## Household questionnaire

#### INTRODUCTION

Good morning / Good afternoon. My name is \_\_\_\_\_\_ and I work for the International Livestock Research Institute (ILRI), which is based in Hanoi. We are conducting a study on how the presence of mosquitoes is affected by the keeping of livestock in urban environments. This study has three parts: 1) a survey to help understand the benefits and risks of urban livestock keeping and the awareness on mosquito-borne diseases; 2) to collect mosquitoes and investigate if the mosquitoes are infected with flaviviruses and, 3) to take blood samples from the livestock at household. We are visiting you because your household has been selected randomly to participate in the study titled "The association between livestock keeping and mosquito-borne diseases in urban Hanoi". If you accept to participate in this study, we will ask you a number of questions related to your household, knowledge and practice of livestock keeping and awareness about mosquito-borne diseases. We will also request you to get the consent to place mosquito traps on your land and take animal's blood for further laboratory analysis.

#### Potential risks

Your participation in this evaluation has no physical risk. We maintain strict control of all the information gained.

## **Potential benefits**

This is an important study to control the burden of neglected tropical diseases such as dengue fever in the community.

## **Confidentiality**

This information will only be shared among our research team members, but we will remove all names so that no one will be able to trace back the information to you. If you voluntarily participate in this study, you may withdraw at any time without any consequences of any kind. You may also use the option of removing your data from the study. You may also refuse to answer any questions you don't want to answer and still remain in the study. The investigator may withdraw you from this research if circumstances arise that warrant doing so. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

If you have any questions now or later you are welcome to call the researchers:

- **Dr Johanna Lindahl** 01675340452 (English)

- **Mr. Nguyen Tien Thang** 0981582712 (Vietnamese)If you have questions regarding your rights as a research participant, contact:

**Institutional Review Board**, Room 103 Building A – Hanoi University of Public Health. No 1A, Duc Thang str, Duc Thang ward, Bac Tu Liem district, HaNoi

Tel: 024 6266 3024. Email: irb@huph.edu.vn

Questienneire ID				
Questionnaire ID				

ID consists of 5 letters. The first two is district code, 3 remainings are household ID.

District code:  $\mathbf{01}$  – Chuong My,  $\mathbf{02}$  – Dan Phuong,  $\mathbf{03}$  – Bac Tu Liem,  $\mathbf{04}$  – Ha Dong

**05** – Ba Dinh, **06** – Cau Giay

No	A. General information						
A1	Gender	Male	1				
Al	Gender	Female	2				
A2	Age						
		College/university	4				
		High school	3				
A3	Highest level of education	Secondary school	2				
		Primary school	1				
		No education	0				
		Single	1				
	Marriage status	Married	2				
A4		Separated/Divorced	3				
		Widowed	4				
		Others:	99				
		Officer	1				
		Farmer	2				
A5	Main occupation	Unemployed	3				
		Retired	4				
		Others:	99				
A6	Number of people in the household						
A7	Number of children under 15 in the household						
<b>A</b> O	Sources of water using in your	Tap water	1				
A8	family	Rain water	2				

	(You can choose more than 1	Rivers/lakes nearby	3	
	option)	Well	4	
		Others:	5	
A9	Type of toilet/sanitation system in your family			
A10	Average income per month of your family in total	VND		
No	B. Li	vestock information		Note
В0	Is your family keeping	Yes	1	Go to B2
Bo	livestock?	No	0	
B1	Why do you not keep livestock? (for household with no livestock)	Lack of space No time Not interested No/limited knowledge Concern about hygiene and sanitation Others:	1 2 3 4 5 99	Go to B10
B2	Number of livestock last year	Pig         Goat         Chicken         Cattle         Duck         Goose         Others:		
В3	Number of livestock this year	Pig         Goat         Chicken         Cattle         Duck         Goose         Others:		

		Indoor	1	
		Tied up, partly outdoor	2	
B4	Type of keeping livestock	Fenced/shed in outdoor	3	
	Type of Reeping fivestock	Free roaming	4	
		Others:	99	
			,,	
		Grandfather/grandmother	1	
	Who is mainly responsible for	Husband	2	
B5	keeping livestock in your home	Wife	3	
		Children	4	
		Others:	99	
D.C	Have your livestock get any	Yes	1	
В6	diseases last year?	No	0	Go to B8
В7	If yes, can you describe the symptoms or name the diseases?			
В8	How do you usually treat when the livestock got diseases?			
		Provide livelihood options	1	
		Reduce cost and time of transportation	2	
		Food production	3	
	Why do you keep livestock?	Recycling animal waste	4	
В9	(Benefits)	Provide the education facilities	5	
	(You can choose more than 1	Poverty alleviation	6	
	option)	Income generation	7	
		Pleasures	8	
		Others:	99	
		Unpleasant smells and noises	1	
	Problems and risks of livestock	Contamination in water resource	2	
B10	keeping for all households	Affect the environment/ecosystem	3	
		Animal health problems	4	

1		Feed supply	5	
		Theft	6	
		Inappropriate waste/manure management	7	
		Bring the diseases to human	8	
		Low production	9	
		Others:	99	
		Cats		
B11	Do you have any pets or other	Dogs		
DII	animals in your household?	Songbird		
		Other pets		
		Don't know any	0	
		Rabies	1	
	Do you know any disease that humans can get from animals?	Japanese encephalitis	2	
B12	B12	Tuberculosis	3	
,	(You can choose more than 1 option)	Brucellosis	4	
		Streptococcus suis	5	
		Other	99	
STT	C. Awareness a	bout mosquito-borne diseases		Note
	Have you heard about diseases		1	Note
STT C1		bout mosquito-borne diseases		Note Go to C3
	Have you heard about diseases being transmitted from	bout mosquito-borne diseases Yes	1	
	Have you heard about diseases being transmitted from mosquitoes to humans	bout mosquito-borne diseases  Yes No	1 0	
C1	Have you heard about diseases being transmitted from	bout mosquito-borne diseases  Yes No Dengue fever	1 0	
	Have you heard about diseases being transmitted from mosquitoes to humans  If yes, can you list the disease(s) that transmitted from mosquitoes  (You can choose more than 1	bout mosquito-borne diseases  Yes No  Dengue fever Japanese Encephalitis	1 0 1 2	
C1	Have you heard about diseases being transmitted from mosquitoes to humans  If yes, can you list the disease(s) that transmitted from mosquitoes	bout mosquito-borne diseases  Yes No  Dengue fever Japanese Encephalitis Zika	1 0 1 2 3	
C1	Have you heard about diseases being transmitted from mosquitoes to humans  If yes, can you list the disease(s) that transmitted from mosquitoes  (You can choose more than 1	bout mosquito-borne diseases  Yes No  Dengue fever Japanese Encephalitis Zika Malaria	1 0 1 2 3 4	
C1	Have you heard about diseases being transmitted from mosquitoes to humans  If yes, can you list the disease(s) that transmitted from mosquitoes  (You can choose more than 1	bout mosquito-borne diseases  Yes No  Dengue fever Japanese Encephalitis Zika Malaria Filariasis	1 0 1 2 3 4 5	
C1 C2	Have you heard about diseases being transmitted from mosquitoes to humans  If yes, can you list the disease(s) that transmitted from mosquitoes (You can choose more than 1 option)	bout mosquito-borne diseases  Yes No Dengue fever Japanese Encephalitis Zika Malaria Filariasis Others:	1 0 1 2 3 4 5 99	
C1	Have you heard about diseases being transmitted from mosquitoes to humans  If yes, can you list the disease(s) that transmitted from mosquitoes (You can choose more than 1 option)  Can you list breeding sites of	bout mosquito-borne diseases  Yes No  Dengue fever Japanese Encephalitis Zika Malaria Filariasis Others:  Don't know	1 0 1 2 3 4 5 99	

		Tires	5	
		Water tanks	6	
		Vase	7	
		Bonsai rockery	8	
		Others:	99	
		Don't know any	0	
	Can you list the risk factors for	Warm and humid season	1	
C4	getting mosquito-borne diseases?	High population density	2	
C4	(You can choose more than 1	Stagnant water	3	
	option)	Livestock keeping	4	
		Others:	99	
		Don't know any	0	
		High fever	1	
	Can you list the symptoms while getting mosquito-borne diseases?  (You can choose more than 1 option)	Muscle pains	2	
C.F.		Nausea/vomiting	3	
C5		Severe headache	4	
		Rash	5	
		Bleeding	6	
		Others:	99	
		Rainy season	1	
C6	In which season mosquito-borne diseases are highest?	Dry season	2	
	discusses are migness.	Same	3	
		Don't know any	0	
		Screening of doors/windows	1	
		Mosquito repellent creams/ liquid	2	
	Can you list the ways to prevent yourself from getting mosquito-	Mosquito nets	3	
C7	borne diseases?	Electric rackets	4	
	(You can choose more than 1 option)	Mosquito coils / Incense sticks	5	
	opion	Long sleeves	6	
		Keep lids on water tanks	7	
		Chemical in water containers	8	

		Anti-mosquito products (e.g. insecticides)	9	
		Eliminate breeding sites	10	
		Using fish in water containers	11	
		Others:	99	
		Don't use any measures	0	Go to C10
		Screening of windows/doors	1	
		Mosquito repellent creams/ liquid	2	
		Mosquito nets	3	
	Which nemanal mustaction do	Electric rackets	4	
	Which personal protection do you use to prevent mosquito-	Mosquito coils / Incense sticks	5	
C8	borne diseases?	Long sleeves	6	
	(You can choose more than 1	Keep lids on water tanks	7	
	option)	Chemical in water containers	8	
		Anti-mosquito products (e.g. insecticides)	9	
		Eliminate breeding sites	10	
		Using fish in water containers	11	
		Others:	99	
		Only at night	1	
	Frequency of using personal	Only during the day	2	
С9	protection to prevent mosquito-	Throughout 24h	3	
	borne diseases?	Few days a week	4	
		Others:	99	
		Never heard	0	
		TV	1	
	What are the sources of the	Broadcast	2	
	information you have heard	Loudspeaker	3	
C10	about the mosquito-borne diseases?	Internet	4	
	(You can choose more than 1	Communication materials	5	
	option)	Health staffs	6	
		Friends	7	
		School	8	

		Other :	99	
		TV	1	
		Broadcast	2	
		Loudspeaker	3	
	Which sources of information	Internet	4	
C11	you like most?	Communication materials	5	
	(You can choose more than 1 option)	Health staffs	6	
	· ·	Friends	7	
		School	8	
		Others:	99	
	Have you or your family	Yes	1	
C12	members ever get mosquito-	No	0	End
	borne diseases during the last 2 years?			
	Which disease(s) has/have been diagnosed?	Dengue fever	1	
		Japanese Encephalitis	2	
C13		Malaria	3	
		No disease was diagnosed	4	
		Others:	99	
		Public medical system	1	
		Private practitioner	2	
C14	Source of treatments for that disease	Self – medication	3	
	discase	No treatment	0	
		Others:	99	

# Sample collection sheet for dogs

tha	Age	Sex	Breed	Any	How is this dog kept?		When (which	
the sample Survey code + D1-5)				symptoms in this dog the last 2 months?	Like the family, follows Indoor Tied up, partly outdoor Fenced/shed in outdoor Free roaming Others:	0 1 2 3 4 99	year) was the dog last vaccinated for rabies?  Never vaccinated=0  Can't remember 99	