0*

Local pork value chain in Vietnam



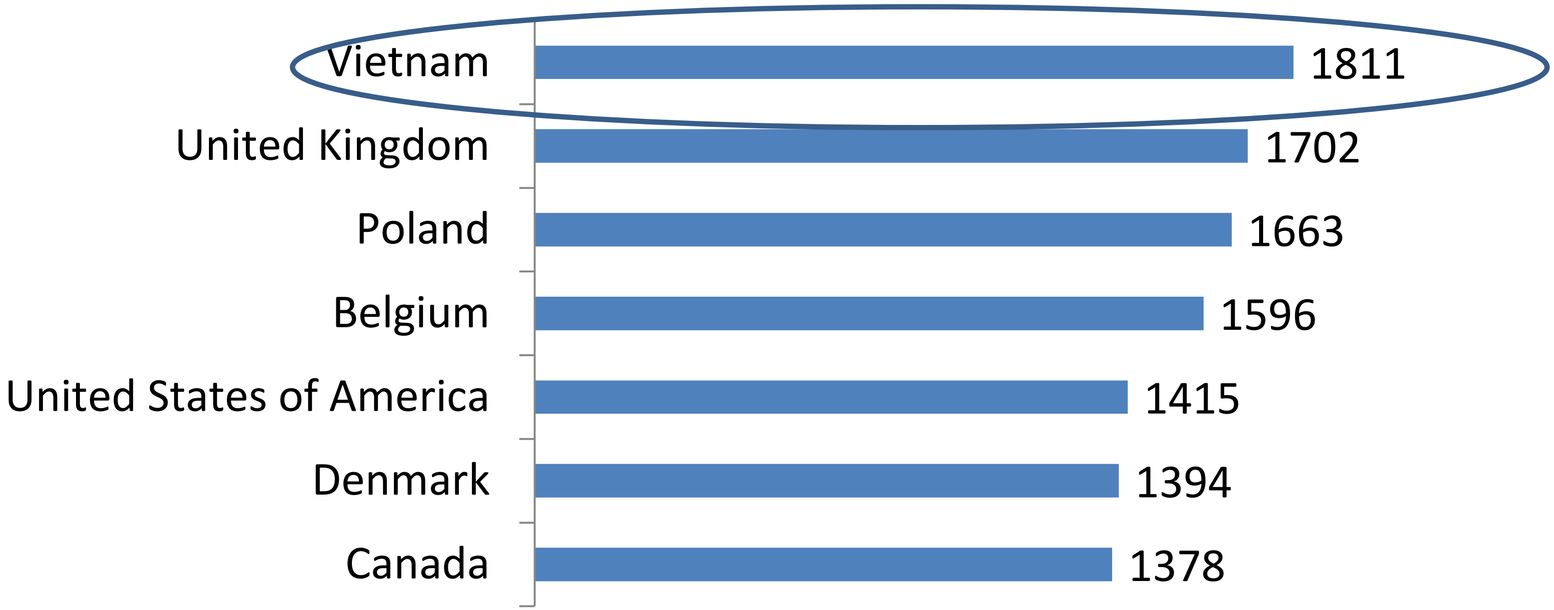
Some issues in the chain

1. **Production:** Weakness of small scale

- Difficult to establish **quality certification system**
- A **number of farmers are weakly market-oriented**: produce what they can, and used to do**. Little concern of market** (trend, demand)
- All transactions are in spot markets. **No long term coordination**
- **High cost of production**

Cost of pig production in 2012

(USD/ton of live pig)



Sources: FAOSTAT (2015), Vietnam data from farm household survey, 2013

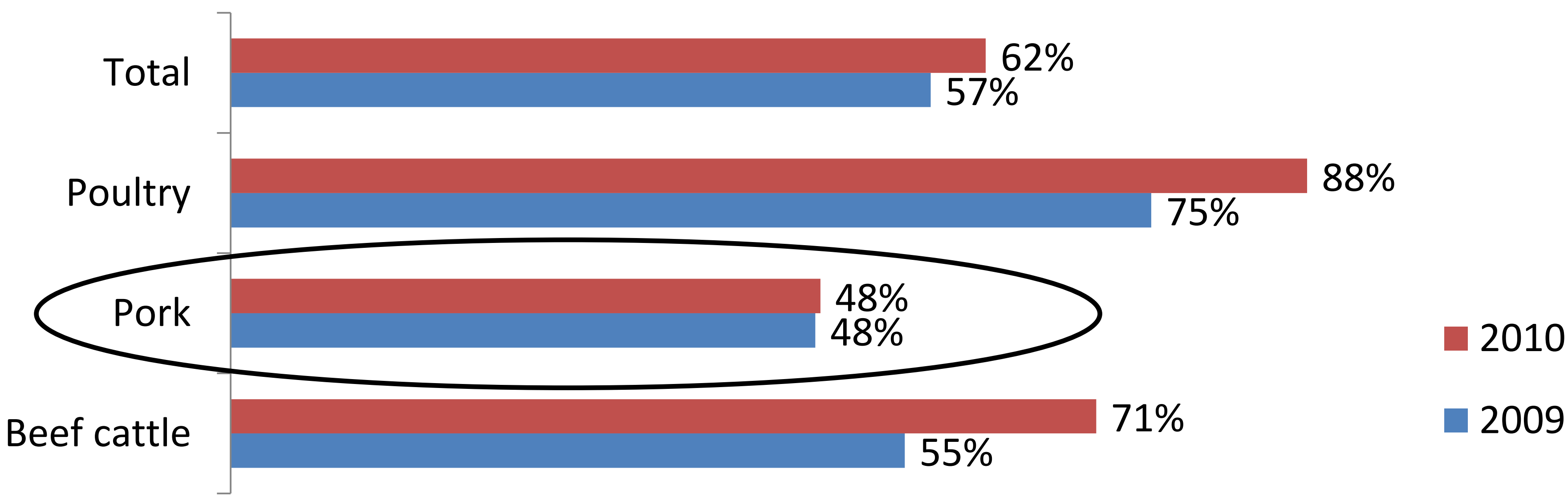
- Vietnam is importing pork from the above countries; Canada, the U.S, and Denmark are top exporters.
- **Vietnam's cost of production is highest as compared with other** pork producing and exporting **countries,** hence importation makes sense from a cost-efficiency perspective.

Some issues in the chain (cont.)

2. **Marketing:** Pork sold in wet market; **unable to trace origin. Asymmetric quality information** (i.e. free of illness of pig) between consumers & sellers

3. **Food safety management along the chain**

% of samples under requirement of veterinary hygiene and food safety in Vietnam



Integration of Vietnam to the world market

- Vietnam **joined WTO and has several FTA agreements at regional levels;** hence, has to comply with free trade agreements
- **Pork import tariff** had been **reduced from about 30%** (at WTO entry in 2006) **to 15% by year 2012**, making it **cheaper for exporters to sell pork** to Vietnam
- **Meat import rising,** partly in **response** to **rising** domestic **demand**, but also due to **reduced tariffs** levied on pork imports
- **Compliance with SPS requirements will need to be assured** for imported pork

Policy implications

- Small pig farms **should be organized in group (or cooperatives**), applying **good practices, and marketing** of pig through group/cooperatives is **supported by quality certification** of trusted institution;
- **Develop a quality assurance system that can** be **feasibly established** under **smallholder conditions**, and **complies with minimum quality and** safety **standards** tailored to **Vietnam's context**;
- **Strengthening capacity to collect appropriate market information** to provide pig producers, particularly smallholders, reliable meat demand and supply forecast to better serve their target consumers; and
- **Improving cost and quality competitiveness in pig value chains**.

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