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

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

		FARMER PROFILE	
001	What is your highest education level attained?	Finished Post-Graduate StudiesFinished Graduate StudiesFinished College/BachelorFinished Certificate/Polytechnic/TechnicalFinished High SchoolFinished ElementarySome schooling but did not finish elementaryDid not go to school	7 6 5 4 3 2 1
002	Age		
003	Gender	MALEFEMALE OTHERS	0 1 3
004	How many years of experience do you have in farming?	Less than 1 year1 year to 2 yearsMore than 2 years to 5 yearsOver 5 years	0 1 2 3
005	Do you consider farming your main occupation?	NO YES If not, what is your other occupation other than in farming?	0

Tenurial S	Status of Farmer			
006	If farming is your main occupation,	NO		0
	do you own the farm?	YES		1
007	If not an owner of the farm, what is	Farm manager or caretake	r	0
	your work arrangement in the	Hired farm helper		1
	farm?	Others (please specify):		2
Farm Typ	e and Scale			
800	How would you classify your farm?	Subsistence		0
		Backyard		1
		Integrated farm		2
		Small-scale commercial far	m	3
		Medium-scale commercial	farm	4
		Large-scale commercial far	m	5
		Others (please specify):		6
009	If large-scale farming, are you a	NO		0
	contract grower of a food	YES		1
	company?			
010	If contract grower, how much is			
	your quota?			
011	Where is your farm located?	Upland		0
		Lowland		1
		Others (please specify):		2
012	Where is your farm erected?	In a flatland		1
	(Please select all that apply)	In a sloping area		1
	erected?	Near a body of water (i.e.,	pond, creek,	1
		river, lake, or sea)		
		Near a farm irrigation syste	em	1
		Near community houses		1
		Others (please specify):		1
013	How do you use the surrounding	Vegetable farming		1
	area of your farm? (Please select all	Rice farming		1
	that apply)	Housing		1
		Flower gardening		1
		Solar drying		1
		Seedling nursery		1
		I leave the surrounding are	ea unused	1
		Others (please specify):		1
Stock Der	nsity			
014	What animals do you raise in your	Animal Types (Select all that	Number of	
	farm?	apply)	Heads	
		Cattle		0
		Buffalo		1
		Coot		2
		Goat		2

			Chicken		4
			Fish		5
			Prawn		6
			Others (please	specify):	7
015	How do you keep you	r animals in	Free-range		0
015	the farm?	i allillais III	Organic		1
	the farm:		Yarding		2
			In captivity		3
			Others (please	specify).	4
016	If raised in captivity, w	hat type of cage		or your animals? (Please s	
	that apply)		-, p ,	(, , , , , , , , , , , , , , , , , , ,	
	Swine		Poultry	Aquaculture	
	Free-range	Free-ra	nge	Fresh water pond:	
	In pens	Battery	cage	Brackish water	
	Others:	Furnish	ed Cage	Fish pen	
		Grow o	ut houses	Integrated fish	
				farming	
		Others:		Others:	
017	In your estimation, wh	nat size is your			
017	pen/cage/pond	14t 312C 13 your			
	periy edge/ porid				
018	In your estimation, ho	w many are			
	raised in each pen/cag				
019	What kind of animal b	reeds do you	Native		0
	raise in the farm		Exotic		1
			Crossbreed/Hy		2
			A mix of native	and exotic breeds	3
020	If a mix of native and e	exotic breeds,	Strictly separat	ted	0
	how do you keep your	native and		may come in close	1
	hybrid animals		contact with e		
			Mixed (co-min		2
			Others (please	specify):	3
Animal Nut	rition and Biosecurity				
021	What kind of feeds do	you use in	Non-commerc		0
	the farm?		Commercial fe		1
022		commercial fee	ds do you use in th	e farm? (Please select all	
	that apply)				
	Swine	Po	oultry	Aquaculture	
Starter		Starter		Natural feed	
Grower		Grower		Supplementary feed	
Finisher		Finisher		Complete feed	

Booster and vitamin-enrichedBooster and vitamin-enriched	
feeds feeds	
Feeds with antimicrobialsFeeds with antimicrobials	_
Others:Others:Others:	
023 What kind of animal products doesFor Breeding	1
your farm produce?Live	1
For slaughter	1
Animal by-products (i.e., eggs, mea	
etc.)	1
Others (please specify):	_
O24 How often do you clean theEveryday	5
cages/pens?Every other day	4
Once a week	3
Once a month	2
After harvest	1
Others (please specify):	0
025 What is the method you use forDry cleaning	1
cleaning your animals' cages/pens?Wet cleaning	1
(select all that apply)Wet cleaning (with chemical	1
disinfectants)	1
Wet cleaning (with biocides)	1
Others (please specify):	
026 How do you dispose animal manureComposting	0
and other farm wastes?Sell as fertilizer	1
Throw in landfill	2
Septic tank	3
Water runoff	4
Others (please specify):	5
027 Have you encountered orYES	1
experienced animal disease NO	0
outbreaks in the last 12 months?CAN'T REMEMBER	0
028 If yes, what types of disease Highly Pathogenic Avian Influenza/	Bird1
outbreaks did you encounter?	1
(Please check those that apply)Foot and Mouth Disease (FMD)	1
Classical swine fever/Swine Cholera	a1
Swine Flu	1
Newcastle Disease	1
Others (please specify):	
029 Is there a veterinarian in your place? Yes and I consult him/her regularly	·3
Yes and I consult him/her less ofter	
Yes but I do not consult him/her	1
There is no veterinarian in my local	

001		l v	1
001	Can you describe what	Yes	1
	antibiotics are?	No (go to Q4)	0
		Don't know (go to Q4)	0
002	If yes, what do you think	As treatment of all types of diseases	0
	antibiotics are intended	As treatment of specific types of diseases	1
	for? (Please select all	As prevention of all types of diseases	0
	that apply.)	As prevention of specific types of diseases	0
		As growth booster	
		Don't know	0
		Others (please specify):	0
		(p.case speemy)	0
003	Please list three		1
003			1
	antibiotics that you		
	know.		1
		Can't remember (Don't read out until the	0
		respondent cannot provide answer)	_
004	Can you describe what	Yes	1
	antimicrobials are	No (go to Q8)	0
		Don't know (go to Q8)	0
005	If yes, what do you think	As treatment of all types of diseases	0
	antimicrobials are	As treatment of specific types of diseases	1
	intended for? (Please	As prevention of all types of diseases	0
	select all that apply.)	As prevention of specific types of diseases	0
		As growth booster	
		Don't know	0
		Others (please specify):	0
		others (piedse speelily).	0
006	Please list three		1
000			
	antimicrobials that you		1
	know.		1
		Can't remember (Don't read out until the	0
		respondent cannot provide answer)	
007	Do you think there is a	Yes	1
	difference between	No	0
	antibiotics and	Don't know	0
	antimicrobials?		
Prior Expo	osure to AMU/AMR Information		
008	Have you heard of	Yes	1
	antibiotic resistance?	No (go to Q11)	0
009	Where did you hear	From TV, please specify channel or program:	1
303	about antibiotic		
	resistance?	From radio, please specify station or program:	1
	Legistatice;		1
		From my friends	1
		From a village seminar	1
			1
			⊥

		Social media such as Facebook, Twitter or	
		Instagram	1
		Others:	1
010	Calaat in the list halour		0
010	Select in the list below, what best describes	Antibiotic resistance is dangerous but don't know how to describe	0
			0
	<u>antibiotic</u>	When an infection cannot be treated because	0
	resistance. (please select	the medicine is ineffective	
	all that apply)	When bacteria develop resistance to one or	1
		more antibiotics	
		I'm not sure or don't know (Don't read out	0
		until the respondent cannot provide answer)	
011	Have you heard of	Yes	1
	antimicrobial resistance?	No (Go to Q14)	0
012	Where did you hear	From TV, please specify channel or program:	1
	about antimicrobial		
	resistance?	From radio, please specify station or program:	1
		From my friends	1
		From a village seminar	1
		Social media such as Facebook, Twitter or	1
		Instagram	
		Others:	1
013	Select in the list below,	Antimicrobial resistance is the same as	0
	what best describes	antibiotic resistance	
	<u>antimicrobial</u>	Antimicrobial resistance is dangerous but I	0
	resistance. (please select	don't know how to describe	0
	all that apply)	Antimicrobial resistance is when infections	0
	un that apply)	cannot be treated because medicine lose their	0
		potency or effectiveness.	
		Antimicrobial resistance is when bacteria	
		develop resistance to antimicrobials such as	
		antibiotics	1
		I'm not sure or don't know (Don't read out	
		\ <u></u>	0
014	France that list is also.	until the respondent cannot provide answer)	1
014	From the list below,	For treatment of infection in your animals (pig,	1
	please select what you	chicken or fish)	
	think is the best time to	To promote growth in my animals/fish	0
	use antibiotics	To prevent infection in my animals/fish	1
		Whenever I feel like using it	0
		Don't know	0
015	From the list below, how	Antibiotics fight bacteria, so it is safe to use	0
	do you assess the risk of	Antibiotics promote growth, so it is safe to	0
	antibiotics in	use	
	animals/fish (please	Animals/fish develop resistance to bacteria,	1
	select all that apply)	which can be passed on to people	
			1
		· · · · · · · · · · · · · · · · · · ·	

		Diseases can be hard to treat because	
		animals/fish might develop resistance to	0
		bacteria	0
		There is no risk in using antibiotics in animals	
		Don't know	
016	Please describe how the use of antibiotics in farm		1
	animals could affect you and your family	Don't know/No comment	0

017. The following statements are what other people think when they are asked about antibiotics. What are your thoughts about them? Please indicate your answer using the scale of 1 to 5 where 1 = strongly disagree, 2 = disagree, 3 = don't know, 4 = agree, and 5 = strongly agree.

Knowledge Statements ¹	1	2	3	4	5
Anti-biotics have the same effect as anti-inflammatory					
drugs					
Different antibiotics are needed to cure different animal					
diseases					
Antibiotics speed up the recovery from most animal					
diseases					
Antibiotics are effective against bacteria					
Antibiotics are effective against viral diseases					
If the animals get side effects during a course of					
antibiotics treatment you should stop giving them as					
soon as possible.					
If the animals get some kind of skin reaction when using					
an antibiotic, you should not give the same antibiotic					
again.					
The unnecessary use of antibiotics would lessen its					
efficacy					

¹ Modified from Jifar and Ayele (2018)

ATTITUDE-RELATED QUESTIONS

Percei	Perceived Severity				
001	From a scale of 1 to 5 (1 being the least	Very Serious	5		
	serious and 5 being very serious) how	Serious	4		
	would you rate your situation if one of	Moderately Serious	3		
	your family members has an infection	Slightly Serious	2		
	that cannot be treated with medicine?	Least Serious	1		
002	From a scale of 1 to 5 (1 being the least	Very Serious	5		
	serious and 5 being very serious) how	Serious	4		
	would you rate your situation if one or	Moderately Serious	3		
	some of your animals have an infection	Slightly Serious	2		
	that cannot be treated with medicine?	Least Serious	1		

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					
If I feel or see that the animals are healed after a few					
days, I stop giving antibiotics before completing the					
course of treatment. ²					
I prefer to keep antibiotics at home in case there may					
be a need for the animals later. ²					
It is good to be able to get antibiotics from relatives or					
friends without having to see a veterinarian. ²					
I always complete the course of treatment with					
antibiotics even if I see that the animal is healed. ²					
I prefer to be able to buy antibiotics from the Agrivet-					
dealers without a prescription. ²					
If the animals get side effects during a course of					
antibiotics treatment you should stop giving them as					
soon as possible. ²					

² Modified from Jifar and Ayele (2018)

PRACTICE/BEHAVIOUR-RELATED QUESTIONS

001	When your animals are	Assess animal's condition	0
	sick, what do you first	Consult with vet	1
	do?	Assess animal's living space	2
		Treat with over-the-counter veterinary drugs	3
		Treat with traditional methods (e.g., use of	4
		natural remedies)	
		Treat with antibiotics	5
		Others (please specify):	6
002	Do you use antibiotics in	Yes	1
	your farm?	No	0
		Don't know	0
003	What are your reasons	prevent sickness	1
	for using antibiotics in	treat sick animals	1
	your farm? (Select all	growth promotion	0
	that apply	Others (please specify):	0
004	Have you used	Highly Pathogenic Avian Influenza/Avian flu	1
	antibiotics to treat any	Foot and mouth disease	1

diseases? (Select all that apply) Administration: Prophylaxis, Metaphylaxis, Treatment, Biocidal) Outhers: Outher	
Administration: Prophylaxis, Metaphylaxis, Treatment, Biocidal) O05 When your animals are sick until sick, you make sure to give antibiotics to: Both sick animals and all of the animals in close proximity to them 0	
005 When your animals are sick you make sure to give antibiotics to: Just the animals that are sick1 Both sick animals and all of the animals in close proximity to them0	
sick, you make sure to give antibiotics to: Both sick animals and all of the animals in close proximity to them 0	
give antibiotics to: proximity to them	
All animals in the farm0	
Others (please specify):0	
006 How do you use Mixed with feeds1	
antibiotics in your farm? Liquid mix1	
Others (please specify):1	
007 Usually, who administers A	
the antibiotics to B1	
animals?	
008 How often do you useEveryday0	
antimicrobials such as At least once a week1	
antibiotics in your farm?At least once every two weeks2	
At least once a month3	
At least once every six months4	
At least once a year5	
Only when needed6	
Access Points	
009 From whom did youNeighbors/Other farmers1	
learn about the use of Leaders in the community1	
antibiotics in farms?Agri-supply agents/suppliers1	
(Select all that apply) Agricultural technicians/Government authorities1	
Veterinarian1	
Self-taught/Own research1	
Others (please specify):1	
010 Where do you get the From friends1	
, o —	
I antibiotics that you use I Neighborhood store I 1	
antibiotics that you useNeighborhood store1 in your farm? (Select all Animal feed store1	
in your farm? (Select all Animal feed store1	
in your farm? (Select all that apply) Animal feed store1 Animal pharmaceutical store1	
in your farm? (Select all that apply) Animal feed store Animal pharmaceutical store Human pharmacy 1	
in your farm? (Select all that apply) Animal feed store1 Animal pharmaceutical store1	
in your farm? (Select all that apply) —Animal feed store —Animal pharmaceutical store —Human pharmacy —Others: (please specify) —Others: (please specify) —Consultation with Veterinarian or other Animal Health Professionals	
in your farm? (Select all that apply) Later that apply	
in your farm? (Select all that apply) Lanimal feed store Animal pharmaceutical store Human pharmacy Others: (please specify) Consultation with Veterinarian or other Animal Health Professionals Do you usually get a professional advice Yes Sometimes 1 1	
in your farm? (Select all that apply) —Animal feed store —Animal pharmaceutical store —Human pharmacy —Others: (please specify) —Others: (please specify) ——1 Consultation with Veterinarian or other Animal Health Professionals O11 Do you usually get a professional advice —Sometimes —Sometimes —No —No ——1 ——1 ——1 ——1 ——1 ——1 ——1 ——1 ——1 ——	
in your farm? (Select all that apply) —Animal feed store —Animal pharmaceutical store —Human pharmacy —Others: (please specify) —Others: (please specify) ————————————————————————————————————	
in your farm? (Select all that apply) Lanimal pharmaceutical store Lanimal pharmaceutical store Human pharmacy Others: (please specify) Consultation with Veterinarian or other Animal Health Professionals O11 Do you usually get a professional advice before buying antibiotics for use in your farm? O12 Do you usually ask a Animal feed store 1 Phuman pharmaceutical store 1 Lanimal pharmaceutical store 1 Lanimal pharmaceutical store 1 1 1	
in your farm? (Select all that apply) —Animal feed store —Human pharmaceutical store —Human pharmacy —Others: (please specify) —Others: (please specify) ————————————————————————————————————	
in your farm? (Select all that apply) Lanimal pharmaceutical store Lanimal pharmaceutical store Human pharmacy Others: (please specify) Consultation with Veterinarian or other Animal Health Professionals O11 Do you usually get a professional advice before buying antibiotics for use in your farm? O12 Do you usually ask a Animal feed store 1 Phuman pharmaceutical store 1 Lanimal pharmaceutical store 1 Lanimal pharmaceutical store 1 1 1	

Non-use	of Prescription		
013	Why do you not seek	It is easy to buy directly from the store	1
	professional advice in buying antibiotics?	There is no veterinarian/para-veterinarian in my village	1
	(Select all that apply)	There are veterinarians/para-veterinarians but	1
	(Select all all apply)	are hard to seek advice	
		I don't see the need for seeking advice	1
		Others: (Please specify)	1
014	When you decide to buy	A	1
	antibiotics without a	B	1
	veterinarian's	C	1
	prescription, which ones	D. Can't remember	0
	do you use?		
015	How do you ensure the	Check expiry date	1
	quality of antimicrobials	Make sure I got it from the pharmacy	1
	such as antibiotics that	I go for certain brands	1
	you bought? (Select all	I go for the seller's recommendations	1
	that apply)	I go for other's recommendations (family	1
		members, friends, neighbors, etc.)	
		None of the above	0
Length o	f Administration		
016	When using antibiotics,	As prescribed or as per manufacturer's	1
	how long do you use it	recommendations	
	in your farm?	More than what was prescribed or	0
		manufacturer's recommendations	
		Before the end of the prescribed course or	0
		manufacturer's recommendations	
		For as long as I feel suitable	0
		Others:	0
017	What records do you	Vaccination record	1
	keep in managing your	Animal population	1
	farm? (Please select all	Antibiotics administered/used	1
	that apply)	Disinfectant records	1
		Sales records	1
		Others:	1
	and Disposal	L v (0 + 000)	
018	Do you keep the excess	Yes (Go to Q20)	1
010	antibiotics?	No (Go to Q21)	0
019	Please describe what	Throw in the garbage	1
	you do with excess	Flush in the toilet	1
	antibiotics (Select all that	<u> </u>	1
	apply)	Burn them	1
		Give to my neighbors/other farmers	0
		Keep them for future use	0
020	How long do you kees	Others (please specify):	1
020	How long do you keep	1-3 months	0
	excess antibiotics?	4-6 months	0

		7-12 months	0
		More than 12 months	0
		I don't keep excess antibiotics	1
021	Where do you usually	Cool dry place	1
021	keep your antibiotics?	cool dry place In the animal's living space	0
	Recp your artibioties:	Under direct sunlight	0
		Moist area	0
		Others (please specify):	0
Withdra	wal Period for Antibiotics	Others (picase specify).	10
022	How long do you stop	1-15 days	0
022	using antibiotics before	16-28 days	1
	selling your animal or	29-60 days	2
	animal by-product?	Others (please specify):	3
023	What do you do with the	Bury properly	1
	meat of slaughtered sick	Burn the dead body	0
	animal?	Sell the meat	0
		Others (please specify):	0
Intentior	n to use antibiotic alternatives a		
001	If you're using	Yes	1
	antibiotics in your farm,	No	0
	would you be willing to	Not sure	0
	use an alternative		
	instead of antibiotics?		
002	If you're NOT using	Yes	1
	antibiotics in your farm,	No	0
	would you be willing to	Not sure	0
	use antibiotics in the		
	future to protect the		
	health of your animals?		
003	Please rate your interest	Interested	1
	in learning more about	Neutral	0
	antibiotics.	Not interested	0

POLICY, INFORMATION, AND SOCIO-CULTURAL ENVIRONMENT

001	Is there a national policy	Yes	1
	that specifies the operation	No	0
	of agricultural farms in your	I don't know	0
	country?		
002	Is there a local ordinance	Yes	1
	that regulates the operation	No	0
	of agricultural farms?	I don't know	0
003	Is there a national policy	Yes	1
	governing sanitary practices	No	0

	of agricultural farms in your country?	I don't know	0
004	Is there a local ordinance	Yes	1
	governing sanitary practices	No	0
	of agricultural farms?	I don't know	0
005	Is there sanitary	Yes	1
	officer/inspector in your	No	0
	area?	I don't know	0
006	Does the sanitary inspector	Yes	1
	visit your farm?	No	0
		I don't know	0
007	How often does s/he visit	Weekly	2
	your farm?	Twice a month	2
		Once a month	2
		Once every three months	2
		Twice a year	2
		Once a year	1
		Never at all	0
		Can't remember	0
800	Can you describe your	Yes	1
	country's laws on using	No (Go to 10)	0
	prescription veterinary drugs?	Don't know (Go to 10)	0
009	If yes, please list down the	a	1
	laws you know or are familiar with:	b	1
010	Can you describe your	Yes	1
	country's laws on	No (Go to 12)	0
	dispensing/disposing veterinary drugs?	Don't know (Go to 12)	0
011	If yes, please list down the	a	1
	laws you know or are familiar with:	b	1
012	Have you heard about	Yes	1
	government programs on	No (Go to Q 14)	0
	antimicrobial use in your community?	Not sure (Go to Q14)	0
013	Can you name these	a	1
	programs?	b	1
		C	1
014	Have you been to a	Yes	1
	community assembly where	No	0
	antimicrobial use was	Don't remember	0
	discussed?		
015	Based on what you heard,	a	1
	please recall the top three	b	1

	messages that you got from	C	1
	the assembly.		
016	Have you encountered	Yes	1
	information on anti-	No	0
	microbial use in the media?	Don't remember	0
017	Please recall the top three	a	1
	messages that you got from	b	1
	the media.	c	1
018	Are you a member in farmer	Yes	1
	organizations in your	No	0
	community?		
	,		
019	Do you join farmers'	All the time	2
	assemblies/seminars/field	Often	1
	days/field school?	Rarely	0
	days/ field serioor:	Not at all	0
020	Do you discuss farm	Yes	1
	management practices with	No	0
	other farmers?		
021	Do you know of a farmer	Yes	1
	scientist or model farmer in	No	0
	your community?	Don't know	0

COMMUNICATION PREFERENCES

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)

	Rank (1-3)	Average time (hours/per day)			
Source		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)

•	·	Aver		rage time (hours/per day)		
Source		ank (1-3)	Less than 1 hour	1-2 hours	2-4 hours	More than 4 hours
Televisio	n					
Radio						
Newspap	per					
Internet						
Social me	edia					
Others: _						
003	Which media/informational sources do you usually seek information on animal health issues? (Select all that apply)	Anima		ır		1 1 1 1 1
004	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)	
Posters						
Leaflets						
Brochure						
Booklets						
	ommunity billboards					
Others: _						
Posters		· · · · · ·				1
005	From whom do you prefer		v farmers			0
	to learn about		nunity leaders			1
	antimicrobial use and antimicrobial resistance?		ultural technicians of the			2
	antimicrobial resistance:	_	rnment			3
			alth authorities (i.e., veterinarians, dical doctors, etc.)		4	
			uppliers and ag	•		5
			s (please speci t			5
	What do you want to	a.	(p. 222 3 p 20 11	· / · · · · · · · · · · · · · · · · · ·		1
	know more about	1-				1
	antimicrobial resistance				_	1
	and antimicrobial use?				_	