

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 DEMOGRAPHIC

001	What is your highest education level attained?	<input type="checkbox"/> Finished Post-Graduate Studies <input type="checkbox"/> Finished Graduate Studies <input type="checkbox"/> Finished College/Bachelor <input type="checkbox"/> Finished Certificate/Polytechnic/Technical <input type="checkbox"/> Finished High School <input type="checkbox"/> Finished Elementary <input type="checkbox"/> Some schooling but did not finish elementary <input type="checkbox"/> Did not go to school	...7 ...6 ...5 ...4 ...3 ...2 ...1 ...0
002	What profession do you consider yourself in?	<input type="checkbox"/> Proprietor/business owner <input type="checkbox"/> Company sales representative <input type="checkbox"/> In-store salesperson/staff <input type="checkbox"/> Veterinary pharmacists (employee) <input type="checkbox"/> Others (Please specify): _____	...0 ...1 ...2 ...3 ...4
003	Age	_____	
004	How many years of experience do you have in your work?	<input type="checkbox"/> Less than 1 year <input type="checkbox"/> 1 year to 2 years <input type="checkbox"/> More than 2 years to 5 years <input type="checkbox"/> More than 5 years to 10 years <input type="checkbox"/> Over 10 years	...0 ...1 ...2 ...3 ...4
005	As (please refer to how the respondent classified himself/herself professionally), how would you classify your store/company?	<input type="checkbox"/> large-scale business <input type="checkbox"/> medium-scale business <input type="checkbox"/> small-scale business	...2 ...1 ...0

006	According to your experience, how does one apply a permit to operate as an agricultural supplier/store?	__ a _____ __ I don't know, I was not the in-charge of its application (skip the next question) __ I don't know, I/we did not apply for one (skip the next question)	...2 ...1 ...0
007	Mainly, who does your store/company cater? (Please check all that apply.)	__ Large farm owners __ Medium farm owners __ Small farm owners/Backyard animal producers __ Large agri-store retailers __ Medium agri-store retailers __ Small agri-store retailers __ Others (please specify): _____	...6 ...5 ...4 ...3 ...2 ...1 ...0
008	Gender	__ Male __ Female __ Others (please specify): _____	...0 ...1 ...2
009	In addition to your degree, have you attended an informal training related to animal production?	__ Yes __ No	...1 ...0

KNOWLEDGE-RELATED QUESTIONS

001	Can you describe what antibiotics are?	__ Yes __ No __ Don't know (go to Q4)	...1 ...0 ...0
002	If yes, what do you think antibiotics are intended for? (Please select all that apply.)	__ As treatment of all types of diseases __ As treatment of specific types of diseases __ As prevention of all types of diseases __ As prevention of specific types of diseases __ As growth booster __ Don't know __ Others (please specify): _____	...0 ...1 ...0 ...0 ...0 ...0 ...1
003	Please list three antibiotics that you know.	__ A. _____ __ B. _____ __ C. _____ __ D. Can't remember (Don't read out until the respondent cannot provide answer)	...1 ...1 ...1 ...0

004	Have you heard of antibiotic resistance?	<input type="checkbox"/> Yes <input type="checkbox"/> No (Go to Q6)	...1 ...0
005	Select in the list below, what best describes <u>antibiotic resistance</u> . (please select all that apply)	<input type="checkbox"/> Antibiotic resistance is dangerous but don't know how to describe <input type="checkbox"/> When an infection cannot be treated because the medicine is ineffective <input type="checkbox"/> When bacteria develop resistance to one or more antibiotics <input type="checkbox"/> I'm not sure or don't know (Don't read out until the respondent cannot provide answer)	...0 ...0 ...1 ...0
006	Where did you hear about antibiotic resistance?	<input type="checkbox"/> From TV, please specify channel or program: _____ <input type="checkbox"/> From radio, please specify station or program: _____ <input type="checkbox"/> From my friends <input type="checkbox"/> From a village seminar <input type="checkbox"/> From my drug supplier/drug company <input type="checkbox"/> Social media such as Facebook, Twitter or Instagram <input type="checkbox"/> Others (Please specify): _____	...1 ...1 ...1 ...1 ...1 ...1
007	Please list three antimicrobials that you know	a. _____ b. _____ c. _____ Can't remember (Don't read out until the respondent cannot provide answer)	...1 ...1 ...1 ...0
008	Which of the following are considered antimicrobials?(Select all that applies)	<input type="checkbox"/> Antibacterials <input type="checkbox"/> Antifungals <input type="checkbox"/> Antivirals <input type="checkbox"/> Antivenom <input type="checkbox"/> Antiparasitics <input type="checkbox"/> None of the above	...1 ...1 ...1 ...0 ...1 ...0
009	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	...0 ...0 ...1 ...1 ...1
010	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: _____	...0 ...1 ...1

011	There is a difference between antibiotics and antimicrobials?	<input type="checkbox"/> True <input type="checkbox"/> False <input type="checkbox"/> Other responses: _____	...1 ...0 ...0
012	Have you heard of antimicrobial resistance (AMR)?	<input type="checkbox"/> Yes <input type="checkbox"/> No (Go to Attitude section)	---1 ---0
013	Where did you hear about antimicrobial resistance (AMR)?	<input type="checkbox"/> From TV, please specify channel or program: _____ <input type="checkbox"/> From radio, please specify station or program: _____ <input type="checkbox"/> From my friends <input type="checkbox"/> From a village seminar <input type="checkbox"/> From drug supplier/drug company <input type="checkbox"/> Social media such as Facebook, Twitter or Instagram <input type="checkbox"/> Others (Please specify): _____	...1 ...1 ...1 ...1 ...1 ...1 ...1
014	Which of the following is true regarding the nature of <u>antimicrobial resistance (AMR)</u> ? (please select all that apply)	<input type="checkbox"/> AMR is when infections cannot be treated because medicine lose their potency or effectiveness. <input type="checkbox"/> AMR is when bacteria develop resistance to antimicrobials such as antibiotics <input type="checkbox"/> AMR emergence is accelerated with overuse and misuse of antibiotics. <input type="checkbox"/> AMR occurs when microorganisms change in response to the use of antimicrobials. <input type="checkbox"/> AMR can occasionally be transferred from one organism to another. <input type="checkbox"/> Don't know	...1 ...1 ...1 ...1 ...1 ...0
015	Which of the following is true about AMR as health issue? (Select all that apply)	<input type="checkbox"/> AMR is a health issue concerning both animals and humans. <input type="checkbox"/> AMR occurs in human pathogens only. <input type="checkbox"/> AMR in food animals is detected by determining the amount of antibiotic residue in meat sample. <input type="checkbox"/> AMR is a global health threat. <input type="checkbox"/> AMR can be eradicated. <input type="checkbox"/> Don't know	...1 ...0 ...1 ...1 ...1 ...0
016	Which of the following practices can contribute to the emergence of AMR? (Select all that apply)	<input type="checkbox"/> Overuse of antimicrobials in animals <input type="checkbox"/> Use of antimicrobials in humans when it is not necessary <input type="checkbox"/> Discontinuing antimicrobial use once the patient (animal or human) shows improvement <input type="checkbox"/> Practicing prudent use of antimicrobials in animal <input type="checkbox"/> Practicing prudent use of antimicrobials in	...1 ...1 ...1 ...0 ...0

		humans	
017	Which of the following practices can help control/prevent the development of AMR? (Select all that apply)	<input type="checkbox"/> Good vaccination programs <input type="checkbox"/> Good husbandry practices <input type="checkbox"/> Use of antimicrobials as growth promoter <input type="checkbox"/> Farm hygiene, sanitation, biosecurity <input type="checkbox"/> Prudent use of antimicrobials <input type="checkbox"/> None of the above	...1 ...1 ...0 ...1 ...1 ...0

ATTITUDE-RELATED QUESTIONS

Perceived Severity			
001	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	...5 ...4 ...3 ...2 ...1
002	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"/> I have no opinion (Do not read to respondent until you are sure that they don't have an answer)	...4 ...3 ...2 ...1 ...0

003. 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 ²	1	2	3	4	5
Antimicrobials such as antibiotics protect both humans and animals from diseases					
Antibiotics are important to improve animal production					
It is good to keep antibiotics at home in case there may be a need for the animals later. ²					
When animals start to show signs of being ill, they should be given antibiotics to prevent them from getting a more serious illness ³					
Antibiotics would help animals to get better more quickly ³					

Anti-biotic should be stopped as soon as the animal gets better ³					
Skipping one or two doses does not contribute to the development of antibiotic resistance ³					
Antibiotics are safe; hence, they can be commonly used ³					
I find it hard to refuse a customer who asks for antibiotics even without prescription especially when s/he highly needs it.					
If the animals get side effects during a course of antibiotics treatment one should stop giving them as soon as possible. ²					
There is no danger in giving antibiotics to animals if properly used					
Antibiotics should be given with prescription					
² Modified from Jifar and Ayele (2018)					
³ Modified from Ahmad et al., 2015					

004. 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
Opinions of my family members					
Laboratory data					
Opinions of the private industry					
Client/farmer expectations					
Opinions of Veterinary Professional groups					
Data in scientific journals					
Data from online search engines such as Google, Yahoo, Bing					
Potential earnings or financial gain					
Opinions of other veterinarians					
Adherence to laws and legislation					
Other factors (please					

identify): _____					
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PRACTICE/BEHAVIOUR-RELATED QUESTIONS

001	What are the three bestselling OTC drugs in your store?	<input type="checkbox"/> A. _____ <input type="checkbox"/> B. _____ <input type="checkbox"/> C. _____ <input type="checkbox"/> D. Can't remember	...1 ...1 ...1 ...0
002	What are the three bestselling prescription drugs in your store?	<input type="checkbox"/> A. _____ <input type="checkbox"/> B. _____ <input type="checkbox"/> C. _____ <input type="checkbox"/> D. Can't remember	...1 ...1 ...1 ...0
003	What do you do when a client wants to buy a prescription drug from your store? (Please select all that apply.)	<input type="checkbox"/> Ask for a veterinarian/animal health specialist's prescription first <input type="checkbox"/> Inquire about the animal's condition and vital information <input type="checkbox"/> I refuse to sell prescriptive drugs to clients who cannot produce a vet's prescription <input type="checkbox"/> If the condition requires the medicine, I dispense the drug even without a veterinarian's prescription <input type="checkbox"/> I explain the dosage and duration of the drug to the client <input type="checkbox"/> I ask the client to closely monitor the health of the animal(s) <input type="checkbox"/> I ask the client to give me an update on the animal's health <input type="checkbox"/> Others (please specify): _____	...1 ...1 ...1 ...1 ...1 ...1 ...1 ...1
004	If you dispense prescription drugs without a vet's prescription, please tell us why? (Select all that apply)	<input type="checkbox"/> It's not required by the law <input type="checkbox"/> It is not required by my organization/business <input type="checkbox"/> I don't feel the need <input type="checkbox"/> The clients prefer not to get the prescription <input type="checkbox"/> I do not want to refuse a client in need <input type="checkbox"/> Others: (Please specify) _____	...1 ...1 ...1 ...1 ...1 ...1
005	Where do you source the antibiotics you prescribe/sell? (Select all that apply)	<input type="checkbox"/> From reputable suppliers/distributor/representative <input type="checkbox"/> Another animal feed store/animal pharmaceutical store <input type="checkbox"/> From human pharmacy store <input type="checkbox"/> Others: (please specify) _____	...1 ...1 ...1 ...1
006	Do you always advise clients/customers how to use antibiotics for use in farms?	<input type="checkbox"/> Yes <input type="checkbox"/> Sometimes <input type="checkbox"/> No	...1 ...0 ...0

007	If you answer “sometimes” or “no”, please tell us why? (Select all that apply)	<input type="checkbox"/> It’s not required by the law <input type="checkbox"/> It is not required by my organization/business <input type="checkbox"/> I don’t feel the need <input type="checkbox"/> I assume the client knows how to administer the drug <input type="checkbox"/> I have to entertain other customers <input type="checkbox"/> Others: (Please specify) _____	...1 ...1 ...1 ...1 ...1 ...1
008	When do you advise clients/customers to use/buy antibiotics for use in farms?	<input type="checkbox"/> If they have a prescription from their veterinarian/animal health specialist <input type="checkbox"/> When we have a promotion on antibiotics/antimicrobials <input type="checkbox"/> If the customers asks <input type="checkbox"/> Only when needed	...1 ...1 ...0 ...1
009	How do you advise client/customer on the use antibiotics in farms/animals?	<input type="checkbox"/> As prescribed or as per manufacturer’s recommendations <input type="checkbox"/> More than what was prescribed or manufacturer’s recommendations <input type="checkbox"/> Stop using before the end of the prescribed course or manufacturer’s recommendations <input type="checkbox"/> For as long as I feel suitable <input type="checkbox"/> Others (Please specify): _____	...1 ...0 ...0 ...0 ...1/0
010	Do you keep a record of number of prescriptions you issue to clients/customers?	<input type="checkbox"/> Yes <input type="checkbox"/> No	...1 ...0
011	Have you advised the use of antibiotics to treat any of the following diseases? (Select all that apply)	<input type="checkbox"/> Highly Pathogenic Avian Influenza/Avian flu <input type="checkbox"/> Foot and mouth disease <input type="checkbox"/> Classical swine fever <input type="checkbox"/> Newcastle disease <input type="checkbox"/> Others (Please specify): _____	...1 ...1 ...1 ...1 ...1
012	What do you usually advise to clients/farmers when they have excess antibiotics (Select all that apply)	<input type="checkbox"/> Throw in the garbage <input type="checkbox"/> Bury in the ground <input type="checkbox"/> Burn them <input type="checkbox"/> Give to neighbors/other farmers <input type="checkbox"/> Keep them for future use <input type="checkbox"/> Others (Please specify): _____	...1 ...1 ...1 ...0 ...0 ...1/0
013	What do you usually advise to clients/farmers when they have expired antibiotics (Select all that apply)	<input type="checkbox"/> Throw in the garbage <input type="checkbox"/> Bury in the ground <input type="checkbox"/> Burn them <input type="checkbox"/> Give to neighbors/other farmers <input type="checkbox"/> Keep them for future use <input type="checkbox"/> Others (Please specify): _____	...1 ...1 ...1 ...0 ...0 ...1/0
014	Where do you store your prescription drugs and antibiotics? (Please select all that apply)	<input type="checkbox"/> In a closed shelf under room temperature and out of direct sunlight <input type="checkbox"/> In a close shelf but under direct sunlight <input type="checkbox"/> In an open shelf under room temperature and out of direct sunlight	...1 ...0 ...1

		<input type="checkbox"/> In an open shelf under direct sunlight <input type="checkbox"/> In the fridge with regulated temperature <input type="checkbox"/> Other (please specify): _____	...0 ...1 ...1/0
015	How often do you check the expiration dates of the drugs including antibiotics?	<input type="checkbox"/> Once a week <input type="checkbox"/> Twice a month <input type="checkbox"/> Once a month <input type="checkbox"/> I don't check at all <input type="checkbox"/> Other (please specify): _____	...1 ...1 ...1 ...0 ...1
016	What do you do when the drugs including antibiotics have reached their expiration date?	<input type="checkbox"/> Pull them out of the shelf <input type="checkbox"/> Pull them out of the shelf and give to others for free <input type="checkbox"/> Keep them in the shelf <input type="checkbox"/> Other (please specify): _____	...1 ...0 ...0 ...0
017	Does anyone from the government monitor the antibiotics you are selling?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Can't remember	...1 ...0 ...0

POLICY, INFORMATION, AND SOCIO-CULTURAL ENVIRONMENT

001	Can you describe your country's laws on using prescription veterinary drugs?	<input type="checkbox"/> Yes <input type="checkbox"/> No (Go to 10) <input type="checkbox"/> Don't know (Go to 10)	...1 ...0 ...0
002	If yes, please list down the laws you know or are familiar with:	a. _____ b. _____	...1 ...1
003	Can you describe your country's laws on dispensing/disposing veterinary drugs?	<input type="checkbox"/> Yes <input type="checkbox"/> No (Go to 12) <input type="checkbox"/> Don't know (Go to 12)	...1 ...0 ...0
004	If yes, please list down the laws you know or are familiar with:	a. _____ b. _____	...1 ...1
005	Have you heard about government programs on antimicrobial use in your community?	<input type="checkbox"/> Yes <input type="checkbox"/> No (Go to Q14) <input type="checkbox"/> Not sure (Go to Q14)	...1 ...0 ...0
006	Can you name these programs?	a. _____ b. _____ c. _____	...1 ...1 ...1
007	Have you been to an assembly where antimicrobial use was discussed?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Don't remember	...1 ...0 ...0

008	Based on what you heard, please recall the top three messages that you got from the assembly.	a. _____ b. _____ c. _____	...1 ...1 ...1
009	Have you encountered information on anti-microbial use in the media?	___ Yes ___ No ___ Don't remember	...1 ...0 ...0
010	Please recall the top three messages that you got from the media.	a. _____ b. _____ c. _____	...1 ...1 ...1
011	Are you a member in agri-vet suppliers/vendors' organizations in your community?	___ Yes ___ No	...1 ...0
019	Do you join suppliers/vendors' assemblies or seminars?	___ All the time ___ Often ___ Rarely ___ Not at all	...2 ...1 ...0 ...0
020	Do you discuss business management practices with your peers?	___ Yes ___ No	...1 ...0

INTENTION TO LEARN MORE ABOUT ANTIMICROBIALS

001	Please rate your interest in learning more about antimicrobials such as antibiotics.	___ Interested ___ Neutral ___ Not interested	...2 ...1 ...0
002	What information about antimicrobials such as antibiotics do you want to know more?	___ A. _____ ___ B. _____ ___ Don't know	...1 ...1 ...0
003	From whom do you prefer to learn about antimicrobial use such as antibiotics?	___ Health experts ___ Government Authorities ___ Others (please specify): _____	...1 ...1 ...1

COMMUNICATION PREFERENCE QUESTIONS

1. 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: _____					

2. 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: _____					

3. 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: _____					

4. 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)**

News				Entertainment
○	○	○	○	○

005	Which media/informational sources do you usually seek information on animal health issues? (Select all that apply)	__Television __Radio __Internet __Social media __Animal health worker __Other: _____	...1 ...1 ...1 ...1 ...1 ...1
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- 05 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 (please specify)	