



Récentes évolutions autour de la qualité dans les filières agricoles et l'alimentation au Vietnam: enjeux institutionnels et méthodes

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Vietnamese consumers in the face of avian flu

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Objective 1: Avian influenza as a food related risk

- Malica previous researches related to food safety risk
- The avian flu mentioned in the press and considered by consumers as a food related risk.

A large proportion of consumers considers Avian Influenza as a food-related risk

⌘ In 2004 (n= 214, Hanoi)

- ☒ 97% believe that AI can be transmitted to humans through contact with sick animals.
- ☒ 45% believe AI can be a food-related risk
- ☒ 30% believe that contamination from human to human is possible

⌘ In 2006 (n=600, Hanoi and Ha Tay)

- ☒ The recommendations of the Information Campaign “**cook poultry meat thoroughly**” and “**do not eat blood pudding**” received the highest score of agreement (98% totally agree with this recommendation to avoid AI)

An impact on poultry consumption

1. Number of consumers

% of consumers who	Janv 2004 <i>Hanoi, n=214</i>	July 2004 <i>Hanoi, n=214</i>	May 2006 <i>Hanoi and Ha Tay, n=600</i>
Consume less poultry than in 2003	-	62%	60%
Do not consume poultry any more	74%	6%	6.5%

2. Quantity consumed:

-30%



Objective 2.

Consumers as risk managers

Avian Influenza is perceived as a risk that consumer can handle with

Perceived self control on AI, May 2006, n=600

	Total (Hanoi and Ha Tay)
No need to protect because there is no risk	3.7%
No, I cannot do anything	1.3%
No, there is little that I can do	8.3%
Yes, I can control it more or less	29.7%
Yes, I can completely protect myself	56.0%
Do not know, no answer	1.0%
Total (n)	600

... by the way of choosing, preparing, cooking poultry

Number (and %) of valid answers* July 2004	1.Yes, absolutely	2. Relatively	3.No, very little or not at all
<i>I can avoid AI by my way of choosing and preparing poultry</i>	91 (42%)	66 (31%)	57 (27%)
<i>I can identify a live animal infected with AI</i>	92 (43%)	70 (33%)	51 (24%)

Ordered logit estimates for personal anxiety today (PAT) and during the crisis (PAC) regarding Avian Influenza

<i>Endogenous variable</i>	Model 1: PAT		Model 2: PAC	
	Number of obs = 207 LR chi2(8) = 76.41 Prob > chi2 = 0.0000 Log likelihood= -175.88003 Pseudo R2 = 0.1785		Number of obs = 208 LR chi2(8) = 44.85 Prob > chi2 = 0.0000 Log likelihood= -264.06531 Pseudo R2= 0.0783	
<i>Exogenous variables</i>	<i>coef</i>	P> z 	<i>coef</i>	P> z
Social anxiety during the crisis	+2.002311	0.000	+0.7044071	0.004
Perceived personal control	-0.0879141	0.309	-0.4114681	0.000
Trust in public authorities	+0.3530614	0.079	+0.0983682	0.594
Sex	-0.9364872	0.040	-0.9373918	0.039
Age	+0.019946	0.133	+0.0020421	0.852
Income	-0.0000277	0.486	+2.00e-06	0.956
Education level	+0.0032518	0.848	-0.0072755	0.655
Children under 15	+0.1939901	0.157	+0.1175211	0.355

(Figuie and Fournier in *Risk Analysis*, forthcoming)



3. Consumers' demand in Avian influenza post crisis

(3 deaths in 2007, 17 provinces with Avian Influenza)

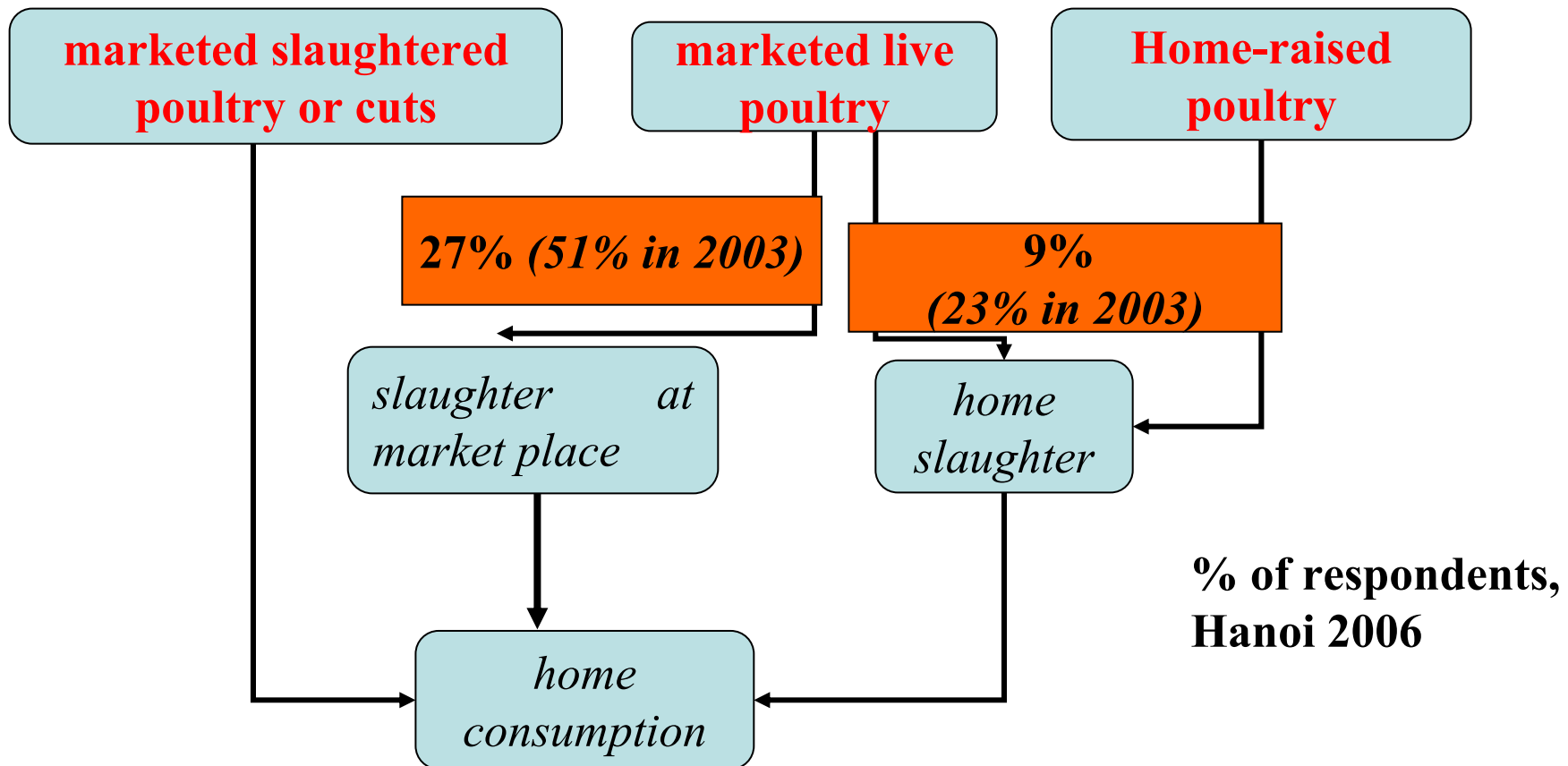
Dangerous products regarding AI (Hanoi and Ha Tay, 2006)

Most quoted as	
More dangerous	Less dangerous
Blood pudding, internal organs	Eggs
Industrial chicken	Farm poultry

64% (*26% in 2003 est*)

34% (*70% in 2003*)

2% (*4% in 2003 est*)



May 2006, source survey in Hanoi, n=300,

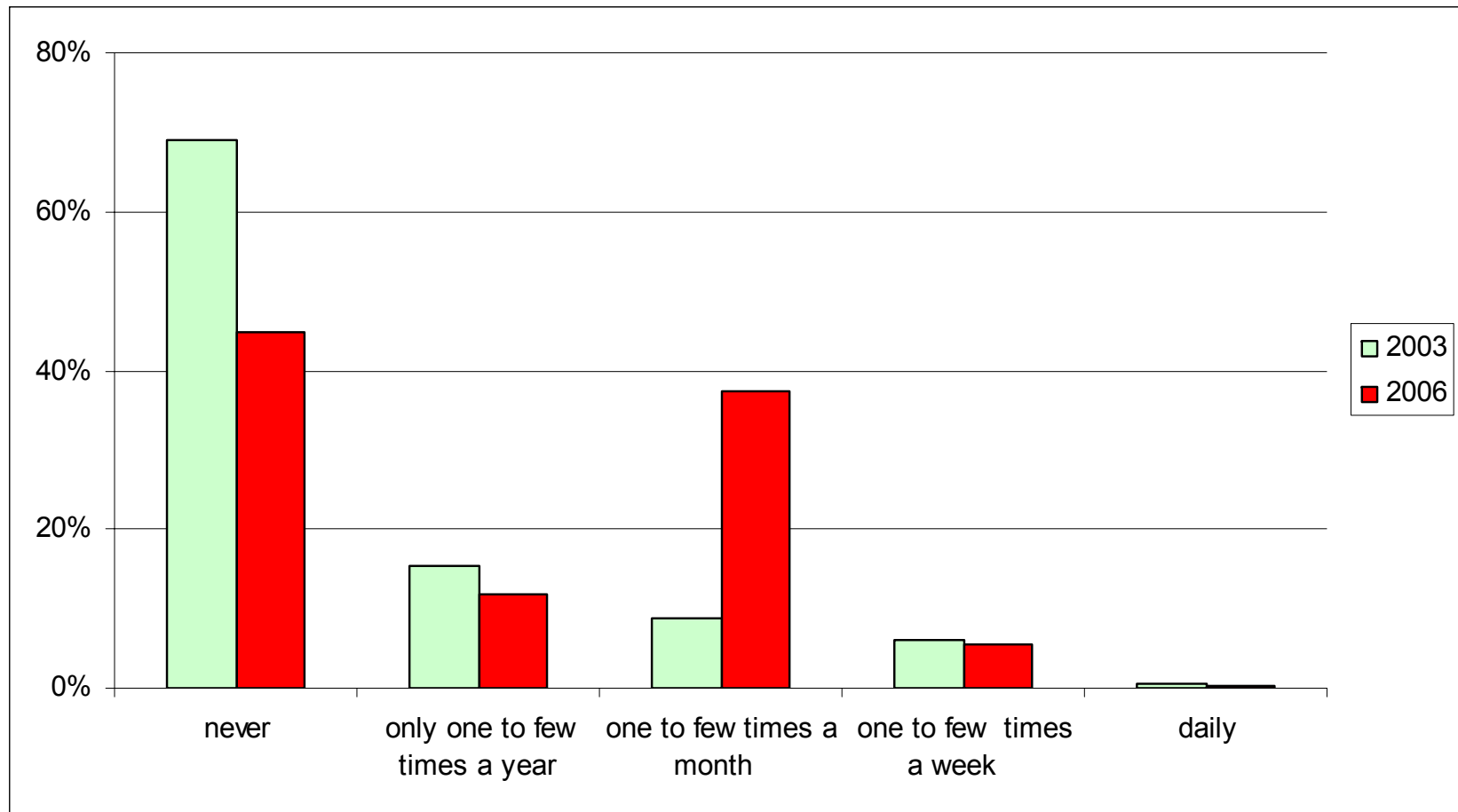
Possible new risks



Photo: Fournier, 2005

Increasing frequency of poultry purchasing in supermarkets

In 2006, in Hanoi, 43% purchase poultry or eggs in a supermarket at least once a month. 16% in 2003



Consumers' trust is based on (Hanoi, 2005)



- **Type of production system : small scale farming**
- **Distribution system: poultry from known farmers, family or village of origin/ or from supermarkets**

Before than trust on veterinary stamp.

Forthcoming studies



- ⌘ Strategies related to Avian Influenza in avian chains (Gripavi project)
- ⌘ Compared Public Policies related to Avian Influenza in 5 countries (AIRD project)
- ⌘ Consumers' Perception in 2007? (AIRD project)

...



Bref historique de la grippe aviaire au Vietnam

⌘ Les étapes

☒ 1ere phase:

Juillet 2003 apparition de la grippe aviaire, officiellement déclaré à l'OIE debut 2004

Le 24 février 2004, le Vietnam déclare que le virus est sous controle et qu'il n'y pas plus de danger

☒ 2ème phase de mai à octobre 2004

☒ 3 ème phase décembre 2004 à avril 2005

☒ 4 ème phase octobre-novembre 2005

☒ 5ème phase? 28 aout 2006 nouveau foyer

⌘ **Impacts:**

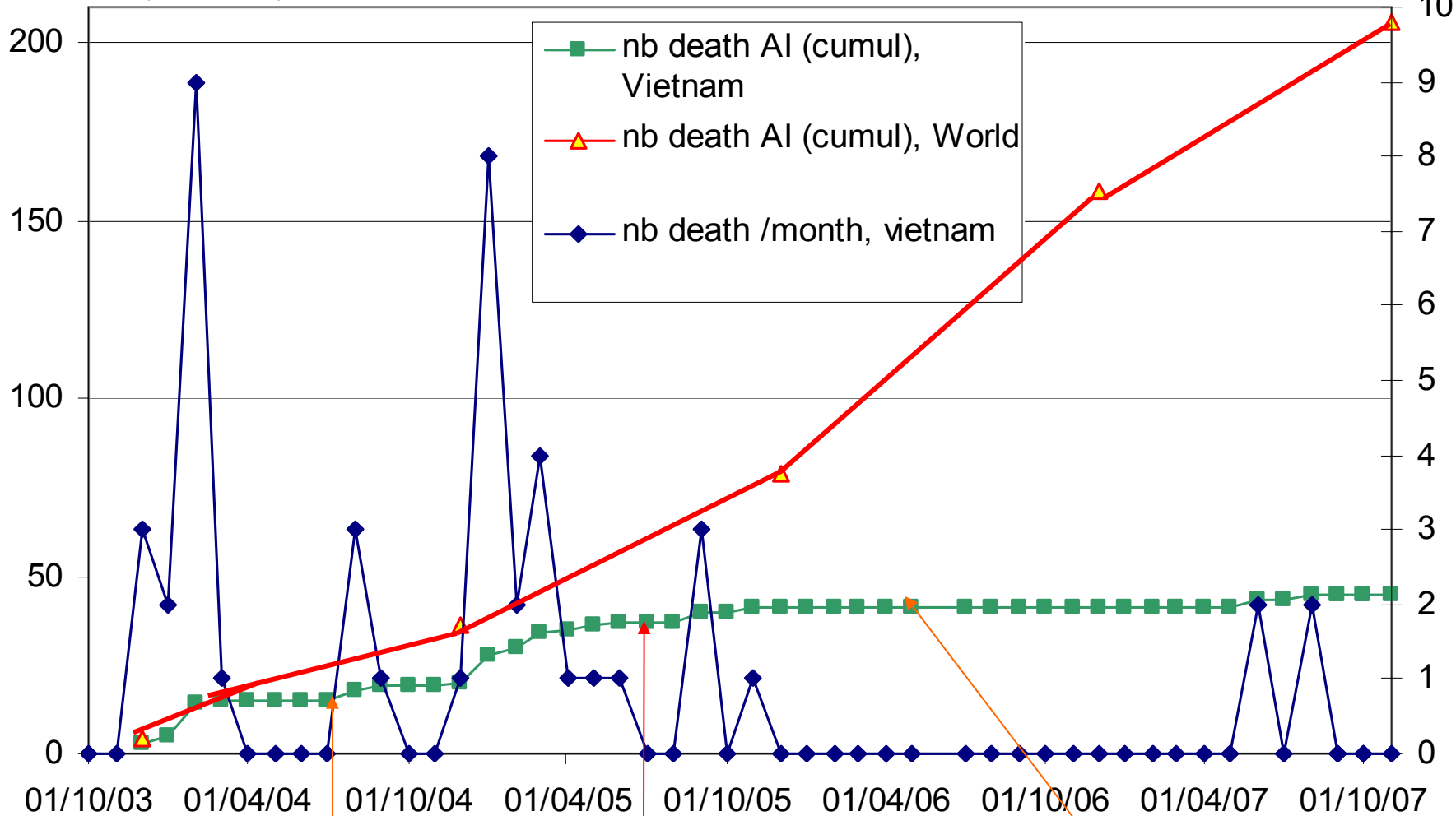
☒ Arrêt de la commercialisation (février 2004 et Novembre Décembre 2005)

☒ Forte variation des prix: 30 à 60 000 VND/kg de poids vif

☒ ...

Death (cumul)

Death/month



S1 July 2004
(n=214, Hanoi)

S2 July 2005
(22 interviews, 5 FG, Hanoi)

S3 May 2006
(600, Hanoi and Ha Tay)

Conducted Survey on AI

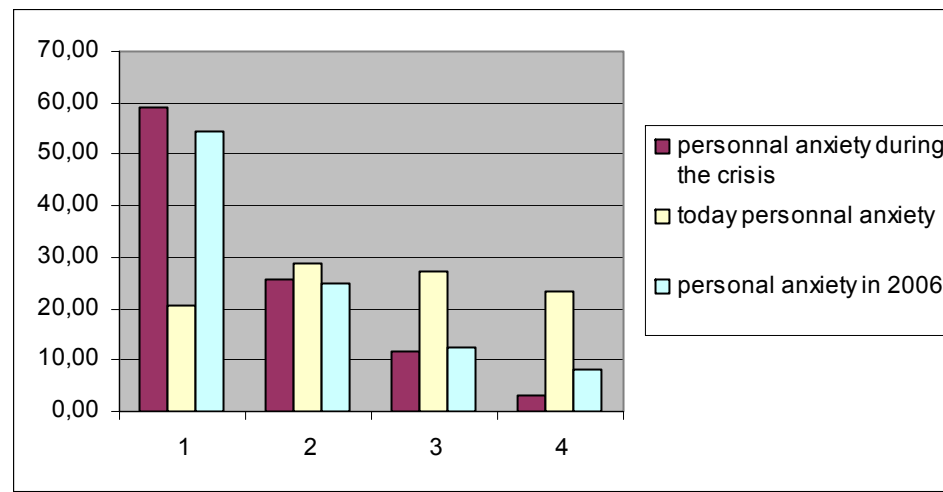
Tool	Sample size	Sample characteristics	Date
Quantitative survey	214	People in charge of cooking and shopping for the households. in Hanoi	April-July 2004
Focus group discussions	5 groups of 6-7 people	(1) People who no longer consume avian products; (2) people who have never stopped eating poultry; (3) “rich” consumers; (4) “poor” consumers; (5) young and old consumers.	July 2005
Quantitative survey IEC campaign assessment (FAO)	600 people	Mainly women (1) 300 in Ha Tay province, in the Red River Delta (2) 300 in Hanoi	May 2006

Information/knowledge



- ⌘ Février 2004 tous les enquêtés (n=214) ont entendu parler de la grippe aviaire (pour la moitié depuis avant septembre 2003). Bon niveau de connaissance.
- ⌘ 2006: Population informed of public recommendation
- ⌘ AI is seen as a food related risk

AI anxiety



1= yes, very concerned, 2= yes, rather concerned, 3= no, rather unconcerned, 4= no, completely unconcerned

A risk among others

Major problems in Vietnam today according to the respondents, **may 2006**

<i>Rank (and total score of each risk*)</i>	<i>Hanoi</i>	<i>N (600)</i>
Food and water quality	1st	474
Environmental pollution	2nd	357
AIDS	3rd	280
<i>Bird flu</i>	<i>4th</i>	<i>249</i>
Economic situation (unemployment, inflation...)	5th	195
Crime	6th	125
Natural disaster	7th	67
Malnutrition	8th	34

D. Numerous edible poultry products.

Regarding AI, blood, liver and Industrial chicken in a lesser extend are seen now as the most dangerous (2006)

	Farm chicken	Industrial chicken	Duck	Muscovy duck and goose	Pigeon and quail	Small birds
Carcass cuts (breast, thigh, wings,...)	X	X	X	X	X	X
Head	X	X	X	X	X	X
Foot	X	X	X	X	X	X
Intestine	X		X	X		
Liver	X		X	X		
Heart	X		X	X		
Gizzard	X		X	X		
Bones	X	X	X	X		
Eggs	X	X	X	X	X	
Embryo			X			
Preserved eggs			X			
Blood	X		X	X		

A. Des consommateurs actifs

1. Une forte dimension alimentaire attribuée au risque de grippe aviaire

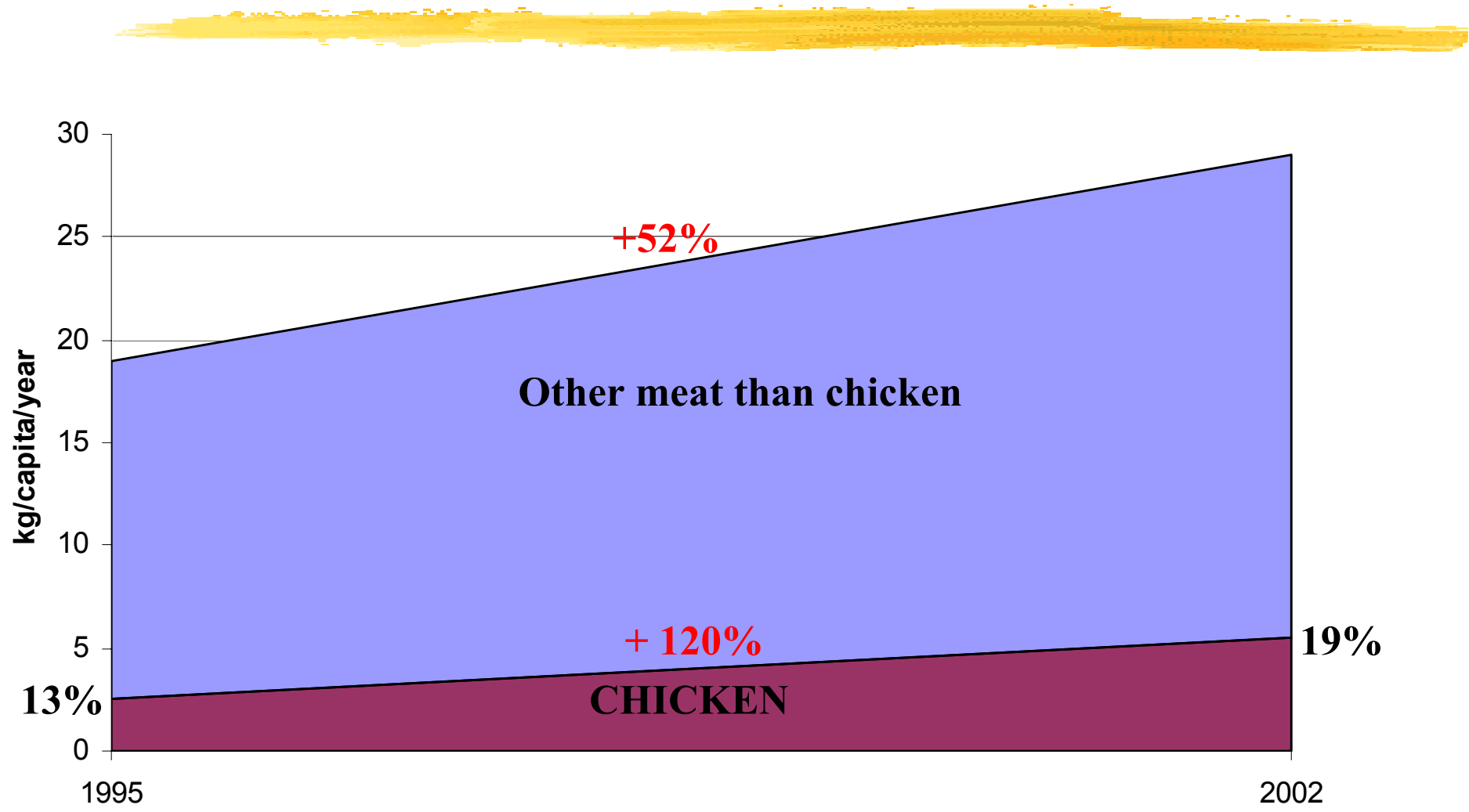
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1. La crise affecte un marché en pleine croissance



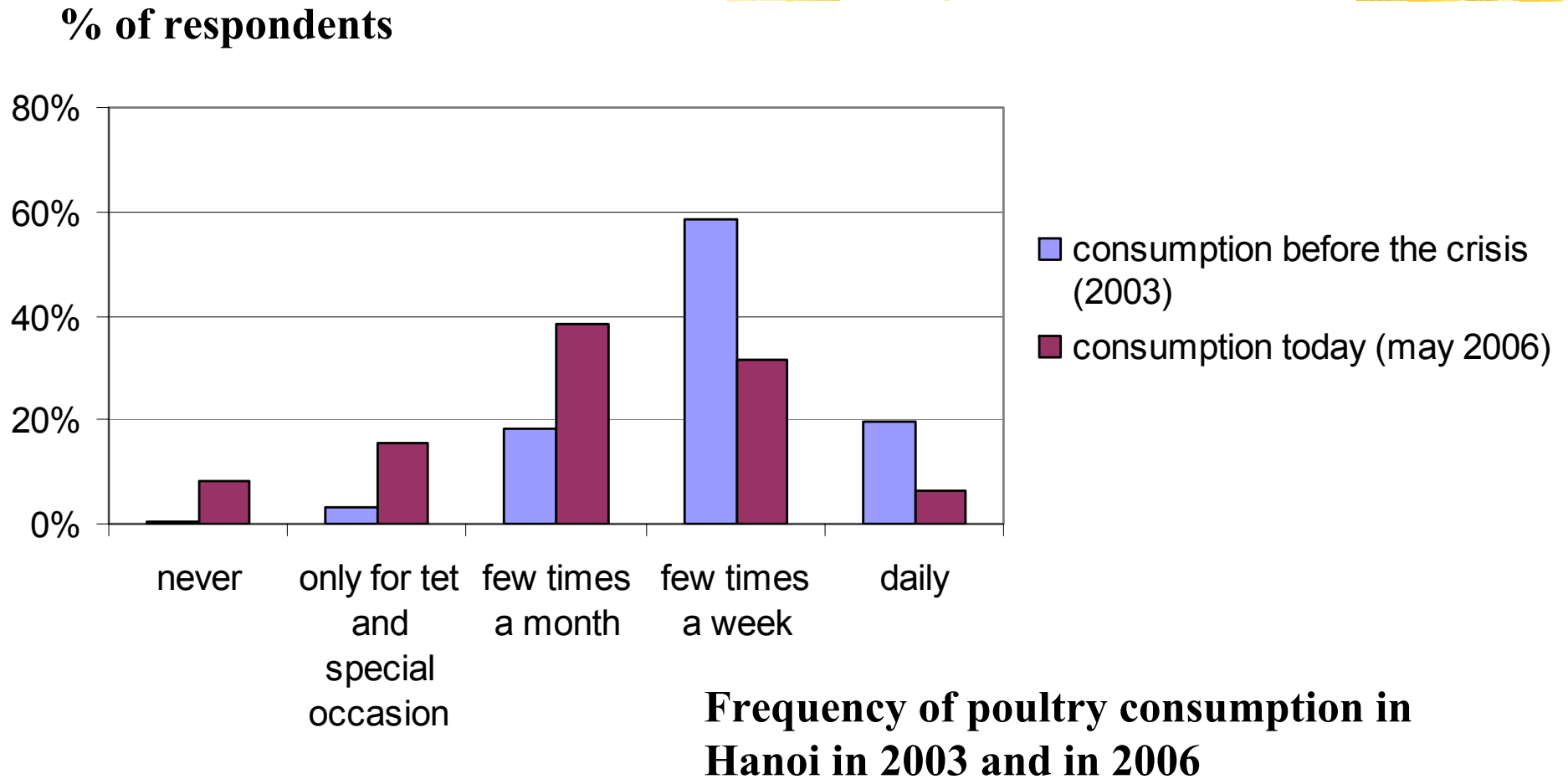
year Sources: FBS (FAO, MARD)

Des quantités consommées moindre: -1/3 en 2006

% of respondents (Consumption in May 2006 compared to 2003)	Hanoi (n= 298)	Ha Tay (n= 297)	Total sample (n= 595)
No change	13,1%	52,9%	32,9%
Decrease around 20%	15,1%	10,8%	12,9%
around 50%	34,2%	15,5%	24,9%
around 70%	28,5%	9,8%	19,2%
100%	8,4%	4,4%	6,4%
Increase	0,7%	6,7%	3,7%
<i>Average decrease in quantity</i>	<i>-53%</i>	<i>-21%</i>	<i>-35%</i>

29 % decrease (if we consider 74% rural and 26% urban population and same consumption in rural and urban area in 2003)

Une fréquence de consommation moindre



Hanoi, n=300, May 2006

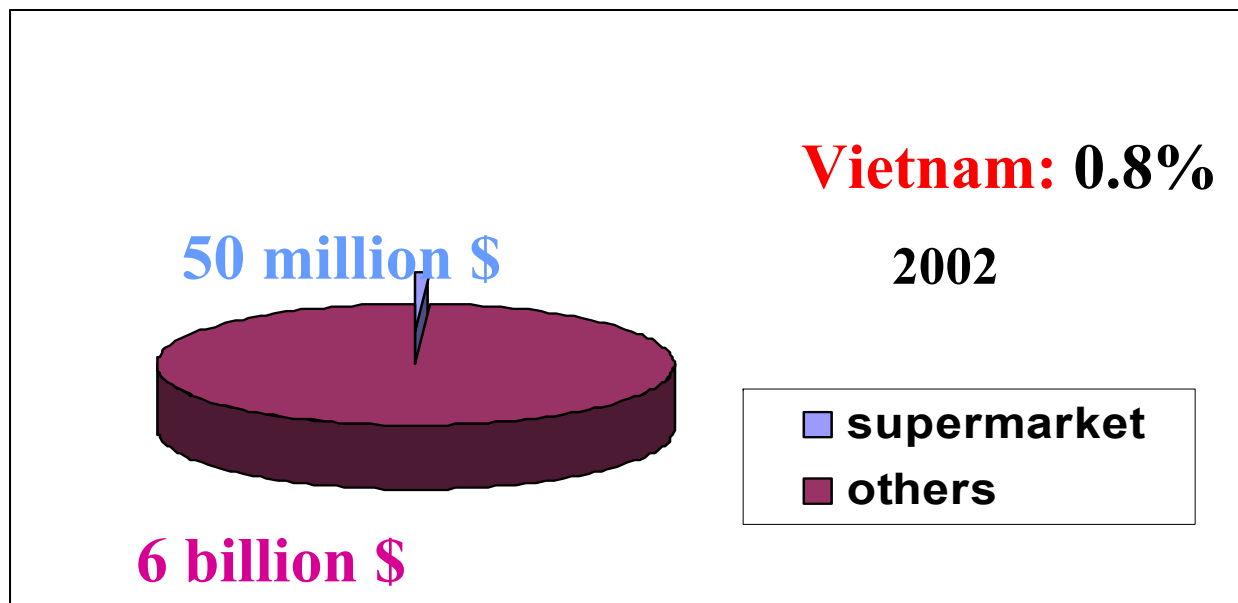
Les produits de substitution (Hanoi, 2004)

Number and % of respondents N= 214, Hanoi, July 2004	Yes (%)
<i>Substitution with any foodstuff</i>	207 (97.2)
✓ pork	182 (85.4)
✓ beef	108 (50.7)
✓ aquatic foodstuffs	160 (75.1)
✓ soya	161 (75.6)
✓ others	15 (7.0)

but minor food purchase in supermarkets (% in value)

Hanoi poor households: 0.3%

Hanoi and Ho Chi Minh City: 5%



Source Figuié and al, 2006 based on Hagen 2002 and GSO



Changes in preparing poultry

- **Consumption of blood pudding: -35.5%**
- **“At home, we cook poultry products thoroughly (no pink meat, no runny eggs)” : + 27%**