

Enhanced assessment of knowledge, attitudes and practices; and, intervention (KAP+) on antimicrobial resistance and antimicrobial use

INTERVIEWEE IDENTIFICATION			
INTERVIEWEE NUMBER:	HOUSEHOLD NUMBER:	DATE OF VISIT:	
INTERVIEWER'S NAME:		TIME OF VISIT:	
RECORD TIME AT THE BEGINNING OF INTERVIEW:		RECORD TIME AT THE END OF THE INTERVIEW:	
RESULTS: _____ _____ _____	RESULTS CODE: 1 = completed 2 = not at home 3 = postponed	4 = refused 5 = partially completed 6 = no eligible person	7 = dropped out 8 = other (specify)

(PRIORITY DEMOGRAPHICS)

#	Question	Answer with choices	Code	
SD1	What is your highest education level attained?	__ Finished Post-Graduate Studies __ Finished Graduate Studies __ Finished College/Bachelor __ Finished Certificate/Polytechnic/Technical __ Finished High School __ Finished Elementary __ Some schooling but did not finish elementary __ Did not go to school	_post-graduate _graduate _college _technical _high school _elementary _some schooling _none	...7 ...6 ...5 ...4 ...3 ...2 ...1 ...0
SD2	What profession do you consider yourself in?	__ Government Veterinarian __ Non-Government Veterinarian __ Para-Veterinarian __ animal health worker __ Animal health authority (Non-veterinarian) __ Others ( <b>Please specify</b> ): _____	_gov vet _non-gov vet _para-vet _health worker _non-vet *_input*	...0 ...1 ...2 ...2 ...3 ...4
SD3	Age	_____	*_input age*	
SD4	How many years of experience do you have in your work?	__ Less than 1 year __ 1 year to 2 years __ More than 2 years to 5 years __ More than 5 years to 10 years __ Over 10 years	_less than 1 yr _1-2 yrs _2-5 yrs _5-10 yrs _10+ yrs	...0 ...1 ...2 ...3 ...4
SD5	Gender	__ Male __ Female __ Other (please specify): _____	_male _female *_input*	...0 ...1 ...2

<b>SD6</b>	Have you encountered or experienced animal disease outbreaks in the last 12 months?	<input type="checkbox"/> Yes (Proceed to SD7) <input type="checkbox"/> No animal disease outbreaks (skip SD7)	<input type="checkbox"/> _yes <input type="checkbox"/> _no	...1 ...0
<b>SD7</b>	<b>If yes on SD6, what animal disease outbreaks</b> Have you encountered or experienced in the last 12 months?	<input type="checkbox"/> Highly Pathogenic Avian Influenza/Bird flu <input type="checkbox"/> Foot and Mouth Disease (FMD) <input type="checkbox"/> Classical swine fever/Swine Cholera <input type="checkbox"/> Swine Flu <input type="checkbox"/> Newcastle Disease <input type="checkbox"/> Others (please specify): _____	<input type="checkbox"/> _yes/no <input type="checkbox"/> _yes/no <input type="checkbox"/> _yes/no <input type="checkbox"/> _yes/no <input type="checkbox"/> _yes/no <input type="checkbox"/> _*input*/no	...6 ...5 ...4 ...3 ...2 ...1

## KNOWLEDGE-RELATED QUESTIONS

#	Question	Answer with choices	Code	
K1	Can you describe what antibiotics are?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know (go to K3)	_yes _no _don't know	...1 ...0 ...0
K2	Please list three antibiotics that you know.	a. _____ b. _____ c. _____ d. Can't remember ( <b>Don't read out until the respondent cannot provide answer</b> ) na	*_input name* *_input name* *_input name* _can't remember _na	...1 ...1 ...1 ...0 ...0
K3	Have you heard of antibiotic resistance?	<input type="checkbox"/> Yes <input type="checkbox"/> No ( <b>Go to K6</b> )	_yes _no	...1 ...0
K4 (a-d)	Select in the list below, what best describes <u>antibiotic resistance</u> . ( <b>please select all that apply</b> )	<input type="checkbox"/> Antibiotic resistance is dangerous but don't know how to describe (K4a) <input type="checkbox"/> When an infection cannot be treated because the medicine is ineffective (K4b) <input type="checkbox"/> When bacteria develop resistance to one or more antibiotics (K4c) <input type="checkbox"/> I'm not sure or don't know ( <b>Don't read out until the respondent cannot provide answer</b> ) (K4d)	_yes/no/na _yes/no/na _yes/no/na _don't know/na	...1/0 ...1/0 ...1/0 ...0
K5 (a-f)	Where did you hear about antibiotic resistance?	<input type="checkbox"/> From TV, please specify channel or program: _____ (K5a) <input type="checkbox"/> From radio, please specify station or program: _____ (K5b) <input type="checkbox"/> From my friends (K5c) <input type="checkbox"/> From a village seminar (K5d) <input type="checkbox"/> Social media such as Facebook, Twitter or Instagram (K5e) <input type="checkbox"/> Others: _____ (K5f)	*_input*/no *_input*/no _yes/no _yes/no _yes/no *_input*/no	...1/0 ...1/0 ...1/0 ...1/0 ...1/0 ...1/0
K6	Please list three antimicrobials that you know	a. _____ b. _____ c. _____ Can't remember ( <b>Don't read out until the respondent cannot provide answer</b> )	*_input name* *_input name* *_input name* _can't remember	...1 ...1 ...1 ...0
K7 (a-f)	Which of the following are considered	<input type="checkbox"/> Antibacterials (K7a) <input type="checkbox"/> Antifungals (K7b) <input type="checkbox"/> Antivirals (K7c)	_yes/no _yes/no _yes/no	...1/0 ...1/0 ...1/0

	antimicrobials? Select all that applies.	<input type="checkbox"/> Antivenom (K7d) <input type="checkbox"/> Antiparasitics (K7e) <input type="checkbox"/> None of the above (K7f)	<input type="checkbox"/> yes/no <input type="checkbox"/> yes/no <input type="checkbox"/> yes/no	...0/1 ...1/0 ...0/1
K8	Which of the following best describes your understanding of AMR?	<input type="checkbox"/> I have no idea what is AMR <input type="checkbox"/> I have a little idea about AMR but not sure if correct <input type="checkbox"/> I understand basic information on AMR <input type="checkbox"/> I understand how AMR arises, and how it spreads <input type="checkbox"/> I have an advanced understanding of AMR	<input type="checkbox"/> no idea <input type="checkbox"/> little idea <input type="checkbox"/> basic info <input type="checkbox"/> understand how it spreads <input type="checkbox"/> advanced	...0 ...1 ...2 ...3 ...4
K9	All antimicrobials in humans are also used in animals, and all antimicrobials in animals are also used in humans.	<input type="checkbox"/> True <input type="checkbox"/> False <input type="checkbox"/> Other responses: _____	<input type="checkbox"/> true <input type="checkbox"/> false <input type="checkbox"/> *input response*	...0 ...1 ...1
K10	Do you think there a difference between antibiotics and antimicrobials?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't know	<input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> don't know	...1 ...0 ...0

### ATTITUDE-RELATED QUESTIONS

<b>A1</b>	From a scale of 1 to 5 (1 being the least serious and 5 being very serious) how would you rate your situation if one of your family members had an infection that cannot be treated with medicine?	<input type="checkbox"/> Very Serious <input type="checkbox"/> Serious <input type="checkbox"/> Moderately Serious <input type="checkbox"/> Slightly Serious <input type="checkbox"/> Least Serious	<input type="checkbox"/> very serious <input type="checkbox"/> serious <input type="checkbox"/> moderately serious <input type="checkbox"/> slightly serious <input type="checkbox"/> least serious	...5 ...4 ...3 ...2 ...1
<b>A2</b>	Are you worried or concerned about how prepared you are in handling AMR issues in the future?	<input type="checkbox"/> Seriously concerned <input type="checkbox"/> Concerned <input type="checkbox"/> Slightly concerned <input type="checkbox"/> Not concerned at all <input type="checkbox"/> No opinion ( <b>Do not read to respondent until you are sure that they don't have an answer</b> )	<input type="checkbox"/> seriously concerned <input type="checkbox"/> concerned <input type="checkbox"/> slightly concerned <input type="checkbox"/> not concerned at all <input type="checkbox"/> no opinion	...4 ...3 ...2 ...1 ...0

A3(a-h). The following statements are what other people feel about antibiotics and antimicrobials.

Please rate your opinion on the following statements whether you: **1 = Strongly disagree; 2 =**

**Disagree; 3 = Neutral; 4 = Agree; or, 5 = Strongly Agree:**

Attitude Statements <sup>2</sup>	1	2	3	4	5
<b>(A3a)</b> When animals start to show signs of being ill, they should be given antibiotics to prevent them from getting a more serious illness <sup>2</sup>					
<b>(A3b)</b> Antibiotics would help animals to get better more quickly <sup>2</sup>					
<b>(A3c)</b> Anti-biotic should be stopped as soon as the animal gets better <sup>2</sup>					
<b>(A3d)</b> Skipping one or two doses does not contribute to the development of antibiotic resistance <sup>2</sup>					
<b>(A3e)</b> Antibiotics are safe; hence, they can be commonly used <sup>2</sup>					
<b>(A3f)</b> I find it important to always advise others that antimicrobials such as antibiotics protect both humans and animals from diseases					
<b>(A3g)</b> Antibiotics are important to improve animal production					
<b>(A3h)</b> Dispensing of antibiotics only upon prescription should be strictly enforced					

<sup>2</sup> Modified from Ahmad et al., 2015

**A4(a-l).** How do you think the following factors would affect your decision when prescribing/administering antimicrobials?

<i>Normative Expectations</i>					
	1 No influence	2 Limited influence	3 Moderate influence	4 Substantial influence	5 Very strong influence
<b>(A4a)</b> Opinions of my family members					
<b>(A4b)</b> Laboratory data					
<b>(A4c)</b> Opinions of the private industry					
<b>(A4d)</b> Client/farmer expectations					
<b>(A4e)</b> Opinions of Veterinary Professional groups					
<b>(A4f)</b> Data in scientific journals					
<b>(A4g)</b> Data from online search engines such as Google, Yahoo, Bing					
<b>(A4h)</b> Potential earnings or financial gain					
<b>(A4i)</b> Opinions of other veterinarians					
<b>(A4j)</b> Adherence to laws and legislation					
<b>(A4k)</b> Other factors (please identify): _____ <b>(A4l)</b>					

## PRACTICE/BEHAVIOUR-RELATED QUESTIONS

#	Question	Answer with choices	Code	
P1	What are the three most common antibiotics that you prescribe/administer?	<div><div>__A. _____</div><div>__B. _____</div><div>__C. _____</div><div>__Can't remember</div></div>	<div><div>_ *insert name*</div><div>_ *insert name*</div><div>_ *insert name*</div><div>_can't remember</div></div>	<div><div>...1</div><div>...1</div><div>...1</div><div>...0</div></div>
P2 (a-d)	Where do you source the antibiotics you prescribe/administer? (Select all that apply)	<div><div>__From reputable suppliers/distributor/representative (P2a)</div><div>__Animal feed store/animal pharmaceutical store (P2b)</div><div>__Human pharmacy (P2c)</div><div>__Others: (please specify) _____ (P2d)</div></div>	<div><div>_yes/no</div><div>_yes/no</div><div>_yes/no</div><div>_ *input*/no</div></div>	<div><div>...1</div><div>...1</div><div>...1</div><div>...1</div></div>
P3	Do you always issue a prescription when advising to use antibiotics for use in farms?	<div><div>__Yes</div><div>__Sometimes</div><div>__No</div></div>	<div><div>_yes</div><div>_sometimes</div><div>_no</div></div>	<div><div>...2</div><div>...1</div><div>...0</div></div>
P4	If you answer "sometimes" or "no", please tell us why? (Select all that apply)	<div><div>__It's not required by the law</div><div>__It is not required by my organization/business</div><div>__I don't feel the need</div><div>__The clients prefer not to get the prescription</div><div>__Others: (Please specify) _____</div></div>	<div><div>_not required by law</div><div>_not required by business</div><div>_don't feel the need</div><div>_clients don't prefer</div><div>_ *input*</div></div>	<div><div>...0</div><div>...1</div><div>...2</div><div>...3</div><div>...4</div></div>
P5	How do you advise the use/administer antibiotics in your client's farm?	<div><div>__As prescribed or as per manufacturer's recommendations</div><div>__More than what was prescribed or manufacturer's recommendations</div><div>__Stop using before the end of the prescribed course or manufacturer's recommendations</div><div>__For as long as I feel suitable</div><div>__Others: _____</div></div>	<div><div>_as presc</div><div>_more presc</div><div>_stop presc</div><div>_as feel</div><div>_ *input*</div></div>	<div><div>...0</div><div>...1</div><div>...2</div><div>...3</div><div>...4</div></div>
P6	Do you keep a record of number of prescriptions you issue to clients	<div><div>__Yes</div><div>__No</div></div>	<div><div>_yes</div><div>_no</div></div>	<div><div>...1</div><div>...0</div></div>
P7 (a-f)	Have you advised the use of antibiotics to treat any of the following diseases? (Select all that apply)	<div><div>__Highly Pathogenic Avian Influenza/Avian flu (P7a)</div><div>__Foot and mouth disease (P7b)</div><div>__Classical swine fever (P7c)</div><div>__Swine flu (P7d)</div><div>__Newcastle disease (P7e)</div><div>__Others: _____ (P7f)</div></div>	<div><div>_yes/no</div><div>_yes/no</div><div>_yes/no</div><div>_yes/no</div><div>_yes/no</div><div>_ *input*/no</div></div>	<div><div>...1</div><div>...1</div><div>...1</div><div>...1</div><div>...1</div><div>...1</div></div>

<b>P8 (a-f)</b>	What do you usually advise to clients/farmers when they have <b>excess</b> antibiotics ( <b>Select all that apply</b> )	__ Throw in the garbage (P8a)	_yes/no	...1
		__ Bury in the ground (P8b)	_yes/no	...1
		__ Burn them (P8c)	_yes/no	...1
		__ Give to neighbors/other farmers (P8d)	_yes/no	...1
		__ Keep them for future use (P8e)	_yes/no	...1
		__ Others: _____ (P8f)	_*input*/no	...1
<b>P9 (a-f)</b>	What do you usually advise to clients/farmers when they have <b>expired</b> antibiotics ( <b>Select all that apply</b> )	__ Throw in the garbage (P9a)	_yes/no	...1
		__ Bury in the ground (P9b)	_yes/no	...1
		__ Burn them (P9c)	_yes/no	...1
		__ Give to neighbors/other farmers (P9d)	_yes/no	...1
		__ Keep them for future use (P9e)	_yes/no	...1
		__ Others: _____ (P9f)	_*input*/no	...1



## POLICY ENVIRONMENT

#	Question	Answer with choices	Code	
E1	Is there a national policy in your country concerning the use of antimicrobials such as antibiotics?	<input type="checkbox"/> Yes <input type="checkbox"/> No (skip to E3)	<input type="checkbox"/> _yes <input type="checkbox"/> _no	...1 ...0
E2	If yes, please enumerate those that you can remember.	<input type="text"/> a. _____ <input type="text"/> b. _____ <input type="text"/> c. _____ <input type="checkbox"/> _don't know <input type="checkbox"/> _not applicable	<input type="text"/> *input name* <input type="text"/> *input name* <input type="text"/> *input name* <input type="checkbox"/> _don't know <input type="checkbox"/> _na	...1 ...1 ...1 ...0 ...0
E3	How would you rate the effectiveness of those policies in regulating antimicrobial use in a scale of 1 to 4, where 1 = least effective, 2 = somewhat effective, 3 = effective, 4 = very effective?	<input type="checkbox"/> _Least effective <input type="checkbox"/> _Somewhat Effective <input type="checkbox"/> _Effective <input type="checkbox"/> _Very Effective	<input type="checkbox"/> _least effective <input type="checkbox"/> _somewhat effective <input type="checkbox"/> _effective <input type="checkbox"/> _very effective	...1 ...2 ...3 ...4
E4	In your assessment, what do you think are the factors that contribute to the level of effectiveness of policies on antimicrobial use?	<input type="text"/> a. _____ <input type="text"/> b. _____ <input type="text"/> c. _____ <input type="checkbox"/> _don't know <input type="checkbox"/> _not applicable	<input type="text"/> *input name* <input type="text"/> *input name* <input type="text"/> *input name* <input type="checkbox"/> _don't know <input type="checkbox"/> _na	...1 ...1 ...1 ...0 ...0
E5	If you could suggest actions to prevent and control antimicrobial resistant, what would these be?	<input type="text"/> a. _____ <input type="text"/> b. _____ <input type="text"/> c. _____ <input type="checkbox"/> _don't know <input type="checkbox"/> _not applicable	<input type="text"/> *input name* <input type="text"/> *input name* <input type="text"/> *input name* <input type="checkbox"/> _don't know <input type="checkbox"/> _na	...1 ...1 ...1 ...0 ...0
E6	Based on your experience, what do you think are the least understood aspects about antibiotics among people?	<input type="text"/> a. _____ <input type="text"/> b. _____ <input type="text"/> c. _____ <input type="checkbox"/> _don't know <input type="checkbox"/> _not applicable	<input type="text"/> *input name* <input type="text"/> *input name* <input type="text"/> *input name* <input type="checkbox"/> _don't know <input type="checkbox"/> _na	...1 ...1 ...1 ...0 ...0

## COMMUNICATION PREFERENCE QUESTIONS

- C1.** Please rank your top three most preferred source of news (**Let respondent tell you the first three sources of entertainment. Rank in the table below**). Please indicate on average your time spent seeking entertainment your top three sources of news. (**Ask respondent how much time they spend for their top three sources. Complete table below**)

Source	Rank (1-3)	Average time (hours/per day)			
		Less than 1 hour	1-2 hours	2-4 hours	More than 4 hours
Television					
Radio					
Newspaper					
Internet					
Social media					
Others: _____					

- C2.** Please rank your top three most preferred source of entertainment (**Let respondent tell you the first three sources of entertainment. Rank in the table below**). Please indicate on average your time spent seeking entertainment your top three sources of entertainment. (**Ask respondent how much time they spend for their top three sources. Complete table below**)

Source	Rank (1-3)	Average time (hours/per day)			
		Less than 1 hour	1-2 hours	2-4 hours	More than 4 hours
Television					
Radio					
Newspaper					
Internet					
Social media					
Others: _____					

- C3.** Please assess the time you spent using the media on an average day. Which one do you tend to do more: watching the news or watching entertainment? Please indicate your preferred media consumption using the continuum below. (**Present table below to respondents and let them point how they would rate their media consumption purpose**)

Only News	Mostly News	Balanced	Mostly Entertainment	Only Entertainment
○	○	○	○	○

<b>C4 (a-f)</b>	Which media/informational sources do you usually seek information on animal health issues? ( <b>Select all that apply</b> )	__ Television (C4a)	_yes/no	...1/0
		__ Radio (C4b)	_yes/no	...1/0
		__ Internet (C4c)	_yes/no	...1/0
		__ Social media (C4d)	_yes/no	...1/0
		__ Animal health worker (C4e)	_yes/no	...1/0
		__ Other: _____ (C4f)	_ *input*/no	...1/0
<b>C5</b>	Please rate your interest in learning more about antimicrobials such as antibiotics.	__ Interested	_interested	...3
		__ Neutral	_neutral	...2
		__ Not interested	_not interested	...1

**C6** From the following list, rank the top three information materials you find most useful for providing information on animal health/farm issues.

Source	Rank (1-3)
Vet School	
Symposia and conferences in university	
Online courses	
Online websites and links	
Documentary	
Television	
Newspaper	
Online blogs	
Social media	
Others ( <b>please specify</b> )	

**Coding Guide for C1 and C2** (column name | code input):

**Rank** (C1\_news1-3, C2\_entr1-3 | tv, radio, newspaper, internet, SNS, \*input\*)

**Ave. time** (C1\_avenewstime1-3, C2\_aveentertime1-3 | less than 1 hr, 1-2 hrs, 2-4 hrs, 4+ hrs)

**Coding Guide for C3** (column name | code input):

**Rank** (C3\_uesgrats | mostly news = 2, only news = 1, balanced = 3, only entertainment = 1, mostly entertainment = 2)

**Coding Guide for C5** (column name | code input):

**Rank** (C1\_prefmedia1-3 | vet school, symposia, online course, websites, documentary, tv, newspaper, blogs, SNS, \*input\*)

-END-