

**ASSESSMENT OF THE PRE-TET INFORMATION,
EDUCATION AND COMMUNICATION (IEC)
CAMPAIGN OF THE JOINT UN - VIETNAMESE
GOVERNMENT PROGRAMME TO FIGHT HIGHLY
PATHOGENIC AVIAN INFLUENZA (HPAI) IN
VIETNAM, 2006**

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FOREWORD

Information, Education and Communication (IEC) have been identified as crucial components in the Vietnamese Government's policy framework¹ to combat Highly Pathogenic Avian Influenza (HPAI or AI). Consequently, the IEC working group of the Joint Government – UN programme on HPAI (JP) launched the “Pre-TET AI IEC Campaign”: during the first term of 2006, a number of communication activities have been developed in order to promote behaviour changes in the population, to minimize human infection with AI.

The present study has been commissioned following the recommendations of the second National AI IEC Workshop on 3rd March 2006 where a consensus agreement was reached in order to conduct a thorough, objective and independent assessment of the Pre-Tet AI IEC Campaign that would inform the design of further IEC activities.

CIRAD (Centre de Coopération Internationale en Recherche Agronomique pour le Développement, France)/ MALICA (“Markets and Agricultural linkages for Cities in Asia” Research Consortium)², has been in charge of conducting this assessment. This was done in May 2006 in partnership with the Faculty of Sociology of the Academy of Journalism and Communication, and all data and analysis is presented in this final report³.

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¹ Vietnam Integrated National Action Plan for Avian Influenza Control and Human Pandemic Influenza Preparedness and Response.

² www.cirad.fr and www.malica-asia.org

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EXECUTIVE SUMMARY

Highly Pathogenic Avian Influenza (HPAI or AI) emerged in Vietnam during 2003. In October 2005, many factors led HPAI risk assessment experts to warn of a potentially more dramatic outbreak season than the previous ones. In this context of emergency, the Vietnamese Government and UN organizations succeeded in launching, at very short notice, the Pre-TET Avian Influenza Information Education and Communication (IEC) Campaign. During the first quarter of 2006, a number of communication activities were developed in order to promote behavioural change in the general population. This report summarizes an assessment of the campaign, based on the selection of 5 main indicators:

- 1) Campaign exposure
- 2) Campaign agreement
- 3) Impact on behaviour change
- 4) Campaign comprehension and
- 5) Credibility of the campaign sources.

The first 3 points were assessed using a survey of 600 people (300 in Hanoi, 300 in Ha Tay province, in May 2006). The final two points were assessed through three focus group discussions conducted in Hanoi and Ha Tay provinces during the same period.

As the campaign focused mainly on people in charge of preparing meals, people in charge of backyard poultry, and children or people in charge of taking care of children, the principal targets of this study were women.

At the time of the study (May 2006), no outbreaks had occurred for 6 months and AI seemed to be under control. Nevertheless, the campaign targeted a population still concerned and affected by AI. The survey showed this with evidence that:

- (i) Poultry flocks have not yet regained the size they had before 2003. In addition, consumers are still worried about consuming poultry products (the consumption of these products has decreased by around 50% in Hanoi).
- (ii) AI is still a source of anxiety for human and animal health and respondents still fear future possible outbreaks.

Moreover, as respondents consider AI as a risk that they can handle at their own individual levels, the context can be considered as favourable for a behavioural change campaign.

People have received a significant amount of information regarding AI from different sources. Some respondents (in the focus group discussions) even complained about excessive communication to the public about AI, which has had, in their opinion, a dramatic impact on the poultry market.

Regarding the Pre-Tet Campaign itself, thanks to good access to the media (mostly television), campaign exposure has been quite good. This is evident from data that shows that around 75% of the respondents have seen the campaign and 60% can correctly quote at least one of the recommendations spontaneously. Television spots have been the most efficient, reaching around 60% of the sample. Radio spots reached the lowest number of people (14%), because a high proportion of respondents do not have a radio or own a radio but never listen to it. However, taking into consideration only the people who listen regularly to the radio (every day, or few times a week), then the radio campaign seems to have been quite effective: 80% of the regular radio listeners heard the Pre-Tet Campaign (60.5% of the regular television watchers).

However, there is probably some overestimation built into the results. Respondents could not always distinguish what came from the Pre-Tet Campaign specifically; independently

of the quality of the Pre-Tet AI IEC Campaign itself, and even when using well-known media personalities, this campaign had some difficulties in developing a distinctive image.

The AI crisis is said by the respondents to have had an important impact on their behaviour. Around 50% (in Hanoi) to 60% (in Ha Tay) of the respondents said that their behaviour has more or less changed due to AI. It is noted that 30% said they changed because of the Pre Tet Campaign (but also probably in response to other information campaigns).

Some behaviour recommended by the campaign is said by the respondents to have been already widely practised before the HPAI crisis (before 2003) and, according to them, has not experienced any change during the last few years. This is the case for:

- ✓ *“Change your chopping board”*
- ✓ *“Wash hands with soap”* to a lesser extent.

But as this assessment relies on reported practices (what people say they do, and not what they really do) and not on observed ones, there might be some over-estimation due to a kind of “desirability bias” (respondents are keen to show to the interviewer that they are in line with the social norm). At least, this shows that these two behaviours are fully integrated into the current social norms.

With the same limits as above, the study shows that some behaviour is not new; such forms of behaviour were said to be already widely adopted before the AI crisis, but they seem to have gained more adherents recently:

- ✓ *“Cook poultry meat thoroughly”*. There is a general consensus on the importance of this recommendation. And people say they pay more attention to it, in part thanks to the campaign (especially in Hanoi).
- ✓ *“Do not eat blood pudding”* has also gained new adherents.

As they attain a high score for the main indicators used to assess this campaign (exposure, agreement, campaign impact on behaviour change), these two recommendations should be considered as the most successful ones of this campaign. For the recommendation “cook poultry meat thoroughly” this could be linked to its widespread dissemination, through television, radio, posters and loudspeakers.

Some behaviour recommended by the campaign is new (that is, few respondents said that they applied it before the AI crisis) and has gained new adherents but is not yet widely adopted, and there is no consensus on the validity of such conduct. This is the case for:

- ✓ *“If you slaughter poultry at home, use a mask and gloves”*. This recommendation was well identified as a message from the campaign and it has gained new adherents. Nevertheless, respondents are divided on this message: a significant number do not agree with this recommendation: *“as people are supposed to slaughter safe poultry, there is no need for such protection”* declared some. There is also a social limit to the adoption of a recommendation of this kind: if someone were using such protection, people would be very reluctant to consume the meal thus prepared.
- ✓ *“Report sick animals to a vet”*. This behaviour was said to be quite rare before 2003. In addition, even if significantly more people say they follow this recommendation more readily now than they did before, their numbers are still small. Interestingly, some even disagree with the appropriateness of such behaviour.

“Avoid contact with sick poultry” is a recommendation that Ha Tay respondents paid more attention to. However, as poultry breeders, these same people do not consider compliance with the recommendation as feasible.

"Children should not play near poultry" was not identified as a recommendation of the campaign. People nevertheless say they follow this advice and are more cautious since AI.

Looking at these problems in more depth reveals how people perceive their own responsibility in fighting AI. Farmers complain that the campaign neglects their competency to manage sick animals (*"avoid contact with sick animals"* should be replaced according to them by the recommendation *"handle sick animal safely"*).

If respondents find most of the recommendations clear, they underline some ambiguity in the poster recommendation *"cook poultry meat thoroughly"*. For the public (and also for those responsible for the campaign), "thoroughly" means "for a long time", while the picture shows a strong fire under the pan, suggesting that the recommendation could be to cook the poultry *"at a high temperature"* (but in the TV and radio spots, there is a clear explanation of what "thoroughly" means, namely: "no pink meat, no runny eggs").

In addition, there is a demand for guidelines on handling sick animals (from farmers) and for managing poultry waste.

The presence of a health organization and of a national organization (The Ministry of Health in this case has both these qualities) is said to be essential to guarantee the credibility of the campaign. The channels used to communicate the messages for the campaign seem also to play a role of "moral guarantee", this is the case for state-run (and trusted) television.

In general, the public think that information should not be too abundant or too "anxiogenous". The survey participants also claim that the campaign should provide information to aid consumers' decisions when purchasing poultry.

Based on the five indicators used to assess the campaign, the conclusions are as follows:

- The campaign succeeded in reaching a large audience, thanks to the combined use of media (television, posters, radio, loudspeakers), television being the most powerful one (due to its large audience).
- Levels of agreement with the campaign are high, showing that the recommendations reflect social norms. There is one exception regarding the recommendation "avoid contact with sick/dead poultry", which is seen by some breeders as a way to deny their experience and ability to deal with animals.
- The impact on behaviour change of this campaign (and probably of other ones and of other factors that are difficult to isolate one from another) has been significant, mainly concerning practices related to avian product consumption (eat well-done meat, stop consuming blood pudding). This is not surprising because such behaviour involves a well-known "process of incorporation" which is a major cause of anxiety for humans.
- The campaign is clear, except for a few possibly ambiguous details.
- The source of the campaign is credible, mainly owing to the presence of the Ministry of Health. This confirms that for the population, AI is not only (and maybe not even mainly) a matter of animal health, but also a matter of human health.

This campaign represents an important step towards concerted and harmonized communication activities between the numerous institutions involved in fighting HPAI in Vietnam. In the future, IEC campaigns could gain progressively increasing impact if all actors involved in other IEC initiatives harmonize their work in a jointly defined strategy through a common campaign, exploiting complementarities, avoiding confusion/cacophony, over-communication and excessive dramatization.

Some recommendations should be considered for a further campaign:

- ✓ The recommendation *"avoid contact with sick or dead poultry"* should be rethought, by consulting breeders so as to see how to rely better on their

competency. This could contribute to increasing their compliance with the messages.

- ✓ Specific research should be undertaken on the recommendation “*do not let children play near poultry*” since it is the least successful recommendation of the campaign. This could be done by organizing focus group discussion on the TV spots related to this recommendation.
- ✓ The recommendations “*only slaughter healthy poultry*” and “*when you slaughter poultry at home, use a mask and gloves*” did not target urban dwellers. But as the study shows that nearly 30% of Hanoi respondents still buy live poultry (and 5% slaughtered it themselves), recommendations for this group should be built into the next campaign.
- ✓ There is a demand for recommendations on “*how to handle sick poultry safely*”, “*how to bury dead animals safely*”, how to manage the waste of poultry slaughter...”

As the context changes, there will be a need for further IEC activity to shift from a strategy of emergency to a long-term risk communication strategy. This might be the opportunity to enlarge the kinds of activities undertaken (not only Behaviour Change) and to address new targets groups. This long-term strategy could aim at fostering public trust vis-à-vis the supply of safe poultry. A synthesis of the Knowledge, Attitudes and Practices (KAP) studies recently conducted could be undertaken to prepare the next campaign. In the longer term, a permanent watchdog of KAP could enable the IEC Joint Group to be constantly prepared for a very rapid generation of new campaigns adapted to new events.

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PART I. OVERVIEW OF THE STUDY

A. CONTEXT AND CONTENTS OF THE PRE-TET AI-IEC CAMPAIGN

- **Background**

In October 2005 the seasonal wave of AI outbreaks hit Vietnam several weeks earlier than expected, raising fears of an evolution of the disease towards more deadly forms. In this emergency context the government of Vietnam, the UN and several donors, have launched the “Joint Government-UN Program for the Fight Against AI – Emergency Phase”.

Information, Education, and Communication (IEC) was identified as one of the most crucial components in the implementation of the emergency phase. UNICEF, thanks to its long experience in the field, was nominated as lead agency for the component. Approached as a crosscutting theme, an IEC working group gathering representatives from both technical agencies and main stakeholders was established. The first initiative of the group was to prepare a nationwide information campaign to provide the public with essential information on the occasion of the Lunar New Year or Tet celebrations when chicken transport, handling and consumption all increase dramatically.

Considering that the Joint Program was launched in mid-November and that the Tet festival was starting end of January, the time constraint was the factor that deeply influenced the process. For this reason, it was agreed that the selection of target behaviours and messages would not be carried out after a formal KAP assessment but would be based on the experience of the technical agencies and of their counterparts.

The material was developed among the IEC group members in a participatory fashion. Experts in disease prevention and in communication joined together in several sessions, hosted by the CHE (Center for Health Education) under the Ministry of Health, which was nominated by UNICEF as their counterpart. The parallel work of the two teams of experts permitted the completion of the preparation in a few weeks and the launch the “Pre-TET IEC Campaign”.

The objective of the campaign was to promote four key preventive actions related to poultry management and handling that would minimise the risk of **human infection by AI**.

- **Messages, targets and channels of communication of the pre- Tet AI- IEC campaign**

The campaign was then launched on the 24th of January 2006 and continued until mid March 2006. All main means of communication have been used (street posters, radio spots, community loud speakers, and TV spots).

The messages, targets and channels of this campaign are summarized in table 1.

Table 1. Messages, targets and channels of the Pre-Tet Information and Education Campaign on Avian Influenza, Vietnam 2006

Message/ Target	TV spots and shows	Radio spots and loud speakers	Street posters
✓ Children Don't play nearby the poultry	x		
✓ People preparing meals			
Cook the poultry meat thoroughly	x	x	x
Cook the poultry meat and eggs thoroughly	x	x	
Change your chopping board and knife between cutting raw and cooked meat		x	
Wash your hands after preparing poultry meat	x	x	
Wash your hands after any contact with poultry		x	
Wash hands before eating	x	x	
✓ Backyard farmer, rural families			
When chickens die or show symptoms of ill-health, report this immediately to the local vet	x	x	
Avoid contact with sick poultry	x	x	
Only slaughter healthy poultry	x	x	
Wear a mask and gloves while slaughtering poultry	x	x	
Wash hands after slaughtering poultry	x	x	
✓ For everybody			
Do not eat blood pudding		x	
Wash your hands with soap			x

See details of campaign material in appendix 1.

B. THE COMPONENTS OF THE AI IEC POST ASSESSMENT

(see *Terms of reference in appendix 2*)

During the second National AI IEC Workshop on 3rd March 2006, a consensus agreement was reached in order to conduct a thorough, objective and independent assessment of the pre-Tet AI IEC Campaign that would inform the design of further IEC activities.

This present IEC Campaign appraisal is then a **post campaign assessment**. It has been conducted in May 2006.

The assessment is based on **five main indicators**:

- ✓ **Campaign exposure:** (radio, loud speakers, TV and posters). According to Valente (2001:116)⁴ "Campaign exposure is the degree to which audience members have access to, recall, or recognize the intervention"
- ✓ **Campaign comprehension:** aims at assessing if the audience understands the message. As emphasized by Weinstein (1993)⁵, there is substantial debate on what should be included in the term comprehension. Comprehension is different from knowledge and the clearest way of measuring comprehension is to ask what the message says
- ✓ **Campaign agreement:** aims at assessing to what extent the audience agrees with each of the recommendations. In this study, respondents were asked if they found the campaign's recommendations useful for avoiding AI and feasible to implement
- ✓ **Changing behaviour:** is a way of measuring if the campaign has changed audience behaviour. For each one of the campaign's recommendations, respondents were asked to compare their behaviour in 2003 to their present behaviour and to explain the reasons for change
- ✓ **Perceived credibility of the source of the campaign:** indicates if the audience judge that the institutions issuing the campaign are trustworthy and credible sources of information

C. MATERIAL AND METHOD FOR THE STUDY

These indicators have been documented using:

- ✓ A survey questionnaire (with mainly closed questions) applied to a large sample.
- ✓ Focus group discussions.

Table 2. Summarized components and tools of the AI IEC assessment

components of the assessment	survey	focus group discussion
✓ campaign exposure	x	
✓ campaign comprehension		x
✓ campaign agreement	x	x
✓ campaign impact on behaviour change	x	
✓ perceived credibility of the source of the campaign		x

⁴ Valente in Rice, Ronald E.; Atkin, Charles K. (eds.), 2001. *Public communication campaign*; London, Sage Publication; 428 p

⁵ Weinstein, Neil D.; Sandman, Peter M., 1993. Some criteria for evaluating risk messages. In *Risk analysis*, 13 (1), pp: 103-114

- **Survey by questionnaire**

Place and date of the survey

Data was collected in Hanoi and in Ha Tay province. In Hanoi, the objective was to assess urban consumers of avian products whilst Ha Tay province was chosen to appraise rural consumers and poultry breeders.

Sampling method and size

In Ha Tay province, two districts were chosen: Ba Vi which has small poultry holders and Phu Xuyen because it was one of the districts which had reported in 2004 the highest percentage of communes with AI (18 communes affected on a total of 22).

Sub-districts (in Hanoi) or communes (in Ha Tay districts) were randomly selected. Households, within the communes and sub-districts were selected with the support of the local authorities.

For time and financial constraints, it was not possible to conduct a survey on a very large sample. But despite the terms of reference setting at 300 the sample size, the evaluation was done on 600 respondents. And as the campaign mainly targets on people in charge of preparing meals, people in charge of backyard poultry, children or people in charge of taking care of children, it was decided to focus mainly on women.

Table 3. Sample of the survey

Province	# of districts (<i>quan, huyen</i>)	# of sub-districts/ communes (<i>phuong, xa</i>)	# of households
Hanoi	3	11	300
Ha Tay	2	8	300
Total			600

See appendix 3 for details of the sample and appendix 4 for the questionnaire

Data collection and analysis

Ten surveyors (sociology students) were given one day training and their questionnaires were checked daily during the sampling process. Questionnaires were conducted at the respondent's home in the month of May 2006. The process took between 30 - 40 minutes. Data was entered into an Access database and SPSS software was used to provide descriptive statistics.

- **Focus group discussions**

Focus group discussions were conducted with the main objectives of discussing the comprehension of the message and the credibility of the source of the campaign. The discussions were focused on the posters.

Group composition

Focus groups discussion were conducted in three places; Hanoi, Ba Vi and Phu Xuyen, with the objectives of reaching urban consumers, small-scale poultry farmers and large-scale poultry farmers. All participants were women:

- ✓ Ba Vi: 8 women farmers with small backyard poultry areas
- ✓ Phu Xuyen: 10 women farmers, from large poultry farms (500 to 1000 fowl)
- ✓ Hanoi: 11 low-income women consumers.

In Hanoi, participants were selected with the support of the Club of Women Consumers, in Ba Vi with the support of the Women's Union and in Phu Xuyen with the one of the local authorities.

Organization

Discussions were held at a participant's house in Hanoi, at the Peoples Committee in Phu Xuyen and at the Cultural Centre in Ba Vi. The focus group discussions were held from 25 to 27 of May 2006. The moderator was one of the researchers of the team and the discussion was conducted according to an agenda. The conclusions of each point of the discussion have been clearly summarized according to the different respondents. Debates have been tape-recorded.

D- LIMITS OF THIS STUDY

The limits of this study have to be emphasized:

1. No progress assessment has been conducted in the framework of this present study: This means that, in this study the degree of program implementation has not been measured and there is no assessment of whether the program was delivered as it was intended or not. For example, the number of posters really displayed has not been checked. Neither has the number of spots really shown on TV been checked, or the time of broadcast, which channel, etc. Nevertheless, the Joint Group itself has regularly monitored the campaign progress. But as we did not access to this assessment, we postulate that the present campaign has been implemented as intended, in all the media.

2. No pre-campaign study, no control group: This is a post-campaign assessment. This means that there is no baseline to compare this study with (no pre-campaign study). In the same way, as it is a nationwide campaign, no control group (group which has not been exposed to the campaign) can be used for comparison. Nevertheless, supposing that the IEC campaign will continue and that further assessments will be done, this present assessment will serve as a baseline study for comparison in the future.

3. Declarative behaviour changes: Changes in behaviour are declarative (the study has only recorded what people pretend to do and not what they actually do). Much past research has shown the gap between reported practices and observed practices. This difference is partly linked to a so-called "desirability bias"⁶ (the respondent tends to answer so as to give a good image of themselves to the interviewer). Direct observations of a small sample could complete this study.

4. An inevitable "desirability bias": In general, due to this bias of desirability, there is most probably an over-estimation of the levels of campaign agreement, behaviour adoption, campaign impact, etc. As a consequence, the results might be best not interpreted as absolute values but used to make comparison between recommendations or groups of respondents.

5. An assessment of the impact of media information rather than the Pre-Tet campaign itself: As emphasized before, the respondents found it difficult to isolate information received from the Pre-Tet campaign from other information received via the media. Thus, this assessment might overestimate the impact of the Pre Tet Campaign. It could even be considered, for some points, as an assessment of the impact of media information as a whole. Moreover, changing behaviour is a long process, a result of combining multiple stimuli, information being only one of them.

6. Time gap: This assessment was conducted in May 2006, when the campaign was implemented intensively during January –February 2006 (and lasted few weeks later but with a lower intensity). This means that there is a time gap which might have impacted how the audience remembers the campaign.

The results of the study should be analysed taking these limiting factors into consideration.

⁶ Moscovici, S.; Buschini F.; 2003. *Les méthodes des sciences humaines*. Paris, PUF. 476 p

PART II. FINDINGS OF THE QUESTIONNAIRE SURVEY

A. SOCIO-ECONOMIC PROFILE OF THE HOUSEHOLDS SURVEYED

The survey respondents are mainly women (84%), aged from 24 to 50 (25%) or from 40 to 60 (56%). The level of education is much higher in the Hanoi sample (75% of the respondents have at least a high school diploma) than in the Ha Tay groups (77 % of the respondents have less than a high school diploma). Table 4 on the following page shows the socio-economic characteristic of the respondents.

The sample groups in Ha Tay are from rural backgrounds and most of the households are principally involved in agricultural activities (66%). In Hanoi, the heads of the households surveyed are mostly employees in private or public companies (65%).

It is difficult to assess in a single-visit survey the income of the households, particularly in rural areas, indeed under-estimation is probably the most likely scenario. Whatever, this sample covers a diversity of incomes, from less than one million per household/ per month to more than 8 million. Incomes are much higher in Hanoi households than in Ha Tay, where 70% of the households earn less than 2 million per month. However, this does not take into account the value of produce grown or raised for self-consumption, which may be an important factor in farmers' households.

Table 4. Socio-economic characteristics of the Pre-Tet AI IEC assessment survey respondents

% in the sample	Hanoi	Ha Tay	All sample	n
Sex				
Male	6,4%	24,7%	15,6%	93
Female	93,6%	75,3%	84,4%	505
Age (years)				
<25	5,4%	5,0%	5,2%	31
25-40	23,1%	27,8%	25,4%	152
40-60	52,5%	56,2%	54,3%	325
>60	19,1%	11,0%	15,1%	90
Education of the respondents				
No education (no diploma)	3,7%	10,0%	6,8%	41
Primary diploma	3,7%	13,7%	8,7%	52
Lower secondary diploma	17,7%	53,5%	35,6%	213
Upper secondary diploma	30,3%	16,1%	23,2%	139
Technical secondary diploma (+2)	5,7%	1,0%	3,3%	20
Professional secondary diploma (+2)	9,7%	2,0%	5,8%	35
College and university diploma (+3 to 5)	28,0%	3,7%	15,9%	95
Post graduate diploma (> +5)	1,3%	0,0%	0,7%	4
Occupation of the head of the households				
Employee in a company	64,4%	10,7%	37,5%	224
Traders, shopkeeper	11,1%	1,7%	6,4%	38
Skilled manual worker	6,7%	4,0%	5,4%	32
Unskilled manual worker	3,7%	6,7%	5,2%	31
agriculture, forestry, and fishery worker	0,0%	65,9%	33,0%	197
unemployed	3,4%	0,0%	1,7%	10
others	10,7%	11,0%	10,9%	65
Income of the households (VND/household/month)				
<1 million	4,6%	42,5%	23,1%	127
1 - 2 million	17,8%	35,8%	26,6%	146
2 - 3 million	29,9%	14,2%	22,2%	122
3 - 5 million	29,9%	6,0%	18,2%	100
5 - 8 million	11,7%	0,4%	6,2%	34
>8 million	6,0%	1,1%	3,6%	20

B. MEDIA ACCESS

The sample groups have a good access to the media. Only one respondent in Hanoi and three in Ha Tay have no radio, no television and do not hear community loudspeakers. Additionally, a further five respondents in Ha Tay have no television, nor radio.

Television is present in nearly all the households (97%) and most of the family watch TV daily (89%). Radio is much less important (42% of the households). Many people have radios but do not listen to them. All together, 74% of the households never listen to the radio. Community loudspeakers have a higher audience rating (33% hear it daily), especially in the province of Ha Tay (41%).

Table 5. Media access

	Hanoi (n=300)	Ha Tay (n=300)	All sample (n=600)
% of households with TV at home	98,3%	95,7%	97,0%
% of households with radio at home	47,7%	36,0%	41,8%
Frequency of watching TV			
never	0,7%	1,3%	1,0%
few times a month	1,0%	3,3%	2,2%
few times a week	4,7%	11,0%	7,8%
daily	93,3%	84,0%	88,7%
cannot say, do not know	0,3%	0,3%	0,3%
Frequency of listening to radio			
never	69,7%	77,7%	73,7%
few times a month	12,7%	4,3%	8,5%
few times a week	5,7%	4,0%	4,8%
daily	11,3%	13,3%	12,3%
cannot say, do not know	0,70%	0,7%	0,7%
Frequency of hearing community loudspeakers			
never	30,7%	17,7%	24,2%
few times a month	20,0%	20,3%	20,2%
few times a week	20,0%	18,3%	19,2%
daily	24,7%	41,0%	32,8%
cannot say, do not know	4,7%	2,7%	3,7%

C. AI RISK EXPOSURE

• Birds/poultry breeding

Most of the households sampled in Ha Tay are involved in poultry breeding (84%, table 6). In Phu Xuyen, one of the two districts of the survey in Ha Tay (see table 7), this percentage is even higher with 91% of the households involved in animal breeding, mostly ducks, with sometimes large-scale breeding operations (up to 1700 heads).

In Hanoi, very few respondents have reported activities linked with birds (except a few poultry traders). Indeed birds are rarely present: ornamental birds (in 3% of the households in Hanoi), poultry in 1% of them (table 6). It is necessary to underline the idea that a great percentage of the Hanoi sample group live in collective buildings (*Khu Tập Thể*) where ownership of animals is not easy.

Respondents in Ha Tay province have been directly affected by AI, since 60% of them had more poultry before AI crisis (table 8). From comments made by the sample groups, it appears that some of them lost a large number of ducks in 2003, but they do not know precisely if the cause was AI. When part of the flock died, they ate some of the remaining birds, buried some by themselves and sold the rest of the birds (there is a special price on the local market for sick animals: around a third of the price of a healthy animal). The reduction in flock size is not only a consequence of animal mortality but respondents also implemented strategies to reduce risk, including the economic risk.

Table 6. Respondents having contact with live animals

	Hanoi	Ha Tay	All sample
sample size (n)	300	300	600
% of households with activities involving contact with poultry			
➤ poultry breeder or worker at a poultry farm	0.7%	83.7%	42.2%
➤ other activities linked to poultry (traders...)	3.3%	1.3%	2.3%
➤ no activity related to poultry,	96.0%	15.0%	55.5%
% of households with			
➤ poultry	1.0%	78.0%	39.5%
➤ ornamental birds	3.0%	1.0%	2.0%
➤ fighting cocks	0.3%	2.3%	1.3%
➤ other birds	0.3%	1.3%	0.8%
➤ no birds, no answer	95.4%	17.4%	56.4%

Table 7. Ha Tay province: Poultry in Ba Vi and Phu Xuyen districts' households

Districts of Ha Tay province	Ba Vi (150)	Phu Xuyen (150)
Households with poultry % (n)	65% (97)	91% (137)
average nb of poultry by household with poultry	33	132

Table 8. Trends in poultry breeding

Situation in 2003 (% of households)	Hanoi	Ha Tay	total sample
had no poultry	85,3%	9,1%	47,2%
had less poultry than today	0,0%	10,4%	5,2%
had the same number of poultry than today	2,0%	20,8%	11,4%
had more poultry than today	12,7%	59,7%	36,2%
valid answers (n)	299	298	597

- Poultry consumption**

Since the beginning of the AI crisis, changes have occurred in avian product consumption (see table 9). Consumption of avian products has been much more affected in Hanoi than in Ha Tay: in Ha Tay, 64% of the households have not changed their consumption or have slightly decreased it (respectively 53% and for 11%). Conversely, in Hanoi, around 70% have decreased their consumption by at least half (and 8% have completely stopped consuming all avian products: meat and eggs). In Ha Tay, some households have actually increased their consumption (7%) as a consequence of the difficulties in marketing their poultry products.

The data gathered allows us to estimate that the consumption of avian products has decreased by an average of 35% in quantity: - 53% in urban areas (Hanoi) and -21% in rural areas (Ha Tay).

Nowadays, in terms of frequency (see table 10), consumption is higher in Ha Tay province, where over 55% of households consume avian products daily or a few times a week (mostly eggs that come from the household domestic fowl), as opposed to under 38% in Hanoi. Also noted is that 24% of the Hanoi households never consume avian products or only consume it for special occasions, such as Tet (whilst the figure is only 18% in Ha Tay).

Table 9. Trends in avian products consumption (compared to 2003)

%	no change	decrease around 20%	decrease around 50%	decrease around 70%	decrease 100%	increase	total (n)
Hanoi	13,1%	15,1%	34,2%	28,5%	8,4%	0,7%	298
Ha Tay	52,9%	10,8%	15,5%	9,8%	4,4%	6,7%	297
Total sample	32,9%	12,9%	24,9%	19,2%	6,4%	3,7%	595

Table 10. Frequency of avian products consumption in the household of the survey

	never	only for Tet and others special occasions/ only a few times a year	one to a few times a month	one to a few times a week	daily	total (n)
Hanoi	8,4%	15,4%	38,5%	31,4%	6,4%	299
Ha Tay	5,7%	12,7%	26,1%	32,4%	23,1%	299
Total sample	7,0%	14,0%	32,3%	31,9%	14,7%	598

- Poultry purchasing**

The Hanoi survey group do not have contact with birds as breeders or farmers but they do have contact as consumers. Nearly 35% of those who buy and consume poultry choose living, un-slaughtered domestic fowls (27% of the total Hanoi sample) (table 11).

Table 11. Percentage of households buying live poultry for consumption (from the total number of households buying poultry)

	no (buy poultry but do not choose them alive)	yes, (buy poultry and choose them sometimes alive)	nearly never buy poultry because raise them at home	valid data	<i>Not a suitable question because do not eat poultry at home</i>
Hanoi	64,1% (152)	34,6% (82)	1,3% (3)	(237)	(62)
Ha Tay	6,9% (17)	16,7% (41)	76,3% (187)	(245)	(55)
Total sample	35,1% (169)	25,5% (123)	39,4% (190)	(482)	(117)

**sometimes means here "at least three times during the last three months"*

Among those who buy live poultry, half of the consumers in Hanoi (or 13.6% of all Hanoi respondents) handle the bird physically when choosing/purchasing it. Nearly all the consumers in Ha Tay choose the bird by actually handling it (table 12).

Table 12. Percentage of households handling live poultry when buying it (from the total number of households buying live poultry)

% (n)	no (choose the poultries alive but do not handle them)	yes, (handle the poultry when choosing it)	valid data	<i>do not eat poultry at home or do not buy live poultry</i>
Hanoi	50,6% (42)	49,4% (41)	(83)	(217)
Ha Tay	5,9% (3)	94,1% (48)	(51)	(249)
Total sample	33,6% (45)	66,4% (89)	(134)	(466)

Among those consumers who buy live poultry, 19% slaughter it themselves at home (or 5% of the total Hanoi sample, see table 13). This does not include the slaughter in Hanoi of fowl received from family or relatives living in the countryside who gift animals to their family in the city.

Table 13. Percentage of households slaughtering poultry at home (from the total number of households buying live poultry)

% (n)	the seller or someone at the market place slaughter it	home slaughtering	valid data	<i>do not eat poultry at home or do not buy live poultry</i>
Hanoi	80,7% (67)	19,3% (16)	(83)	(217)
Ha Tay	3,8% (2)	96,2% (50)	(52)	(248)
Total sample	51,1% (69)	48,9% (66)	(135)	(465)

D. PERCEPTION OF AI RISK

Factors favourable to the campaign effecting behavioural change are that the targeted population must feel personally (or their relatives) exposed to the specific risk, and must perceive a degree of personal control in order to counter the risk (and the campaign must reinforce this feeling). Few questions included in this survey were aimed at checking this point.

- AI in the portfolio of general risks**

Avian influenza is an important concern for the whole population, especially in Ha Tay, but is not the major perceived risk compared to other risks that people are exposed to (table 14).

Both Hanoi and Ha Tay residents agree about the ranking of various risks with the exception of AI which comes second in Ha Tay, and only fourth in Hanoi. In both cases, “Quality of food and water” is the primary concern. This is followed by “environmental pollution” by Hanoi residents (specifically air pollution) and then AIDS. Ha Tay dwellers are concerned with AI to a greater extent followed by AIDS and environmental (water) pollution that rank third place equal.

Table 14. Major problems in Vietnam today according to the respondents

Rank (and total score of each risk*)	Hanoi	Ha Tay	Total sample
Food and water quality	1st (474)	1st (345)	1st (819)
AIDS	3rd (280)	3rd (302)	3rd (582)
Malnutrition	8th 34	8th 66	8th 100
Bird flu	4th (249)	2nd (317)	4th (566)
Environmental pollution	2nd (357)	3rd (302)	2nd (659)
Natural disaster	7th (67)	7th (75)	7th (142)
Crime	6th (125)	6th (125)	6th (250)
Economic situation (unemployment, inflation...)	5th (195)	5th (160)	5th (355)

* score: rank 1= 3 points, rank 2 =2 points, rank 3=1 point

Answers to the question “Rank the first three major problems for Vietnam today”

- **AI anxiety**

AI is obviously still a source of anxiety (see table 15), but the reasons are noticeably different for urban and rural respondents. The surveyed group still feel anxious about AI regarding animal health (their animals) in Ha Tay but not in Hanoi. However both groups felt concern with regards to their own health. The economic impact is still a concern for Ha Tay residents as many face the direct loss of their animals. However, it is not such a concern for those in Hanoi: most of whom are not even worried about the possible impact on food prices. Finally, only one third of the respondents in Hanoi feel anxious about possible new outbreaks, whereas two thirds of those in Ha Tay declared this to be a concern.

Table 15. Anxiety regarding possible impact of AI on human and animal health, possible economic impact and possible new outbreaks

Hanoi (n=300) Ha Tay (n=300)	No, not anxious at all	No, little anxious	Yes, rather anxious	Yes, very anxious	no suitable question, no answer
<i>“Do you feel anxious at present about the possible impact of bird flu on your health and the health of your community/relatives?”</i>					
Hanoi	6,7%	17,0%	28,7%	47,7%	0,0%
Ha Tay	9,7%	8,0%	21,0%	61,3%	0,0%
Total sample	8,2%	12,5%	24,8%	54,5%	0,0%
<i>“Do you feel anxious at present about the possible impact of bird flu on the health of your poultry/birds (if you have poultry/birds at home)?”</i>					
Hanoi	2,0%	0,7%	0,0%	2,0%	95,3%
Ha Tay	7,7%	11,4%	19,7%	42,5%	18,7%
Total sample	4,9%	6,1%	9,9%	22,4%	56,8%
<i>“Do you feel anxious at present about the possible economic impact of bird flu on your family (loss of income, increase of food expenditure)?”</i>					
Hanoi	42,7%	27,7%	17,0%	12,7%	0,0%
Ha Tay	16,4%	16,1%	19,1%	48,2%	0,3%
Total sample	29,5%	21,9%	18,0%	30,4%	0,2%
<i>“Do you feel anxious at present about a possible new outbreak of Bird flu in Vietnam?”</i>					
Hanoi	10,7%	16,0%	31,7%	40,7%	1,0%
Ha Tay	10,3%	7,3%	23,3%	58,3%	0,7%
Total sample	10,5%	11,7%	27,5%	49,5%	0,8%

- **Perception of individual control over AI**

This anxiety is tempered by the fact that two thirds of the group feel that AI is a risk that can control at their personal level.

Table 16. Perceived self control on AI

	No need to protect because there is no risk	No, I cannot do anything	No, there is little that I can do	Yes, I can control it more or less	Yes, I can completely protect	Do not know, no answer	Total (n)
Hanoi	2,7%	0,7%	7,0%	29,3%	60,0%	0,3%	300
Ha Tay	4,7%	2,0%	9,7%	30,0%	52,0%	1,7%	300
Total sample	3,7%	1,3%	8,3%	29,7%	56,0%	1,0%	600

Answer to the question: Do you think that you can protect yourself and your relatives against bird flu?

E. CAMPAIGN EXPOSURE

Campaign exposure is assessed by the percentage of respondents who have seen or heard the campaign and who can recall correctly at least one of the recommendations of the campaign.

- **Share of the population reached by the campaign**

The campaign has reached a high percentage of the population, since 75% of the respondents have seen it (on TV, radio, loudspeakers or posters) and 62% have seen it and can remember at least one of the recommendations (table 17).

In fact these figures have probably been over estimated. The surveyors described a few elements of the Pre-Tet campaign. These included; celebrity actors involved in the campaign, locations of the posters, radio programmes where the messages were broadcast. But, the surveyors did not mention the recommendations of the campaign, so as not to interfere with the following questions. Nevertheless, most respondents had heard so much information on AI from different sources that some of them found it difficult to remember exactly which information came from the Pre-Tet campaign itself.

Table 17. Campaign exposure

% (n)	have not seen/heard the campaign	have seen the campaign but cannot remember any recommendation	have seen the campaign and can remember correctly at least one recommendation	Total (n)
Hanoi	17,4% (52)	13,4% (40)	69,2% (207)	299
Ha Tay	31,0% (93)	14,3% (43)	54,7% (164)	300
Total sample	24,2% (145)	14,0% (83)	62,3% (371)	599

- **Exposure according to the different media used**

Television spots reached the major audience (58% of the respondents). Following this in the data gathered were loudspeakers (37%), posters (31%) and radio (14%), see tables 18 and 19.

Radio spots reached only a few people because a high portion of the respondents do not own a radio or have a radio but never listen to it. However, taking into consideration only the people who listen regularly to the radio (every day, or few times a week), then the radio campaign seems to have been quite efficient. 80% of the regular radio listeners heard the Pre-Tet campaign as opposed to only 71% for loudspeakers and 60.5% for television (see table 20). This might be linked to the quality of the radio programme, the frequency of repetition or the attentiveness of the listeners.

Table 18. Television, radio and loudspeakers campaign exposure

% (n)	have access to this media but have never seen the pre- Tet campaign	have access to this media and have seen the pre- Tet campaign	cannot say, do not know, no answer	not suitable question because do not have access to this media	Total (n)
Television					
Hanoi	25,3% (76)	68,3% (205)	5,7% (17)	0,7% (2)	300
Ha Tay	46,3% (139)	47,7% (143)	5,0% (15)	1,0% (3)	300
Total sample	35,8% (215)	58,0% (348)	5,3% (32)	0,8% (5)	600
Radio					
Hanoi	15,0% (45)	15,3% (46)	1,3% (4)	68,3% (205)	300
Ha Tay	14,0% (42)	12,3% (37)	0,7% (2)	73,0% (219)	300
Total sample	14,5% (87)	13,8% (83)	1,0% (6)	70,7% (424)	600
Loudspeakers					
Hanoi	29,8% (89)	35,8% (107)	4,3% (13)	30,1% (90)	299
Ha Tay	39,8% (119)	38,1% (114)	3,0% (9)	19,1% (57)	299
Total sample	34,8% (208)	37,0% (221)	3,7% (22)	24,6% (147)	598

Table 19. Poster campaign exposure

% (n)	Have not seen the poster	Have seen the poster	Total (n)
Hanoi	53,7% (161)	46,3% (139)	300
Ha Tay	84,7% (254)	15,3% (46)	300
Total sample	69,2% (415)	30,8%(185)	600

Table 20.Comparison of the different media channels used by the campaign

All sample	n	in % of total sample	in % of people who have access to this media	in % of people who regularly hear/see this media
respondents who have seen/heard the campaign	454	75.6%	76.2%	
respondents who have seen the campaign on TV	348	58%	59.8%	60.5%
respondents who have heard the campaign on radio	83	13.8%	33.1%	80.5%
respondents who have heard the campaign on loud speakers	221	36.8%	51.0%	70.8%
respondents who have seen the campaign's posters	185	30.8%		

- Exposure to the different recommendations**

Among those surveyed, Hanoi residents who had seen the campaign were more likely to spontaneously repeat campaign messages than residents from Ha Tay (see table 21).

Three recommendations were spontaneously provided by nearly one third of the respondents who have seen/heard the campaign:

- ✓ Cook the poultry products thoroughly (no pink meat, no runny eggs)
- ✓ If you slaughter poultry at home, use a mask and gloves and wash your hands afterward in Ha Tay.
- ✓ Wash your hands with soap after contact with (chicken, slaughtering or cooking). (Except in Ha Tay where it is quoted by only 16% of the respondents who have seen the campaign)

The other recommendations were only quoted by a very few people (around 10% or less).

Table 21. Recommendations spontaneously provided by the respondents who had seen the campaign (percentage of people who articulate the messages/people who have seen or heard the campaign)*

	Hanoi (n=247)	Ha Tay (n=207)	All sample (n=454)
1. Cook the poultry products thoroughly (no pink meat no runny eggs)	49,3%	28,7%	39,0%
2. If you slaughter poultry at home, use a mask and gloves and wash your hands afterward*		34,3%	
3. Wash your hands with soap (after contact with chicken, slaughtering, cooking)	35,3%	16,3%	25,8%
4. Change your chopping board and knife for cooked and uncooked food	11,3%	8,7%	10,0%
5. Do not eat blood pudding	10,3%	7,7%	9,0%
6. Avoid contact with sick/ dead poultry (= when you see a bird is sick or dead, you should not touch it)*		4,3%	
7. When chickens die or show symptoms of ill health, report this immediately to the local vet*		6,3%	
8. Only slaughter healthy poultry at home*		4,0%	
9. Children should not play nearby poultry	1,0%	0,7%	0,8%

* These recommendations were specifically targeted at rural people

F. CAMPAIGN AGREEMENT

Respondents were asked to assess their agreement with the messages of the campaign, from “1= totally disagree” to “4= totally agree”. Agreement meaning that they find the recommendation useful to avoid AI spreading and that they find the recommendation feasible.

All the recommendations received a high score of agreement (see table 22):

- ✓ The maximum score was for “do not eat blood poultry” and “cook poultry products thoroughly”
- ✓ The minimum score (but still a high score) in Ha Tay for “When chickens die or show symptoms of ill health, report this immediately to the local vet” and “if you slaughter poultry at home use mask and gloves” (see comments in focus group discussions, part III).

Table 22. Agreement with the different recommendations of the campaign

average score 1 = "totally disagree" ; 4= "totally agree"	Hanoi	Ha Tay	total sample
Do not eat blood pudding	3,99	3,96	3,97
Cook the poultry products thoroughly (no pink meat, no runny eggs)	3,97	3,96	3,96
Change your chopping board and knife for cooked and uncooked food	3,93	3,95	3,94
Children should not play nearby poultry	3,92	3,90	3,91
Avoid contact with sick/ dead birds*		3,89	
Wash your hands with soap after contact with chicken, slaughtering, cooking	3,88	3,87	3,88
Only slaughter healthy poultry at home *		3,92	
When chickens die or show symptoms of ill health, report immediately to the local vet*		3,78	
If you slaughter poultry at home, use mask and gloves and wash your hands after*		3,81	

* These recommendations were specifically targeted at rural people.

The survey group also suggested other recommendations such as:

- ✓ vaccinate poultry
- ✓ clean the area of poultry breeding with lime
- ✓ do not eat poultry during AI
- ✓ only eat controlled poultry or poultry with known origin

In addition, and more anecdotal:

- ✓ clean poultry carcass or eggs with salt
- ✓ drink tea
- ✓ eat ginger and garlic

G. CAMPAIGN IMPACT ON PEOPLES BEHAVIOUR

The impact of the different recommendations of the campaign on the respondents' behaviour has been assessed in the following way:

For each recommendation, the respondents were asked if the suggested behaviour matched his or her personal behaviour presently and before the crisis (in 2003) (from "1= do not match at all" to "4= completely match").

In case of change in their behaviour, from 2003 to the present day, the respondents were asked the reasons for this change (AI in general, Pre-Tet campaign or others reasons?)

• Behavioural change

Present behaviour

At present, according to most of the respondents they follow the recommendations of the campaign, with a **very high score** for:

- ✓ At home, we cook poultry products thoroughly (no pink meat, no runny eggs)
- ✓ We change or clean our chopping board and knife for raw and cooked meat
- ✓ My family and I do not eat poultry blood pudding
- ✓ I wash my hands frequently with soap

These recommendations were said to be completely followed by around 90-95% of the respondents in Hanoi and in Ha Tay. This percentage is suspiciously high. As we mention already since this assessment relies on reported practices (what people say to do, and not what they really do) and not on reported ones, there might be some over-estimation

due to a kind of “desirability bias” (respondents are willing to show to the interviewer that they are in line with the social norm). At least, this shows that these two behaviours are completely part of the present social norms.

It is interesting to compare this data with the results of a recent survey conducted by the American Red Cross⁷ showing that only 17% of households having soap used it for washing hands in the last 24 hours at least 2 critical times (after defecation and one of the following: after cleaning a young child, before preparing food, before eating, before feeding a child).

The lowest scores were from Ha Tay for the recommendations:

- ✓ If we slaughter poultry at home, we use a mask and gloves and wash our hands afterward
- ✓ If chickens die or show symptoms of ill health, I report this immediately to the local vet
- ✓ When I see that a bird is sick or dead, I avoid contact with it

In general all the recommendations are more practiced in Hanoi than in Ha Tay. Interestingly, very few respondents were able to cite the recommendation “*do not let children play nearby poultry*” (see Campaign exposure), but most of them nevertheless said they follow this recommendation.

Comparison with behaviour in 2003 (before the AI crisis)

Respondents said that they applied the campaign recommendations more today than they did in 2003.

The major increase concerns two recommendations in Ha Tay which were quoted above as having low scores of agreement:

- ✓ If chickens die or show symptoms of ill health, I report this immediately to the local vet
- ✓ If we slaughter poultry at home, we use a mask and gloves and wash our hands after

The critical meaning of this increase is that even if these recommendations are not widely practiced their adoption is nevertheless increasing.

Others recommendations are also said to be more followed:

- ✓ My family and I do not eat blood pudding made from fowl, in Ha Tay and Hanoi
- ✓ At home, we cook poultry products thoroughly (no pink meat, no runny eggs) predominantly in Hanoi.

and in a lesser extend:

- ✓ When I see that birds are sick or when they are dead, I avoid contact in Ha Tay
- ✓ we only slaughter healthy poultry at home, in Ha Tay
- ✓ I do not let children play near poultry

Two other recommendations which are said to be widely followed are so since 2003, and their reported adoption has increased only a little:

- ✓ I wash my hands frequently with soap
- ✓ We change or clean our chopping board and knife for raw and cooked meat

⁷ Survey conducted in December 2005 in randomly selected villages of six provinces (Dien Bien, Lau Chau, Nghe An, Ha Tinh, Quang Binh, and Quang Ngai) by 330 mothers with children under 2.

Table 23. Behaviour changes from 2003 to the present

I do not let children play near poultry						
	1. "do not match at all with my behaviour"	2.	3.	4. "totally match with my behaviour"	average score (and difference with score in 2003)	# of valid answers
at present						
Hanoi	6,3%	0,9%	6,3%	86,5%	3,8 (+0.7)	111
Ha Tay	18,5%	8,2%	10,3%	63,0%	3,2 (+0.5)	146
All sample	13,2%	5,1%	8,6%	73,2%	3,4 (+0.6)	257
in 2003						
Hanoi	24,1%	5,6%	7,4%	63,0%	3,1	108
Ha Tay	35,8%	9,0%	6,7%	48,5%	2,7	134
All sample	30,6%	7,4%	7,0%	55,0%	2,8	242

I wash my hands frequently with soap						
	1.	2.	3.	4.	average score	# of valid answers
at present						
Hanoi	0,3%	0,7%	3,7%	95,3%	3,9 (0)	298
Ha Tay	6,0%	3,3%	3,0%	87,7%	3,7 (+0.2)	300
All sample	3,2%	2,0%	3,3%	91,5%	3,8 (+0.1)	598
in 2003						
Hanoi	0,7%	2,0%	4,4%	93,0%	3,9	298
Ha Tay	11,7%	6,3%	6,0%	76,0%	3,5	300
All sample	6,2%	4,2%	5,2%	84,4%	3,7	598

When I see that a bird is sick or when it is dead, I avoid contact*						
	1.	2.	3.	4.	average score	# of valid answers
at present						
Ha Tay	42,9%	10,7%	9,4%	37,1%	2,4 (+0.7)	224
in 2003						
Ha Tay	69,0%	9,0%	6,3%	15,7%	1,7	255

If a chicken dies or shows symptoms of ill health, I report immediately to the local vet*						
	1.	2.	3.	4.	average score	# of valid answers
at present						
Ha Tay	39,5%	5,0%	7,3%	48,2%	2,6 (+1.1)	220
in 2003						
Ha Tay	79,4%	3,2%	2,4%	15,1%	1,5	252

We only slaughter healthy poultry at home *						
	1. “do not match at all with my behaviour”	2.	3.	4. “totally match with my behaviour”	average score (and difference with score in 2003)	# of valid answers
at present						
Ha Tay	4,4%	2,2%	0,9%	92,4%	3,8 (+0.7)	225
in 2003						
Ha Tay	26,0%	5,8%	2,4%	65,8%	3,1	292

If we slaughter poultry at home, we use a mask and gloves and wash our hands afterward*						
	1.	2.	3.	4.	average score	# of valid answers
at present						
Ha Tay	54,5%	3,0%	7,2%	35,3%	2,2 (+1)	235
in 2003						
Ha Tay	93,2%	1,4%	0,7%	4,8%	1,2	292

We change or clean our chopping board and knife for raw and cooked meat (any kind of meat not only poultry)						
	1.	2.	3.	4.	average score	# of valid answers
at present						
Hanoi	1,0%	0,0%	2,3%	96,7%	3,9 (+0.1)	299
Ha Tay	2,7%	0,0%	4,1%	93,2%	3,9 (+0.2)	293
All sample	1,9%	0,0%	3,2%	94,9%	3,9 (+0.1)	592
in 2003						
Hanoi	3,0%	1,7%	3,3%	92,0%	3,8	299
Ha Tay	7,0%	1,7%	5,0%	86,3%	3,7	299
All sample	5,0%	1,7%	4,2%	89,1%	3,8	598

At home, we cook poultry products thoroughly (no pink meat, no runny eggs)						
	1.	2.	3.	4.	average score	# of valid answers
at present						
Hanoi	2,5%	0,7%	1,1%	95,7%	3,9 (+0.9)	280
Ha Tay	2,5%	0,4%	0,7%	96,5%	3,9 (+0.3)	283
All sample	2,5%	0,5%	0,9%	96,1%	3,9 (+0.6)	563
in 2003						
Hanoi	27,1%	6,7%	7,7%	58,5%	3,0	299
Ha Tay	11,7%	2,3%	2,3%	83,6%	3,6	299
All sample	19,4%	4,5%	5,0%	71,1%	3,3	598

My family and I do not eat blood pudding made from poultry						
	1. "do not match at all with my behaviour"	2.	3.	4. "totally match with my behaviour"	average score (and difference with score in 2003)	# of valid answers
at present						
Hanoi	4,0%	0,3%	0,3%	95,3%	3,9 (+0.9)	299
Ha Tay	3,7%	1,0%	1,0%	94,3%	3,9 (+0.9)	298
All sample	3,9%	0,7%	0,7%	94,8%	3,9 (+0.9)	597
in 2003						
Hanoi	21,7%	14,3%	3,7%	60,3%	3,0	300
Ha Tay	30,8%	5,7%	0,7%	62,9%	3,0	299
All sample	26,2%	10,0%	2,2%	61,6%	3,0	599

* These recommendations were specifically targeted at rural people.

• Impact of the Pre-Tet AI campaign on behaviour

It is quite difficult to isolate the impact of the Pre-Tet campaign on the behaviour of the respondents. Firstly because information received from the Pre-Tet Campaign is not easily distinguished from other sources of information by the respondents (see above). Second, because behavioural change is a complex process involving many interactive factors. As a whole around, 75% of the respondents have changed at least one element of their behaviour since 2003. So that now, their overall general behaviour better matches the Pre-Tet campaign recommendations (with a higher percentage in Ha Tay of 78%). AI is the major reason for this change, and **the Pre-Tet campaign (and probably other information broadcast by the various media channels) has been cited by one third of the respondents as a factor in this change** (table 24).

Table 24. % Global behaviour change and reasons for it

% (and number) of total respondents who have	Hanoi, n=300	Ha Tay, n=300	total sample n=600
changed behaviour* since 2003	70.6% (212)	78.3% (235)	74.5% (447)
✓ because of AI in general	53% (159)	61% (184)	57.2% (343)
✓ because of the campaign	30% (89)	30% (91)	30% (180)

*Changing behaviour means that the respondent has indicated, for at least one of the Pre-Tet Campaign recommendations, that her/his present behaviour matches better now than it did before 2003. Respondents may have changed one behavioural pattern because of the campaign and one other because of AI in general.

The campaign has demonstrated its impact, even on a small share of the audience (20% to 10% of the respondents, according to the recommendations, declared that their present behaviour match more with the recommendation than it did before 2003 due to the Pre-Tet campaign itself) on:

- ✓ The use of masks and gloves for slaughtering animals, in Ha Tay
- ✓ The thorough cooking of poultry products (no pink meat, no runny eggs) in Hanoi (and lets remember that a large share of respondents declared that they were already in line with this recommendation before 2003)
- ✓ The concept of reporting to local vets chickens with symptoms of ill health in Ha Tay
- ✓ The slaughter of only safe animal in Ha Tay
- ✓ The stop of the consumption of blood pudding in Hanoi and Ha Tay.

See table 25 on the next page for more empirical data.

Table 25. Behavioural changes for each recommendation and reasons for it

in % of valid answers	no change	change			nb of valid answers
		<i>because of AI</i>	<i>because of the campaign</i>	<i>other reasons</i>	
I do not let children play near poultry					
Hanoi	76,5%	18,6%	3,9%	1,0%	102
Ha Tay	75,4%	17,7%	3,8%	3,1%	130
All sample	75,9%	18,1%	3,9%	2,1%	232
I wash my hands frequently with soap					
Hanoi	96,0%	1,7%	1,7%	0,7%	298
Ha Tay	86,0%	9,3%	3,3%	1,3%	300
All sample	91,0%	5,5%	2,5%	1,0%	298
When I see that a bird is sick or when it is dead, I avoid contact*					
Ha Tay	68,7%	24,8%	5,1%	1,4%	214
If a chicken dies or shows symptoms of ill health, I report this immediately to the local vet*					
Ha Tay	62,7%	21,7%	13,2%	2,4%	212
We only slaughter healthy poultry at home*					
Ha Tay	69,0%	16,4%	11,5%	3,1%	226
If we slaughter poultry at home, we use masks and gloves and wash our hands afterward*					
Ha Tay	61,1%	15,8%	20,1%	3,0%	234
We change or clean our chopping board and knife for raw and cooked meat					
Hanoi	95,0%	2,0%	2,7%	0,3%	298
Ha Tay	92,9%	3,7%	3,1%	0,3%	294
All sample	93,9%	2,9%	2,9%	0,3%	592
At home, we cook poultry products thoroughly (no pink meat, no runny eggs)					
Hanoi	59,5%	23,7%	15,8%	1,1%	279
Ha Tay	85,9%	7,8%	6,0%	0,4%	283
All sample	72,8%	15,7%	10,9%	0,7%	562
My family and I do not eat poultry blood pudding					
Hanoi	61,5%	25,4%	11,4%	1,7%	299
Ha Tay	67,2%	19,1%	10,7%	3,0%	299
All sample	64,4%	22,2%	11,0%	2,3%	598

* These recommendations were specifically targeted at rural people.

Table 26. Synthesis of the different recommendations

(min and max value for each indicator)(a)	exposure *		agreement**		adoption***		behaviour change****		campaign(s) impact*****	
	Hanoi	Ha Tay	Hanoi	Ha Tay	Hanoi	Ha Tay	Hanoi	Ha Tay	Hanoi	Ha Tay
Cook the poultry products thoroughly (no pink meat no runny eggs)	++ (49%)	+ (34%)	++ (3.99)	+ (3.96)	++	++ (96%)	+ (0.9)		+ (16%)	
If you slaughter poultry at home, use mask and gloves and wash your hands after		+		-		--		+		+ (20%)
Wash your hands with soap (after contact with chicken, slaughtering, cooking,...)	+		- (3.88)		++	++	(0)	(0.2)	- (1.7%)	- (3%)
Change your chopping board and knife for cooked and uncooked food				+	++ (97%)	++		(0.2)	-	-
Do not eat blood pudding		-	++	+ (3.96)	++	++	+ (0.9)	+	+	+
Avoid contact with sick/ dead poultry		-				-				
When chickens die or show symptoms of unhealthiest, report immediately to the local vet		-		- (3.78)		- (48%)		+ (+1)		+
Only slaughter healthy poultry at home		-								+
Children should not play nearby the poultry	- (1%)	- (0.7%)			- (86%)				-	-

a= ("-" means minimum value for the column, not a negative one)

* exposure: % of the respondents who have seen the campaign and can spontaneously quote this recommendation

** agreement: average note given by the sample to assess their agreement with the usefulness of the recommendation to fight AI and its feasibility (1: "do not agree at all", 4 = "completely agree")

*** adoption: % of the sample which reported behaviour completely matched with the recommendation

**** behaviour change: score to assess the reported change in the adoption of the recommended behaviour from 2003 to now. 0= no change

***** campaign impact: % of the respondents who declared that their behaviour matched better with the recommendation now than it did in 2003, due to the campaign, ("-" means lowest impact for the column, not a negative one)

PART III. FOCUS GROUP DISCUSSION FINDINGS

To complete the assessment of the campaign, three focus groups discussions were held: one in Hanoi and two in Ha Tay province (Ba Vi district and Phu Xuyen district). These three groups are representative of the potential population that risk being exposed to the disease: consumers, small-scale poultry breeders and large-scale poultry breeders (see a description of the groups in table 1).

Table 27. Description of the groups

	# of participants	participants' characteristics
Hanoi	11	women with low incomes (housekeepers, young or retired workers, vegetable sellers)
Ba Vi (Ha Tay province)	8	women farmers with small-scale poultry breeding operations
Phu Xuyen (Ha Tay province)	10	women from families with large-scale poultry breeding (500 to 1000 ducks) operations

Participants were shown photos used for the campaign posters (without text or logos) and asked to comment on the images (see figure 1). Then text was added and participants asked to discuss this and also to discuss the feasibility of the recommendations made by the posters. Finally, the logos were added and participants asked if they knew the institutions and what their opinion was about these institutions being involved in an AI IEC campaign.

The main objective was to assess participants' knowledge, comprehension and level of agreement with the messages of the campaign and also to assess the public image of the institutions involved.

A. PARTICIPANTS' KNOWLEDGE OF THE AI IEC CAMPAIGN

The participants of the three discussion groups knew little about the AI IEC campaign. Most had heard a lot about AI on television but it was quite difficult for participants to distinguish specifically which parts of this information came from the Pre-Tet IEC campaign. They do not listen to radio and so had not heard about the radio campaign. None of the participants in rural area had seen the posters and only a few of the Hanoi participants had seen one of the posters (poster #1) when passing by the local hospital.

Figure 1. AI IEC Campaign Posters

Reduce the risk of bird flu, Giảm nguy cơ nhiễm cúm gia cầm			
<p>Poster 1</p> <p>Cook the poultry meat thoroughly</p> <p>Hãy nấu chín kỹ thịt gia cầm</p>		<p>Poster 2</p> <p>Avoid contact with sick or dead birds</p> <p>Không tiếp xúc với gia cầm bị bệnh hoặc chết</p> <p>Report to local vet or authorities immediately when you discover sick or dead bird</p> <p>Hãy báo ngay cho cán bộ thú y hoặc chính quyền khi phát hiện gia cầm bị bệnh hoặc chết</p>	
<p>Poster 3</p> <p>Wash your hands with soap</p> <p>Hãy rửa tay bằng xà phòng</p>		<p>Poster 4</p> <p>Slaughter poultry safely</p> <p>Chỉ giết mổ gia cầm khỏe mạnh</p> <p>Only slaughter healthy poultry Wear mask and gloves Wash your hands with soap afterward</p> <p>Chỉ giết mổ gia cầm khỏe mạnh Đeo khẩu trang và găng tay Rửa tay bằng xà phòng sau khi giết mổ</p>	

B. CAMPAIGN COMPREHENSION AND AGREEMENT

• **Poster 1 (Cook the poultry meat thoroughly)**

Upon seeing the image without any text, participants clearly identified the recommendation as “cook well the chicken, only eat well done chicken meat...” Nevertheless, according to participants of the three groups, the image does not show the correct way to achieve this.

- ✓ Firstly: because there is not enough water in the pan: the water should completely cover the chicken in order to cook thoroughly
- ✓ Secondly: the fire under the pan is too hot. The issue is not to cook the chicken at a high temperature but to cook it for a long time, according to the participants
- ✓ Thirdly: participants said a covered pan should be seen in the image. A covered pan is seen as essential for cooking food well

When seeing the accompanying text, the participants found it very clear, understandable and found the recommendations most useful and feasible. But they confirm some ambiguity between the text and the image. For them, “thoroughly” means “for a long time”, when the picture shows a strong fire under the pan, supposing that the recommendation could be to cook the poultry “at a high temperature” (which is not the

idea of the campaign responsible in fact. But is necessary to precise that in the TV spot, there is a clear explanation of what means “thoroughly”: “no pink meat, no runny eggs”). They all stressed that they have always followed these recommendations, even before AI, but they are even more cautious now.

- **Poster 2 (Avoid contact with sick or dead birds)**, Ha Tay groups only

Seeing the image without text or logos the participants stated that:

- ✓ This message is clearly associated to AI and its consequences for animals (the chicken is dead) but also that there is a potential threat to human health (the people are protected).
- ✓ The people in the photo are clearly identified as a women farmer and a vet
- ✓ The situation is clear: the woman is informing the vet about the death of the animal

According to the participants, the poster is aimed at poultry breeders by giving the following advice:

- ✓ Farmers have to protect themselves from AI. Paying attention to poultry alone is not enough; people also have to protect themselves by wearing a mask and gloves when in contact with poultry
- ✓ Farmers have to inform the vet when they find a dead fowl in any place, not only on their own farm
- ✓ Even when there is only a single dead animal (as in this picture) farmers have to act on this advice

The message is clear but the participants are critical of this image. The group said that if the message is ‘people should protect themselves correctly’ then wearing only a mask and gloves is probably useless if people do not also wear boots (the woman in the picture does not). Moreover, participants underlined the different level of protection vis-à-vis the vet and the farmer. Always according to the respondents, farmers and vet should be shown with equal protection. They underline that there is no problem of feasibility because if farmers cannot wear a uniform like the vet, they could at least wear a raincoat.

However, this constructive criticism does not mean that participants approve of the message. When the text was added the two groups in Ha Tay were surprised by the sentence “Avoid contact with sick or dead poultry.” According to them this recommendation is not realistic: it is only by regular close contacts with their animals (feeding in particular) that farmers can detect sick poultry. And if they detect a sick bird they first have to handle it to make their own diagnosis and to decide if they can treat the animal or if they have to call the vet. They believe the message should not be: “Avoid contact with sick or dead poultry” rather it should be “only have safe contact with poultry.” Participants suggested that information be given to farmers on techniques for safely burying sick or dead poultry (wearing masks, gloves boots, and a raincoat, using plastic snares to catch birds and burying them with lime). In this way participants said each citizen could contribute to limiting the spread of avian influenza.

- **Poster 3 (Wash your hands with soap)**

This poster received very few comments. The image was quite clear for every group: “wash hands with soap after contact with poultry, wash hands before eating...” There is a general consensus on the importance of this message and therefore no comments were made on its feasibility.

Criticisms concerned the lack of water in the image: a tap or at least a bowl of water should figure in the poster. Discussion group participants said this would be more useful than banana leaves, in fact some of the participants found the presence of the banana leaf quite surprising.

- **Poster 4 (Slaughter poultry safely)**, Ha Tay groups only

This image was interpreted as a recommendation to wear gloves and a mask when slaughtering poultry and to wash hands afterwards with soap. The groups again

commented that wearing gloves and a mask is not useful if the person does not also protect their feet by wearing boots. This was thought particularly important because it is likely, due to the proximity of the man, that he would pour the dirty water on his feet. The Phu Xuyen group underlined this problem of waste management, and the contamination potential of effluent. They pointed out that the campaign should tackle this issue: “what should people do with the waste from slaughtered poultry, including the washing water?”

When the text was added to the image, participants judged it to be very clear, easily understandable and coherent with the picture.

C. CREDIBILITY OF THE INSTITUTIONS INVOLVED IN THE CAMPAIGN

Participants were asked about the logos of the institutions present on the posters (see figure 2).

Figure 2. The logo of the institutions involved in the campaign as they appear on the posters



from left to right: Ministry of Health, Ministry of Agriculture and Rural Development, WHO, FAO, UNICEF, UNDP

Participants did not recognize most of the institutional logos on the posters except for the Ministry of Health. This logo is clearly written in Vietnamese “Bo y Te” (the letters on the MARD’ logo are too small) as opposed to the other foreign institutions which are named in English. When mention was made of the other organizations, people in Hanoi and Ha Tay province said they know of the Ministry of Agriculture and some have heard of UNICEF and the World Health Organization. The others, FAO and UNDP, are completely unknown.

The institutions involved in the campaign are not considered as important by Ha Tay respondents. The credibility of the campaign is related to the main channel of dissemination: information broadcast by state television is supposed to be controlled by the government and thus considered as trustworthy.

Hanoi respondents paid more attention to the institutions involved. The presence of the logo of the Ministry of Health and to a lesser extent the World Health Organization, are important because, as said the participants, the recommendations are mainly related to human health issue. According to the respondents, information issued by the Ministry of Agriculture, FAO, UNICEF and the UNDP on AI and the implications for human health, should always be guaranteed by MOH or WHO to be accurate.

Participants, from the Hanoi focus group, not only compared health organizations to other organizations but they also compared national institutions to international ones. According to some participants, Vietnamese institutions are more able to develop messages adapted to the Vietnamese situation, whereas recommendations from international organizations may not be suitable to the local context. Younger participants responded that the only important thing was that the professional skill of the institutions was high, whatever their origin.

D. OTHER COMMENTS ON THE CAMPAIGN

For all the group participants, the messages presented on the posters were not new. They all already knew about the core ideas even if they have not seen the Pre-Tet Campaign. Participants said that the best way to disseminate information is the 7pm

television news. The Hanoi group also mentioned the humorous programme “*Appointment at the weekend*”. The program has a large audience, including children, and its light-hearted content makes it easy to remember. Participants of both groups also recommended the use of loudspeakers in rural and urban areas due to their wide accessibility.

In regard to positioning of posters, participants suggest that they could be put in busier places such as markets particularly at meat stalls, for example, under the responsibility of the market management board or the sellers themselves. Other suggestions were that they could be placed in public meeting spaces such as the community meeting rooms in Hanoi districts or in the village meeting rooms.

Besides suggestions for better methods to disseminate official AI recommendations, the group in Phu Xuyen (large-scale poultry breeders) complained about the negative effects of the excess public communication regarding avian influenza.

Some of them began large-scale duck breeding in 2003 and since then they have not made any profit due to avian influenza. Some respondents also said they have incurred large debts (20 - 100 million Vietnam Dong) even though they are in a safe area and their animals have not been affected by AI. But, the general climate has led to many difficulties in marketing their products. The Government in particular by using the medium of TV has over-emphasized the subject, and this has led to an exaggerated fear by consumers. Additionally, middlemen and collectors have used this to impose extremely low prices when buying poultry.

A few complained strongly that they have so much information about AI on TV that they have sometimes turn the TV off. Participants suggested a reasonable communicative level in order to avoid exaggerated consumer fears.

On the other side, Hanoi participants as consumers, asked that beside information aimed at behavioural change the Government should also communicate information about safe poultry producing zones. This would help consumers have access to safe poultry products rather than just banning poultry marketing as had happened during some periods.

In short, the focus group discussions confirm that there were difficulties in distinguishing information received from the Pre Tet campaign and information received from others sources. This suggests that the exposure level to avian influenza information assessed by the survey might have been overestimated. Also, it suggests that most people have heard these same recommendations from others sources. The message is clear and understandable, however, farmers complain that the campaign neglects their competency to manage sick animals (“*avoid contact with sick animals*” should be “*handle sick animals safely*”), in fact they feel more than able to deal with the situation. Related to poster #1, there is some ambiguity in the recommendation “*cook poultry meat thoroughly*”. The public interpret the message from seeing the picture as “cook at a high temperature”. However they responded in the discussion group that the correct message should be “cook for a long time”.

Moreover there is demand from farmers for recommendations on handling sick animals and for managing poultry waste. The presence of a health organisation and of a national organisation (Ministry of Health being both) is essential to guarantee the credibility of the campaign. The dissemination channels used for the campaign can also play a role, a fine example being that of the state run TV channels as ‘moral guarantors’. Information should not be over abundant or too “anxiety causing”. It should be aimed not only at changing people’s behaviours but it should also provide messages to inform consumers about the unaffected producer areas and safe products.

PART IV. THE KEY POINTS OF THE CAMPAIGN

According to the research literature, there are different factors that should guarantee the success of a behaviour change campaign.

1. The targeted population must feel that they personally (or their relatives) are exposed, and must perceive that there is personal control, at an individual level, and that control is possible (and information must reinforce this perception).
2. Recommended practices must 1) be appropriately formulated (i.e., clear) 2) sound effective to the audience 3) be adapted to the context of application (technical/economic/socio-cultural context)
3. Recommended practices must be appropriately delivered
4. Recommendations must come from a credible source of information

If these precepts are applied to the Pre-Tet AI IEC, it is possible to confirm that the targeted population of this campaign feels personally exposed to AI and that they consider that through their behaviour they can more or less control the risk of AI. Thus, the main message: “you can reduce the risk of bird flu” matches the dominant public perception (see “AI risk anxiety”).

Based on the five indicators used to assess the campaign, it appears that:

- Recommendations have been appropriately delivered as shown by the campaign exposure data. Using different media (television, poster, radio, loudspeakers), the campaign has been able to reach a large audience. Television spots have been the most efficient, while radio spots reached the lowest number of people (TV viewers being much more numerous than radio listeners). Nevertheless, radio spots seem to have been quite effective among the regular (but not numerous) radio listeners. However, even relying on celebrities, this campaign did not develop a unique, recognisable identity, in relation to the large amount of other information broadcast by the media.
- Levels of agreement with the campaign messages are quite high, showing that the recommendations reflect social norms. Nevertheless some limits to getting public agreement have been identified.

They stem from the feasibility of some of the recommendations:

- For technical reasons, like for: “*when you see sick poultry, report it to a vet*” or “*avoid contact with sick poultry*”. The respondents to the survey insisted “it is only by contact that we can detect sick animals”.
 - For cognitive or socio-cultural reasons, as in the message: “*Use a mask and gloves when slaughtering poultry*”. Some replied to this with: “someone slaughtering poultry with such protection will be suspected of slaughtering unsafe poultry”. Again, with “*avoid contact with sick poultry*” and “*when you see sick poultry, report it to a vet*”, the complaints were that these recommendations disqualified the breeders as potential intermediaries with veterinarian services in the field.
- The impact on behaviour change of this campaign (and probably of other factors that are difficult to isolate) has been significant on practices related to avian product consumption (eat well-done meat, stop consuming blood pudding). This is not surprising because these forms of behaviour, linked to the consumption of the products, involve an already well-described “process of incorporation” (Fischler, 1990)⁸ that is the major cause of anxiety for humans.

⁸ Fischler, C. (1990). *L'omnivore*. Paris, O. Jacob.

- The recommendations are clear. Some ambiguity has been highlighted by the respondents on the poster recommendation, “*cook poultry meat thoroughly*”. This does not however affect the public perception on how to cook poultry meat.
- Combining the different indicators, the two recommendations “cook poultry meat thoroughly” and “do not eat blood pudding” should be considered as the most successful ones of this campaign. For the recommendation “cook poultry meat thoroughly” this has to be put into the context of its widespread dissemination through television, radio, posters and loudspeakers
- The source of the campaign is credible, mainly owing to the presence of the Ministry of Health. This confirms that for the population, AI is not only (and maybe not even mainly) a matter of animal health, but also a matter of human health.

PART VI. CONCLUSIONS: THE IMPLICATION OF THE FINDINGS FOR FUTURE IEC ACTIVITIES

Consequently, the implications for the next IEC Campaign are as follows:

A. PURSUING JOINT GROUP'S IEC ACTIVITIES

- ✓ This campaign represents important progress towards concerted and harmonized communication activities between the numerous institutions involved in fighting HPAI in Vietnam, in order to develop complementarities, and avoid counterproductive confusion.
- ✓ The follow-up of this effort of consultation should contribute to decreasing redundant information and avoiding over-communication (as the public have complained of an excess of communication). It should also help respond to the lack of more elaborated types of information (since at the same time, the public have demands for information concerning aspects such as “poultry waste management”, “having safe contact with sick animals”, etc.). It should also avoid an overly alarmist approach, which may have a dramatic economic impact on the poultry commodity chain.
- ✓ This campaign, using celebrities and a humorous tone was probably quite original. Nevertheless, in a context of over-communication, this has not been enough for the campaign gaining a specific identity (the AI campaign could not be distinguished clearly by the respondents from other source information on AI). International celebrities could be used in case of a campaign covering several countries. But probably it would be more efficient to pursue consultation between Vietnamese institutions, in order to reduce over-communication on AI and overlapping. Using more original (than other sources of information on AI) and persistent channels (for example through objects that people might be willing to keep) might also be worthwhile: i.e. distribution of T shirt to farmers, notebooks to students, plates to housekeepers with reproduction of the different posters or with humorous drawings related to the recommended behaviours.
- ✓ The option chosen in this current campaign to de-dramatize AI, using a humorous tone and actors, has proven to be effective and to match with the demand of the audience, breeders in particular. Further campaigns should continue in this vein rather than aiming at increasing audience fear.

B. BEHAVIOUR CHANGES: RETHINK RECOMMENDATIONS

The recommendations “*cook poultry thoroughly*” and “*do not eat blood pudding*” have now been largely adopted, significantly more than before the crisis, thanks to the Pre-Tet IEC campaign (or more probably, the various AI campaigns). However, these recommendations could be maintained for extended periods only for some targeted groups.

The message “*if you slaughter poultry at home, use a mask and gloves ...*” has had an impact and could gain even more adherents. Distributing gloves in market places and encouraging poultry product wholesalers/retailers to use gloves could contribute to increasing the social acceptability of such measures.

Similarly, the recommendation "*wash hands frequently*" could be given emphasis and promotion. It is an important message and not only for combating AI. Many studies show that people often say they wash their hands when in fact they do not⁹. Moreover, "frequently" may have many interpretations. Interesting experiments have been conducted in Africa with demonstrations in market places using "Petri dishes" to show to people who are convinced that they have clean hands that in fact they do not. These experiments could also be conducted in Vietnam.

The recommendation "*children should not play near poultry*" should merit special attention. It has not been identified by the respondents as a recommendation of the Pre-Tet Campaign, maybe because it has not also been espoused by other sources of AI information. It must be made clear that children have been major victims of AI. Further research on this specific point (maybe by organizing group discussions on this subject) could be useful to clarify this issue.

Some recommendations should be added or re-thought:

- ✓ In cooperation with breeders: "*Avoid contact with sick animals*" and "*report to a vet when animals are sick*" are not judged as feasible actions. Farmers are asking for recommendations on how to handle or bury animals safely. They ask to be associated in a more active way with AI control. Multi-stakeholder groups (AI experts, farmers) could be organised to work specially on this point.
- ✓ The recommendations "*only slaughter healthy poultry*" and "*when you slaughter poultry at home, use a mask and gloves*" did not target urban dwellers. But as the study shows that nearly 30% of Hanoi respondents still buy live poultry (and 5% slaughtered it themselves), recommendations for this group should be built into the next campaign. Banning the sale of live poultry in favour of the sale of slaughtered poultry could increase food risks since the cold food chain is not yet trustworthy. In some markets in Hanoi, chicken is frozen during the night and kept in a simple cool box during sale time. Or, worse, the meat is kept in the open air for sale and unsold meat is then frozen again. Also as slaughtering live animals is still common in Hanoi, why not provide a safe environment in which to do it?
- ✓ Focus groups provided many remarks and suggestions regarding the posters. This could also be carried out for TV spots since TV spots have the largest audience. Nevertheless, suggestions given by the participants have to be examined cautiously by risk experts. They shall not be considered as solutions to problems. For example, is it really necessary to change the fire under the pan on the poster "*cook poultry meat thoroughly*"? The idea is not so much to match reality as to obtain audience attention. Similarly, is it really useful to use boots to slaughter poultry? Isn't there a risk of contributing to the dramatization that this campaign aims to avoid?

These different points can only be answered through the cooperation of experts from the different areas concerned. But, it is important to note, it also needs the cooperation of different stakeholders (breeders, traders, consumers, etc.).

⁹ Redmond, E. C. and C. J. Griffith (2003). "Consumer food handling in the home: a review of food safety studies." *Journal of Food Protection* **66**(1): 130-161.

C. CHANGE FROM A STRATEGY OF EMERGENCY TO A LONG-TERM IEC STRATEGY

This campaign has been built in a context of emergency to answer to the warnings of experts who feared a possible outbreak season more dramatic than the previous ones. The situation is now quite different, since AI seems to be under control. Therefore further IEC activities should shift toward a long-term strategy.

Risk information can have many objectives:

1. enhancing knowledge on the nature of risk
2. communicating risk management options selected by authorities
3. promoting actions that individuals may take to reduce personal risk
4. fostering public trust and confidence in the safety of the food supply

The Pre-Tet IEC has focused on the third point. But the content of further IEC campaigns could be enlarged to address the other three objectives.

More concretely, a long-term IEC strategy could be based on the following points:

- **Fostering public trust in the safety of the poultry supply**

Since AI seems to be under control, it is now time to think of rebuilding the supply chain. This presupposes fostering public trust in the safety of poultry products. Poultry consumption is still affected by the crisis and some respondents attribute to the campaign the recommendation “*do not consume poultry products*” (and actually some sources have disseminated this recommendation).

There is definitely demand from producers and consumers for better public information regarding the safe producer areas and safe products. It is actually quite difficult for consumers to know what to buy. Their strategy for safety relies on buying poultry from supermarkets (for the ones who can afford it), from their usual retailers or directly from producers. If there is the political will to sustain the small-scale stakeholders in the avian commodity supply chain (producers, traders, etc.), it will be necessary to support the development of the veterinarian stamp to achieve greater reliability and guarantees for the consumer.

- **Build a permanent “Laymen” Knowledge Attitude and Practices (KAP) observatory**

Knowledge, Attitudes and Practices (KAP) studies are essential to building Behaviour Change (BC) Campaigns because they enhance identification of issues to be addressed by the campaign and they classify the target groups.

As now more time is available to draw up a future campaign, a synthesis of recent Knowledge, Attitudes and Practices (KAP) studies could be undertaken to prepare the next campaign. In the longer term, a permanent watchdog of KAP could provide the Joint Group with permanent information and enable quick reactions in order to deal with further events such as new knowledge on AI transmission, new regulations, new outbreaks, or even an AI pandemic.

The objective should *not* be simply to check if people know, feel and act correctly regarding AI, *but rather* to use a KAP observatory to continuously assess the level of public concern and public demand in terms of information (rather than only considering “needs”). This observatory should aim at following up some indices, such as for example:

- ✓ AI knowledge scale. It should focus on the knowledge of forms of behaviour to limit AI human infection: Currently this knowledge is that recommended by the experts (campaign exposure) but laymen knowledge should also be incorporated (experts should first assess its efficiency and then incorporate it)
- ✓ AI anxiety causing scale: based on the rank of bird flu in the “portfolio of risk” (compared to other risks), the level of anxiety regarding potential human and animal health impacts and the economic impact. Also the perceived degree of personal control, and finally the level of optimism/pessimism regarding the future
- ✓ AI risk exposure: this index should be based on the adoption of behaviour linked to the recommendations, but the index should also follow up on some behaviour such as: raising poultry in the city, buying and handling live poultry, selling sick animals

As most KAP studies and this present assessment are based on reported practices, this watchdog should include observation of real practices so to have a more realistic assessment of the effective practices of the population.

This KAP observatory should also be aimed at studying groups of stakeholders that have not been taken into consideration by previous KAP studies, namely: large-scale farmers, wholesalers, slaughterers, traders (previous KAP studies have mainly focused on small-scale producers). This will provide a valuable contribution to risk assessment activities, this will help to classify the target groups for further Behaviour Changes Communication campaigns, and may be essential in avoiding that any groups become a kind of scapegoat, as often happens in situations of risk.

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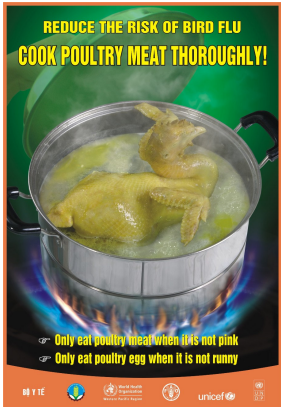
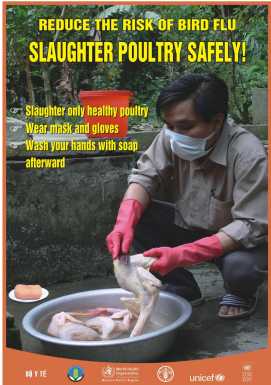

APPENDIX

APPENDIX 1. OVERVIEW OF AI IEC MATERIALS OF PRE-TET CAMPAIGN

(source: AI IEC Joint Group)

Materials already produced

Type	Description	Quantity	Distribution and Use
Street posters			
Washing hands with soap	 <p>2mx3m</p>	1,000	<p>Posted on streets of 11 high risk provinces and major cities</p> <p>Bac Giang: 50 Hung Yen: 25 Thai Binh: 25 Ha Tay: 25 Hanoi: 200 Hai Phong: 100 Hue: 100 Da Nang: 25 HCM City: 300 Long An : 50 Can Tho: 100</p>
Cooking poultry meat thoroughly	 <p>2mx3m</p>	1,000	<p>Posted on streets of 11 high risk provinces and major cities</p> <p>Bac Giang: 50 Hung Yen: 25 Thai Binh: 25 Ha Tay: 25 Hanoi: 200 Hai Phong: 100 Hue: 100 Da Nang: 25 HCM City: 300 Long An : 50 Can Tho: 100</p>
A4 Posters			
Washing hands with soap	 <p>A4 size</p>	250	<ul style="list-style-type: none"> Used as sample only (not yet mass production and distribution for community) Included in IEC packages distributed to all stakeholders before Tet.

Cooking poultry meat thoroughly	 <p>A4 size</p>	250	<ul style="list-style-type: none"> Used as sample only (not yet mass production and distribution for community) Included in IEC packages distributed to all stakeholders before Tet.
Slaughtering poultry safely	 <p>A4 size</p>	250	<ul style="list-style-type: none"> Used as sample only (not yet mass production and distribution for community) Included in IEC packages distributed to all stakeholders before Tet.
Avoiding contact with sick birds	 <p>A4 size</p>	250	<ul style="list-style-type: none"> Used as sample only (not yet mass production and distribution for community) Included in IEC packages distributed to all stakeholders before Tet.
TV spots			
TV spots	<ul style="list-style-type: none"> 45-60 seconds each <p>Each spot promotes one of the following actions: washing hands with soap; cooking poultry meat safely; slaughtering poultry safely; avoiding contact with sick or dead birds; keep children far from poultry</p>	4	<ul style="list-style-type: none"> Broadcasted nation-wide on VTV1, VTV2 and VTV3 3 times a day from 27 Jan to 7 Feb and 15 Feb. to 15 Mar. Sent to all provincial for local broadcast (02 per province)
Celebrity spots	<ul style="list-style-type: none"> 30 seconds each <p>Each spot promotes one of the following actions: washing hands with soap; cooking poultry meat safely; slaughtering poultry safely; avoiding contact with sick or dead birds; keep children far from poultry</p>	5	<ul style="list-style-type: none"> Broadcasted nation-wide on VTV1, VTV2 and VTV3 3 times a day from 27 Jan to 7 Feb and 15 Feb. to 15 Mar. Sent to all provincial for local broadcast (02 per province)

TV shows			
Staying home on Sunday	<ul style="list-style-type: none"> • 45 minute quiz show 	1	<ul style="list-style-type: none"> • VTV3
Radio spots			
Radio spots	<ul style="list-style-type: none"> • 30 seconds each • Each spot promotes one of the following actions: washing hands with soap; cooking poultry meat safely; slaughtering poultry safely; avoiding contact with sick or dead birds 	4 plus a modified version for after Tet	<ul style="list-style-type: none"> • Broadcasted on 6 programs on Radio Voice of Vietnam: Public and Community Health; Family and Society; Women's Program; Education and Training; Program for the Elderly; Distant Education; Culture and Life; Humanity; and Social Forum) from 25 Jan to 28 Feb • Sent to all provincial for local broadcast (22 per province)

Materials are being produced and not yet mass produced and distributed

Type	Description	Quantity	Distribution and Use
Street poster			
Booklet	<ul style="list-style-type: none"> • Second draft • Covers both human and animal health sides 	To be determined	Household
Educational film	<ul style="list-style-type: none"> • Second draft of the scripts. • 8 minutes • Mostly covers human health 	1	To be determined
Posters	<ul style="list-style-type: none"> • Third draft • Needs pretest • 60cmx90cm • Content same as with A4 size above 	To be determined	To be determined

These materials will be posted on a dedicate website, which is being designed.

APPENDIX 2. TERMS OF REFERENCE FOR THE PRESENT STUDY

A - BACKGROUND

Information, Education, and Communication (IEC) has been identified as a crucial component in the Government's policy framework¹⁰ to combat Highly Pathogenic Avian Influenza (HPAI). The AI IEC working group of the Joint Government – UN programme on HPAI has successfully implemented the Pre-TET AI communication campaign. During the period December 2005-March 2006, a number of communication activities through mass media and printing materials has been developed and disseminated. In order to develop effective mid-term and long term AI communication action plans, it is important to assess the level of public awareness, behavior and practice toward various AI issues. This TOR is designed following the recommendations of the second AI IEC workshop on 3rd March 2006 where a consensus agreement was reached in order to conduct a thorough, objective and independent assessment of the pre-Tet AI IEC Campaign

The specific objective of the campaign was to change risky behaviour related to poultry management and handling, the expected result was to inform on proper practices that would minimise the risk of human infection of AI.

The campaign was conducted using street posters, radio spots, and TV spots (see all the campaign material in Annex 2). It was launched on 24th January and run until mid March. Target areas were differentiated in rural and urban while categories of people and main messages were:

Children:

1. Don't play nearby the poultry
2. Wash your hands before eating

People preparing meals:

3. Cook the poultry products thoroughly (no pink meat no runny eggs)
4. Change your chopping board for raw and cooked meat
5. Wash your hands before cooking

Backyard farmers:

6. When chickens die or show symptoms of unhealthiest, report immediately to the local vet
7. Do not slaughter poultry home, if you have to do it, use mask and gloves and wash your hands after

For rural areas:

8. Wash your hands after any contact with chickens, after slaughtering chickens and before eating

For everybody:

9. Wash your hand frequently

The objective of the assessment is to provide a quick post IEC campaign assessment.

FAO will provide CIRAD with the necessary resources to carry out the Assessment of the IEC Pre Tet campaign of the joint UN-Government programme to fight HPAI.

¹⁰ Vietnam Integrated National Action Plan for Avian Influenza Control and Human Pandemic Influenza Preparedness and Response.

B - TERMS OF REFERENCE

Activities to be conducted

- Survey design
- Data collection (questionnaires and focus group discussion)
- Data analysis
- Report writing
- Presentation of results

Outputs

- ✓ an assessment of the form of the messages

Indicative level of penetration of the different messages, according to the channel (TV, Radio, Poster), and according to the target groups (backyard farmers, person preparing meal) = % of people who have seen the message and who can remember the content

Clearness of the messages (understandable, pleasant)

Credibility of the source of this information

- ✓ an assessment of the contents of the messages

Novelty of the information/recommendations for the different target groups (did the target groups already know about these proper practices, did they apply them before the campaign, before the crisis, do they apply them now?)

Implementability (and perceived implementability) of the recommendations: are the recommendations suited to the context of its application (technical/economic/ socio cultural)

Coherency of these messages with other sources of information ("official" or "non official").

- ✓ discussion of the implications that the assessment results have for the JP IEC group for the design of the next BCC campaigns
- ✓ suggestions for a quick methodology for a permanent KAP observatory

Deliverable

1. A report will be delivered to the IEC group of the JP for the fight against AI for comments on June 9th 2006. The report will include:
 - description and analysis of results of the IEC assessment
 - discussion of the implication of the findings for the next BBC of the JP for the fight against AI
 - suggestions for a quick methodology for a permanent KAP observatory
2. A final report on the third week of June 2006
3. A presentation of the findings to the IEC working group of the joint UN-Government programme to fight HPAI in June
4. An electronic copy of the raw data, not later than October 20th 2006.

Methodology

The assessment of this campaign will be based on classical tools (see for example Rice and Atkin, 2000: *Public communication campaign*; Desvougues and Smith 1988: *Focus groups and risk communication*). That is:

1. Survey by questionnaire (CIRAD to provide copy of the questionnaires)

This survey will focus on the nine points of the campaign (see above). It will be conducted through a structured questionnaire and will aim at building indices on the following items:

- socio professional category (SPC)
- AI risk exposure (raising/cooking/consuming)
- campaign exposure (radio/television/poster)
- comprehension (assess through the knowledge of the messages 'what the message say?' , Weinstein and al, 1993)
- agreement (does the audience agree with the recommendation?) using a Likkert scale for the 9 points of the campaign
- impact on changing behaviour (do AI/ do the campaign has change audience behaviour...?)

This survey need to be a short one (25' 30') with dichotomic answers (yes/no) and Likkert scale (only one open question).

Sampling

The choice of sampling size and method is a pragmatic one, taking into account resources constraints

Hanoi: 150 respondents at market places (a previous study in Hanoi has shown that the main determinant for consumers to purchase in a market is the proximity to households rather than income). We will choose 3 markets in different places of Hanoi (55 surveys by market place, including 10 % of non valuable questionnaires). Interviews will be conducted at different times of the day. By this way we will mainly interview people in charge of preparing food (women housekeepers).

Rural area; 150 respondents in Ha Tay province: a two stages sampling method will be used: 10 communes will be randomly selected in the province. Around 17 households, including a % of non valuable questionnaires, with backyard poultry, in each commune will be randomly selected. The respondents will be the person in charge of raising poultry in the household, this includes probably a high share of person also in charge for preparing meal (women).

Processing

Data will be entered and processed through SPSS software. Frequency analysis will be provided. Effect of SPC and level of risk exposure will be tested.

2. Focus group discussions (CIRAD to provide copy of the checklist)

Focus group discussions will be conducted in Hanoi with the support of the Club of Consumers as Women, part of the Vietnamese association of consumers. (CCW and Vinastas)

These discussions will mainly focus on the choice of the 9 points of the campaign, how it compares with others information sources and current behaviour (coherency, implementability) and the credibility of the source.

Poster will be used to support the discussion and so the form of the message (clearness) will be mainly discussed in relation with the posters.

The 3 homogeneous groups of 10 people each will be organized, for 3 income levels. Discussion will be held in the house of one member of the Club and will last 1h30 to 2 H00. Members of the discussion group are not members of the Club. The moderator will be one of the Club members. She will conduct the discussion according to an agenda. The conclusions of each point of the discussion will be clearly summarized to the respondents. Debate will be recorded for further deeper analysis by the researchers.

Objectives and tools

	survey	focus group
level of penetration	x	
clearness	x	x
credibility of the source		x
novelty, impact on behaviour (declared)	x	x
perceived implementability		x
coherency		x

Limits of this study

1. We will not conduct a so-called “progress assessment”. This means that we will not measure the degree of the program implementation to determine whether the program was delivered as it was intended. That is, we will not check for example the number of posters really exposed, if they have really been exposed in hospital or school as intended, the number of spots really shown on TV, the time of diffusion and the channel, etc, the radio spots... We make the hypothesis that the campaign has been implemented as intended.

2. It is a post-campaign assessment. This means that there is no baseline to compare (no pre-campaign study). Nevertheless, the previous KAPB studies will provide a substantial baseline.

3. The sample size is limited for resources constraints. Nevertheless it will give an indicative level of penetration of the communication campaign. And based on this first study, another assessment, with improved tools and experienced surveyors, could be conducted in the future.

4. Changes in behaviour are declarative. Many researches have shown that there is an important difference between practices reported by respondents and real practices. This difference is link to a so-called “desirability bias”. Qualitative researches, including focus group discussions can contribute to reduce this bias.

Intellectual Property

The name of CIRAD-Malica will appear on the report, jointly with the one of the FAO. The names of the experts involved in the research will be mentioned.

CIRAD-Malica experts will be allowed to communicate the results of this research (scientific paper, communication,...) with the condition that the donor (FAO) is clearly mentioned. In using the data base, FAO will duly acknowledge the role of CIRAD in the collection and in the study.

Duration and Timing

Task	May 1	May 2	May 3	May 4	June 1	June 2	June 3
Research design	x						
Surveyor training		X					
Data collection		X	X				
Entering processing data				x			
Submission of draft report					x		
Comments from the Joint Group						x	
Submission of final report							x

APPENDIX 3. DETAIL OF THE SAMPLE SURVEYED FOR THE ASSESSMENT OF THE PRE-TET AI IEC, 2006

Province	name of districts/ communes	name of quarters/ villages	nb of households
Hanoi	Hoan Kiem	Chuong Duong	40
		Tran Hung Dao	1
		Phan Chu Trinh	34
	Dong Da	Kim Lien	26
		Nam Dong	39
		O Cho Dua	44
		Thinh Quang	35
		Thai Thinh	6
	Thanh Xuan	Thanh Xuan Bac	13
		Thanh Xuan Trung	17
		Thuong Dinh	45
Ha Tay	Ba Vi	Chau Son	50
		Phu Chau	50
		Phu Phuong	50
	Phu Xuyen	Chau Can	50
		Tri Thuy	49
		Van Tu	46
		Thon Thuong	4
		Thon Vuc	1
TOTAL			600

N°/ /

APPENDIX 4. QUESTIONNAIRE USED FOR THE ASSESSMENT OF THE PRE-TET AI IEC, 2006

(English version)

Name of surveyor:

Date of the survey: / / 2006

Place of survey (area):

time at the beginning of the survey:

time at the end:

S1. Risk exposure

Do you have currently any professional activity linked to avian (implicate contact or proximity with poultry,...)?

<input type="checkbox"/>	no
<input type="checkbox"/>	poultry breeder or worker in a poultry farm
<input type="checkbox"/>	poultry collector, wholesaler or seller
<input type="checkbox"/>	poultry slaughtering, cooking
<input type="checkbox"/>	vet
<input type="checkbox"/>	other:

Raising live poultries/birds/cock/... at home

At the moment, do you have live chickens/ cocks/ birds at home?

<input type="checkbox"/>	no
<input type="checkbox"/>	yes

↳ If yes, what kind?

<input type="checkbox"/>	poultry	if yes, number:
<input type="checkbox"/>	ornamental birds	if yes, number:
<input type="checkbox"/>	fighting cock	if yes, number:
<input type="checkbox"/>	other	if yes, number:

Did you have poultry/birds/cock at home before AI crisis (in 2003)?

<input type="checkbox"/>	No I did not
<input type="checkbox"/>	Yes, but I had less
<input type="checkbox"/>	yes, I had same number
<input type="checkbox"/>	yes but I had more
<input type="checkbox"/>	cannot say, do not know

Comments (if the household has lost animal because of AI, note it here):

N°/ /

Consuming poultry**At the moment, how often do you consume avian products (chicken, eggs..)?**

<input type="checkbox"/>	daily
<input type="checkbox"/>	one to few times a week
<input type="checkbox"/>	one to few times a month
<input type="checkbox"/>	only for Tet and others special occasions/ only few times a year
<input type="checkbox"/>	never
<input type="checkbox"/>	cannot say, do not know

Did you change your consumption of avian products since bird flu? (comparing 2003 with today)

<input type="checkbox"/>	no change
<input type="checkbox"/>	decrease around 20%
<input type="checkbox"/>	decrease around 50%
<input type="checkbox"/>	decrease around 70%
<input type="checkbox"/>	decrease 100% (means, I do not eat anymore)
<input type="checkbox"/>	increase
<input type="checkbox"/>	cannot say, do not know

Buying live animal**When you (or the person in charge for preparing food at your home) buy poultry for home consumption do you sometimes choose them alive? (SOMETIMES MEANS HERE "AT LEAST THREE TIMES DURING THE LAST THREE MONTHS")**

<input type="checkbox"/>	no (we buy poultry but we do not choose them alive)
<input type="checkbox"/>	yes, we buy poultry and we choose them sometimes alive
<input type="checkbox"/>	we quite never buy poultry because we raise them at home
<input type="checkbox"/>	cannot say, do not know
<input type="checkbox"/>	<i>no suitable question because do not eat poultry at home</i>

🔗 In this case (when buy poultry, choose it alive), do you or does this person **handle the poultry alive?**

<input type="checkbox"/>	no (we choose the poultries alive but we do not handle them)
<input type="checkbox"/>	yes
<input type="checkbox"/>	cannot say, do not know
<input type="checkbox"/>	<i>no suitable question</i>

🔗 In this case (when buy poultry, choose it alive) who slaughters it?

<input type="checkbox"/>	the seller or someone at the market place
<input type="checkbox"/>	we slaughter it at home
<input type="checkbox"/>	cannot say, do not know
<input type="checkbox"/>	<i>no suitable question</i>

N°/ /

S2. Campaign exposure

Television exposure**Do you have a television at home ?**

<input type="checkbox"/>	no
<input type="checkbox"/>	yes

How often do you watch television (in average during the last 5 months)?

<input type="checkbox"/>	never
<input type="checkbox"/>	few times a month
<input type="checkbox"/>	few times a week
<input type="checkbox"/>	daily
<input type="checkbox"/>	cannot say, do not know

👉 If you watch television, did you see the play of the AI IEC Pre TET campaign? (GIVE SOME CUES FOR PEOPLE REMEMBER THE SPOTS, LIKE THE NAME OF THE ACTORS,...)

<input type="checkbox"/>	No, I watch television but I have never seen any play about AI IEC Pre Tet campaign
<input type="checkbox"/>	Yes I watch television and I have see the play about AI IEC Pre Tet campaign
<input type="checkbox"/>	cannot say, do not know
<input type="checkbox"/>	<i>Not suitable question because do not watch television</i>

Radio exposure**Do you have radio at home?**

<input type="checkbox"/>	no
<input type="checkbox"/>	yes

How often do you hear radio (in average during the last 5 months)?

<input type="checkbox"/>	never
<input type="checkbox"/>	few times a month
<input type="checkbox"/>	few times a week
<input type="checkbox"/>	daily
<input type="checkbox"/>	cannot say, do not know

👉 if you hear radio, did you hear about AI IEC Pre Tet campaign?

<input type="checkbox"/>	No, I hear radio but I have never heard about AI IEC Pre Tet campaign
<input type="checkbox"/>	Yes I hear radio and I have heard about AI IEC Pre Tet campaign
<input type="checkbox"/>	cannot say, do not know
<input type="checkbox"/>	<i>Not suitable question because do not hear radio</i>

Loud speakers exposure**Do you hear loud speakers?**

<input type="checkbox"/>	no
<input type="checkbox"/>	yes

N°/ /

❖if you hear loudspeakers , did you hear about AI IEC Pre Tet campaign?

<input type="checkbox"/>	No, I hear loudspeakers but I have never heard about AI IEC Pre Tet campaign
<input type="checkbox"/>	Yes I hear loudspeakers and I have heard about AI IEC Pre Tet campaign
<input type="checkbox"/>	cannot say, do not know
<input type="checkbox"/>	<i>Not suitable question because do not hear loud speakers</i>

Poster exposure

Have you seen poster of AI IEC Pre tet campaign?

<input type="checkbox"/>	no
<input type="checkbox"/>	yes

N°/ /

Have you heard / read recommendations to protect yourself and your relatives of bird flu, other than the ones of the pre Tet campaign? from which sources?

<input type="checkbox"/>	No other recommendations
<input type="checkbox"/>	television (TV journal, ...)
<input type="checkbox"/>	radio
<input type="checkbox"/>	news papers
<input type="checkbox"/>	vet
<input type="checkbox"/>	relatives, colleagues, neighbours
<input type="checkbox"/>	vendors, collectors for poultry products....
<input type="checkbox"/>	local authorities
<input type="checkbox"/>	others
<input type="checkbox"/>	cannot say, do not know

4. If you have seen, hear, watch the AI IEC campaign, what do you remember of the recommendation of this campaign? (SPONTANEOUS ANSWERS. DO NOT SHOW THE LIST)

<input type="checkbox"/>	<i>no suitable question because have not seen/heard the campaign</i>
<input type="checkbox"/>	Do not remember any recommendation
<input type="checkbox"/>	Children should not play nearby the poultry
<input type="checkbox"/>	Wash your hands with soap after contact with chicken, slaughtering, cooking
<input type="checkbox"/>	Avoid contact with sick/ dead poultry (= when we see that a poultry is sick or dead, we should not touch it)
<input type="checkbox"/>	When chickens die or show symptoms of unhealthiest, report immediately to the local vet
<input type="checkbox"/>	only slaughter healthy poultry at home
<input type="checkbox"/>	If you slaughter poultry at home, use mask and gloves and wash your hands after
<input type="checkbox"/>	Change your chopping board and knife for cooked and uncooked food
<input type="checkbox"/>	Cook the poultry products thoroughly (no pink meat no runny eggs)
<input type="checkbox"/>	do not eat pudding
<input type="checkbox"/>	Others
<input type="checkbox"/>	Others

N°/ /

S3. Campaign agreement

Do you agree that the following behaviours can protect yourself and your community against bird flu?

1. No, completely disagree
2. No, tend to disagree (ineffective or unfeasible)
3. Yes, tend to agree
4. Yes, completely agree

SHOW THE TABLE TO THE RESPONDENT

recommendations	do not know	No	agreement	Yes	
Avoid that children play nearby the poultry	<input type="checkbox"/>	1	2	3	4
Wash your hands frequently with soap	<input type="checkbox"/>	1	2	3	4
Avoid contact with sick/ dead poultry	<input type="checkbox"/>	1	2	3	4
When chickens die or show symptoms of unhealthiest, report immediately to the local vet	<input type="checkbox"/>	1	2	3	4
Only slaughter healthy poultry (=we shall not slaughter a poultry to consume it when we know that it is not healthy)	<input type="checkbox"/>	1	2	3	4
if you slaughter poultry at home, use mask and gloves and wash your hands after	<input type="checkbox"/>	1	2	3	4
Change your chopping board and knife for raw and cooked meat	<input type="checkbox"/>	1	2	3	4
Cook the poultry products thoroughly (no pink meat, no runny eggs)	<input type="checkbox"/>	1	2	3	4
Do not eat blood pudding	<input type="checkbox"/>	1	2	3	4

Which other recommendations will you suggest?

S4. Behaviour change

How much do the following sentences match with your personal behaviour at present and before the crisis (in 2003)
(even for people who do not know the campaign).
SHOW THE TABLE TO THE RESPONDENT

1. No, completely disagree

2. No, tend to disagree (ineffective or unfeasible)

3. Yes, tend to agree

4. Yes, completely agree

(FILL THE COLUMN "AT PRESENT" AND "IN 2003", BEHAVIOUR BY BEHAVIOUR. THEN, WHEN THE COLUMNS ARE FILLED, WHEN THERE IS CHANGE, ASK THE REASONS FOR CHANGE:

If there is change between now and 2003 what are the main reason for change?

	at present	in 2003	
behaviour	ADOPTION no yes	ADOPTION no yes	reasons for changes
I do not let children play nearby the poultry	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other
I wash your hands frequently with soap	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other

	at present	in 2003	
When I see that a poultry is sick or when it is dead, I avoid contact it	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other
if chickens die or show symptoms of unhealthiest, I report immediately to the local vet	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other
We only slaughter healthy poultry at home (when we know that a poultry is not healthy we do not slaughter it to consume it)	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other
If we slaughter poultry at home, we use mask and gloves and wash your hands after	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other
We change or clean our chopping board and knife for raw and cooked meat (for any kind of meat not only poultry)	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other
At home, we cook the poultry products thoroughly (no pink meat, no runny eggs)	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other
I and my family, we do not eat poultry blood pudding	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	1 (no) 2 3 4 (yes) <input type="checkbox"/> not suitable question <input type="checkbox"/> do not know	<input type="checkbox"/> not suitable question <input type="checkbox"/> no change <input type="checkbox"/> bird flu <input type="checkbox"/> campaign <input type="checkbox"/> other

S5. Risk anxiety

Indicate how important do you judge these problems for Vietnam, today?

Rank the first three major problems.

SHOW THE TABLE TO THE RESPONDENT

1. READ THE LIST OF RISK

2. ASK TO NOTE THE RISK

3. ASK TO CHOOSE THE 3 MOST IMPORTANT

4. ASK TO RANK THESE 3 MOST IMPORTANT

Kind of problem	do not know	1. Not a problem at all 2. a small problem 3. quite a problem 4. a major problem	Rank the first 3 major 1. for the major 2. for the second 3. for the third
AIDS	<input type="checkbox"/>	1 2 3 4	
Malnutrition	<input type="checkbox"/>	1 2 3 4	
Food and water quality	<input type="checkbox"/>	1 2 3 4	
Bird flu	<input type="checkbox"/>	1 2 3 4	
Environmental pollution	<input type="checkbox"/>	1 2 3 4	
Natural disaster	<input type="checkbox"/>	1 2 3 4	
Crime	<input type="checkbox"/>	1 2 3 4	
Economic situation (unemployment, inflation,...)	<input type="checkbox"/>	1 2 3 4	

Do you feel anxious at present about the possible impact of bird flu on:

	do not know, not concerned	1. No, not anxious at all 2. No, little anxious 3. Yes, rather anxious 4. Yes, very anxious
Impact of bird flu on your health and the one of your community/relatives ?	<input type="checkbox"/>	1 2 3 4
Impact of bird flu on the health of your poultry/birds (if you have poultry/birds at home)?	<input type="checkbox"/>	1 2 3 4
the economic impact of bird flu on your family (loss of income, increase of expenditure)?	<input type="checkbox"/>	1 2 3 4
about a possible outspreading of Bird flu in Vietnam	<input type="checkbox"/>	1 2 3 4

Do you think that you can protect yourself and your relatives against bird flu?

<input type="checkbox"/> no need to protect because there is no risk <input type="checkbox"/> do not know	NO YES <div style="text-align: center;"> 1 2 3 4 </div>
	1. No I cannot do anything 2. No, there is little that I can do 3. Yes, I can control it more or less 4. Yes , I can completely protect

Comments

S6. Information on respondent

Name:

Age: / ____ /

sex

<input type="checkbox"/>	Male
<input type="checkbox"/>	Female

Are there children under 10 living in your household? How many? / ____ /

Address:

Education of the RESPONDENT

<input type="checkbox"/>	No education (no diploma)
<input type="checkbox"/>	Primary diploma
<input type="checkbox"/>	lower secondary diploma
<input type="checkbox"/>	upper secondary diploma
<input type="checkbox"/>	technical secondary diploma (+2)
<input type="checkbox"/>	professional secondary diploma (+2)
<input type="checkbox"/>	College and university diploma (+3 to 5)
<input type="checkbox"/>	Post graduate diploma (> +5)

Professional of the HEAD of the HOUSEHOLD (NOW OR BEFORE TO RETIRE)

<input type="checkbox"/>	Employee in a company
<input type="checkbox"/>	Traders, shopkeeper
<input type="checkbox"/>	Skilled manual worker
<input type="checkbox"/>	Unskilled manual worker
<input type="checkbox"/>	agriculture, forestry, and fishery worker
<input type="checkbox"/>	unemployed
<input type="checkbox"/>	others

<input type="checkbox"/>	If now retired, cross here
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Total monthly Income of the household (NOT THE ONE OF THE RESPONDENT): Optional question:
the respondent may not be willing to answer)

<input type="checkbox"/>	<1 million VND/month
<input type="checkbox"/>	1 - 2 million VND/month
<input type="checkbox"/>	2 - 3 million VND/month
<input type="checkbox"/>	3 - 5 million VND/month
<input type="checkbox"/>	5 - 8 million VND/month
<input type="checkbox"/>	>8 million VND/month
<input type="checkbox"/>	cannot/do not want to answer

Comments