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

		INTERVIEWEE IDENTIFIE	CATION	
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		

#### **SOCIO-DEMOGRAPHIC QUESTIONS**

#	Question	Answer Choices	Code	
		FARMER PROFILE		
SD1	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	_post-graduate _graduate _college _technical _high school _elementary _some schooling -none	7 6 5 4 3 2 1
SD2	Age		*input age*	
SD3	Gender	MaleFemaleOthers (please specify):	_male _female _*input*	0
SD4	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	_less than 1 yr _1-2 yrs _2-5 yrs _5+ yrs	0 1 2 3
SD5	Do you consider farming your main occupation?	<ul><li>No</li><li>Yes</li><li>If not, what is your other occupation other than in farming?</li></ul>	_*input* _yes _*input*	0

Tenurial Status of Farmer							
SD6	If farming is your main occupation, do you own the farm?	No Yes	_no _yes	1			
SD7	If not an owner of the farm, what is your work arrangement in the farm?	Farm managerFarm caretakerHired farm helperOthers (please specify):	_manager _caretaker _hired helper _*input*	0 1 2			
		Farm Type and Scale					
SD8	How would you classify your farm?	SubsistenceBackyardIntegrated farmSmall-scale commercial farmMedium-scale commercial farmLarge-scale commercial farmOthers (please specify):	_subsistence _backyard _integrated _small-scale _medium_scale _large_scale _*input*	0 1 2 3 4 5			
SD9	If large-scale farming, are you a contract grower of a food company?	No Yes	_no _yes	1			
SD10	If contract grower, how much is your quota?		*input quota per year*				
SD11	Where is your farm located?	Upland Lowland Others (please specify):	_upland _lowland _*input*	0 1 2			
SD12 (a-f)	Where is your farm erected? (Please select all that apply) erected?	In a flatland (SD12a)In a sloping area (SD12b)Near a body of water (i.e., pond, creek, river, lake, or sea) (SD12c)Near a farm irrigation system (SD12d)Near community houses (SD12e)Others (please specify): (SD12f)	_yes/no _yes/no _yes/no _yes/no _yes/no _yes/no _*input*/no	1/0 1/0 1/0 1/0 1/0 1/0			
SD13 (a-h)	How do you use the surrounding area of your farm? (Please select all that apply)	Vegetable farming (SD13a)Rice farming (SD13b)Housing (SD13c)Flower gardening (SD13d)Solar drying (SD13e)Seedling nursery (SD13f)	_yes/no _yes/no _yes/no _yes/no _yes/no _yes/no	1/0 1/0 1/0 1/0 1/0 1/0			

			the surrounding area unu	sed	_yes/no	1/0
		(SD13g)Others (please specify) (SD13h)			_*input*/no	1/0
			Stock Density			
SD14	What animals do	A	•			
(a-i)	you raise in your farm?  Animal Types (Select all that apply)			Input number of he	eads	
	laillir	·	(SD14a)			
			o (SD14b) SD14c)			
		Goat ( Pig (SI	•			
			en (SD14e)			
		Fish (S	•			
			(SD14g)			
			s (SD14h)			
			s name (SD14i)		*input name*	
SD15	How do you keep	Free-r	•		_free-range	0
0010	your animals in the	Organ	•		organic	1
	farm?	Yardin			_yarding	2
		In cap	•		in captivity	3
			s ( <b>please specify</b> ):		_*input*	4
SD16	If raised in captivity,		of cage/pen do you use for	your anima	ls? (Please select all t	hat
(a-c)	apply) _yes/no					
	Swine (SD16aa-	-ac)	Poultry (SD16ba-be)	Aquacu	lture (SD16ca-ce)	
	Free-range		Free-range	Fresh w	ater pond:	1/0
	In pens		Battery cage	Brackish	water	1/0
	Others:(input)		Furnished Cage	Fish pen		1/0
			Grow out houses	Integrat	ed fish farming	1/0
			Others: (input)	Others:	(input)	1/0
SD17	In your estimation,		*sketch if necessary*		*input estimated ar	ea in
	what size is your				meters squared*	
	pen/cage/pond					
SD18	In your estimation,		*tally if necessary*		*input estimated	
	how many are				number*	
	raised in each					
	pen/cage/pond?					
SD19	What kind of	Native			_native	0
	animal breeds do	Exotic			_exotic	1
	you raise in the	Crossk			_crossbreed	2
	farm	Hybrid			_hybrid	2
			of native and exotic breeds	5	_mix	3
SD20	If a mix of native		y separated		_strictly separated	0
	and exotic breeds,		ated but may come in close	contact	_separated w/	1
	how do you keep		each other		contact	
	your native and	·	(co-mingled)		_mixed	2
	hybrid animals	otner	s (please specify):		_*input*	3

			Animal Nutrition and Biosecurity			
SD21	What kind of feeds	N	on-commercial feeds		_non-commercial	0
	do you use in the	C	ommercial feeds		_commercial	1
	farm?					
SD22		com	mercial feeds do you use in the farr	n? ( <b>Plea</b> s	se select all that apply	<b>/</b> )
	(_yes/no)				l: (00001 I I)	1
	Swine (SD22aa-af)		Poultry (SD22ba-bf)		culture (SD22ba-bd)	. /-
Start			Starter		ural feed	1/0
Grov			Grower		olementary feed	1/0
Finis			Finisher	Com	plete feed	1/0
	ster and vitamin-enrich	ied	Booster and vitamin-enriched			1/0
feed			feeds			
	ls with antimicrobials		Feeds with antimicrobials			1/0
Othe	ers:		Others:(input)	Oth		1/0
(input)	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\			(input)		1 /0
SD23	What kind of		or Breeding (SD23a)		_yes/no	1/0
(a-e)	animal products does your farm		ve (SD23b) or slaughter (SD23c)		_yes/no _yes/no	1/0 1/0
	produce?		nimal by-products (i.e., eggs, meat,	etc )	_yes/no _yes/no	1/0
	produce:		SD23d)	etc.)	_yes/110	1/0
		,	•	SD23e)	_*input*/no	1/0
SD24	How often do you		veryday	,	everyday	5
	clean the		very other day		_every other day	4
	cages/pens?	0	nce a week		_once a week	3
		0	nce a month		_once a month	2
		A	fter harvest		_after harvest	1
			thers ( <b>please specify</b> ):		_others	0
SD25	What is the method		ry cleaning (SD23a)		_yes/no	1/0
(a-e)	you use for		/et cleaning (SD23b)		_yes/no	1/0
	cleaning your		et cleaning (with chemical disinfect	tants)	_yes/no	1/0
	animals'	(SD2	•			1 /0
	cages/pens? (select all that apply)		/et cleaning (with biocides) (SD23d) thers ( <b>please specify</b> ):(S		_yes/no _*input*/no	1/0 1/0
	ali tilat apply)		thers (please specify)(3	D23e)		1/0
SD26	How do you	C	omposting		_composting	0
3223	dispose animal		ell as fertilizer		_sell	1
	manure and other		hrow in landfill		throw in landfill	2
	farm wastes?	S	eptic tank		_septic tank	3
		V	/ater runoff		_water runoff	4
		0	thers ( <b>please specify</b> ):		_*input*	5
SD27	Have you	Y	es		_yes	1
	encountered or	N			_no	0
	experienced animal	C	an't remember		_can't remember	0
	disease					

	outbreaks in the			
	last 12 months?			
SD28	If yes, what types	Highly Pathogenic Avian Influenza/Bird flu	_yes/no	1/0
(a-f)	of disease	(SD28a)		
	outbreaks did you	Foot and Mouth Disease (FMD) (SD28b)	_yes/no	1/0
	encounter? (Please	Classical swine fever/Swine Cholera (SD28c)	_yes/no	1/0
	check those that	Swine Flu (SD28d)	_yes/no	1/0
	apply)	Newcastle Disease (SD28e)	_yes/no	1/0
		Others ( <b>please specify</b> ): (SD28f)	_*input*/no	1/0
SD29	Is there a	Yes and I consult him/her regularly	_yes, regular	3
	veterinarian in your	Yes and I consult him/her less often	_yes, less often	2
	place?	Yes but I do not consult him/her	_yes, no	1
			consultation	
		There is no veterinarian in my locality	_no	0

# **KNOWLEDGE-RELATED QUESTIONS**

#	Question	Answer choices	Code	
K1	Can you describe what antibiotics are?	Yes No (go to K4) Don't know (go to K4)	_yes _no _don't know	1 0 0
К2	If yes, what do you think antibiotics are intended for? (Please select all that apply.)	As treatment of all types of diseasesAs treatment of specific types of diseasesAs prevention of all types of diseasesAs prevention of specific types of diseasesAs growth boosterDon't knowOthers (please specify):	_treatment all _treatment spec _prevention all _prevention spec _growth booster _don't know _*input*	0 1 0 0 0 0
К3	Please list three antibiotics that you know.	Can't remember (Don't read out until the respondent cannot provide answer)	_*input name* _*input name* _*input name* _can't remember	1 1 1
K4	Can you describe what antimicrobials are	Yes No ( <b>go to K8</b> ) Don't know ( <b>go to K8</b> )	_yes _no don't know	1 0 0
K5	If yes, what do you think antimicrobials are intended for? (Please select all that apply.)	As treatment of all types of diseasesAs treatment of specific types of diseasesAs prevention of all types of diseasesAs prevention of specific types of diseasesAs growth boosterDon't knowOthers (please specify):	_treatment all _treatment spec _prevention all _prevention spec _growth booster _don't know _*input*	0 1 0 0 0
K6	Please list three antimicrobials that you know.	Can't remember (Don't read out until the respondent cannot provide answer)	_*input name* _*input name* _*input name* _can't remember	1110
K7	Do you think there is a difference between antibiotics and antimicrobials?	Yes No Don't know	_yes _no _don't know	1
	1	Prior Exposure to AMU/AMR Information	T	
K8	Have you heard of antibiotic resistance?	Yes No ( <b>go to K11</b> )	_yes _no	0

К9	Where did you hear	From TV, please specify channel or program:	_*input*/no	1/0
	about antibiotic resistance?	(K9_tv)From radio, please specify station or	_*input/no	1/0
		program:(K9_radio)	,	1 /0
		From my friends (K9_friends)	_yes/no	1/0
		From a village seminar (K9_seminar)	_yes/no	1/0
		Social media such as Facebook, Twitter or Instagram (K9_socmed)	_yes/no	1/0
		Others: (K9_others)	_*input*/no	1/0
K10	Select in the list below, what best	Antibiotic resistance is dangerous but don't know how to describe	_wrong	0
	describes <u>antibiotic</u> <u>resistance</u> . ( <b>please</b>	When an infection cannot be treated because the medicine is ineffective	_wrong	0
	select all that apply)	When bacteria develop resistance to one or more antibiotics	_correct	1
	1	l'm not sure or don't know ( <b>Don't read out</b> until the respondent cannot provide	_wrong	0
		answer)		
K11	Have you heard of	Yes	_yes	1
	antimicrobial resistance?	No ( <b>Go to K14)</b>	_no	0
K12	Where did you hear about antimicrobial	From TV, please specify channel or program: (K12_tv)	_*input*/no	1/0
	resistance?	From radio, please specify station or program: (K12_radio)	_*input/no	1/0
		From my friends (K12_friends)	_yes/no	1/0
		From a village seminar (K12_seminar)	_yes/no	1/0
		Social media such as Facebook, Twitter or Instagram (K12_socmed)	_yes/no	1/0
		Others: (K12_others)	_*input*/no	1/0
K13	Select in the list below, what best	Antimicrobial resistance is the same as antibiotic resistance	_wrong	0
	describes antimicrobial	Antimicrobial resistance is dangerous but I don't know how to describe	_wrong	0
	resistance. (please select all that apply)	Antimicrobial resistance is when infections cannot be treated because medicine lose their potency or effectiveness.	_wrong	0
		Antimicrobial resistance is when bacteria develop resistance to antimicrobials such as antibiotics	_correct	1
		l'm not sure or don't know ( <b>Don't read out</b> until the respondent cannot provide answer)	_wrong	0
K14	From the list below, please select what	For treatment of infection in your animals (pig, chicken or fish)	_yes/no	1/0
	you think is the	To promote growth in my animals/fish	_yes/no	0/1
		To prevent infection in my animals/fish	_yes/no	1/0

	best time to use	Whenever I feel like using it	_yes/no	0/1
	antibiotics	Don't know	_don't know	0
K15	From the list below,	Antibiotics fight bacteria, so it is safe to use	_yes/no	0/1
	how do you assess	Antibiotics promote growth, so it is safe to	_yes/no	0/1
	the risk of	use		
	antibiotics in	Animals/fish develop resistance to bacteria,	_yes/no	1/0
	animals/fish (please	which can be passed on to people		
	select all that	Diseases can be hard to treat because	_yes/no	1/0
	apply)	animals/fish might develop resistance to		
		bacteria		
		There is no risk in using antibiotics in	_yes/no	0/1
		animals		
		Don't know	_yes/no	0/1
K16	Please describe	(answer)	_*input answer*	1
	how the use of	Don't know/No comment	_don't know*	0
	antibiotics in farm			
	animals could			
	affect you and your			
	family			

**K17**. 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 <sup>1</sup>	1	2	3	4	5
(K17a) Anti-biotics have the same effect as anti-					
inflammatory drugs					
(K17b) Different antibiotics are needed to cure different					
animal diseases					
(K17c) Antibiotics speed up the recovery from most					
animal diseases					
(K17d) Antibiotics are effective against bacteria					
(K17e) Antibiotics are effective against viral diseases					
(K17f) If the animals get side effects during a course of					
antibiotics treatment you should stop giving them as					
soon as possible.					
(K17g) If the animals get some kind of skin reaction					
when using an antibiotic, you should not give the same					
antibiotic again.					
(K17h) The unnecessary use of antibiotics would lessen					
its efficacy					

<sup>1</sup> Modified from Jifar and Ayele (2018)

#### ATTITUDE-RELATED QUESTIONS

		Perceived Severity		
A1	From a scale of 1 to 5 (1 being the	Very Serious	_very serious	5
	least serious and 5 being very	Serious	_serious	4
	serious) how would you rate your	Moderately Serious	_moderately serious	3
	situation if one of your family	Slightly Serious	_slightly serious	2
	members has an infection that	Least Serious	_least serious	1
	cannot be treated with medicine?			
A2	From a scale of 1 to 5 (1 being the	Very Serious	_very serious	5
	least serious and 5 being very	Serious	_serious	4
	serious) how would you rate your	Moderately Serious	_moderately serious	3
	situation if one or some of your	Slightly Serious	_slightly serious	2
	animals have an infection that	Least Serious	_least serious	1
	cannot be treated with medicine?			

A3. 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
A3a	Antimicrobials such as antibiotics protect both humans and					
	animals from diseases					
A3b	Antibiotics are important to improve animal production					
A3c	If I feel or see that the animals are healed after a few days, I					
	stop giving antibiotics before completing the course of treatment. <sup>2</sup>					
A3d	I prefer to keep antibiotics at home in case there may be a need for the animals later. <sup>2</sup>					
A3e	It is good to be able to get antibiotics from relatives or friends without having to see a veterinarian. <sup>2</sup>					
A3f	I always complete the course of treatment with antibiotics even if I see that the animal is healed. <sup>2</sup>					
A3g	I prefer to be able to buy antibiotics from the Agrivet-dealers without a prescription. <sup>2</sup>					
A3h	If the animals get side effects during a course of antibiotics					
	treatment you should stop giving them as soon as possible. <sup>2</sup>					

<sup>&</sup>lt;sup>2</sup> Modified from Jifar and Ayele (2018)

# PRACTICE/BEHAVIOUR-RELATED QUESTIONS

#	Questions	Answers with choices	Code	
P1	When your animals	Assess animal's condition	_assess condition	0
	are sick, what do you	Consult with vet	_consult vet	1
	first do?	Assess animal's living space	_assess living space	2
		Treat with over-the-counter	_treat w/ otc	3
		veterinary drugs		
		Treat with traditional methods (e.g.,	_treat w/ traditional	4
		use of natural remedies)	medicine	
		·		
		Treat with antibiotics	_treat w/ ab	5
		Others (please specify):	_*input	6
P2	Do you use antibiotics	Yes	_yes	1
	in your farm?	No	_no	0
		Don't know	_don't know	0
Р3	What are your reasons	prevent sickness (P3a)	_yes/no	1/0
(a-d)	for using antibiotics in	treat sick animals (P3b)	_yes/no	1/0
	your farm? (Select all	growth promotion (P3c)	_yes/no	0/1
	that apply	Others (please specify): (P3d)	_*input*/no	0/1
P4	Have you used	Highly Pathogenic Avian	_yes/no	1/0
(a-f)	antibiotics to treat any	Influenza/Avian flu (P4a)		
	of the following	Foot and mouth disease (P4b)	_yes/no	1/0
	diseases? (Select all	Classical swine fever (P4c)	_yes/no	1/0
	that apply)	Swine flu (P4d)	_yes/no	1/0
		Newcastle disease (P4e)	_yes/no	1/0
		Others: (P4f)	_*input*/no	1/0
	Administra	tion: Prophylaxis, Metaphylaxis, Treatment	, Biocidal)	•
P5	When your animals	Just the animals that are sick	_sick	1
	are sick, you make	Both sick animals and all of the	_sick and near	0
	sure to give antibiotics	animals in close proximity to them		
	to:	All animals in the farm	all	0
		Others (please specify):	_*input*	0
P6	How do you use	Mixed with feeds (P6a)	_yes/no	1/0
(a-d)	antibiotics in your	Liquid mix (P6b)	_yes/no	1/0
	farm?	Injected (P6c)	_yes/no	1/0
		Others (please specify):	_*input*/no	1/0
		(P6d)		
P7	Usually, who	A (P7a)	*input name*	1
(a-b)	administers the	B(P7b	*input name*	1
	antibiotics to animals?			
P8	How often do you use	Everyday	_everyday	0
	antimicrobials such as	At least once a week	_once a week	1
	antibiotics in your	At least once every two weeks	_every two weeks	2
	farm?	At least once a month	once a month	3

		At least once every six months	_every six months	4
		At least once a year	, once a year	5
		Only when needed	_only when needed	6
		Access Points		
P9	From whom did you	Neighbors/Other farmers (P9a)	_yes/no	1/0
(a-g)	learn about the use of	Leaders in the community (P9b)	_yes/no	1/0
	antibiotics in farms?	Agri-supply agents/suppliers (P9c)	_yes/no	1/0
	(Select all that apply)	Agricultural technicians/Government	_yes/no	1/0
		authorities (P9d)	,	
		Veterinarian (P9e)	_yes/no	1/0
		Self-taught/Own research (P9f)	_yes/no	1/0
		Others (please specify):	_*input*/no	1/0
		(P9g)		
P10	Where do you get the	From friends (P10a)	_yes/no	1/0
(a-f)	antibiotics that you	Neighborhood store (P10b)	_yes/no	1/0
	use in your	Animal feed store (P10c)	_yes/no	1/0
	farm? (Select all that	Animal pharmaceutical store (P10d)	_yes/no _yes/no	1/0
	apply)	Human pharmacy (P10e)Others: (please specify)	yes/no *input*/no	1/0 1/0
		(P10f)		1/0
	Consultation	with Veterinarian or other Animal Health Pr	rofessionals	
P11	Do you usually get a	Yes	yes	1
	professional advice	Sometimes	_sometimes	1
	before buying	No	_no	0
	antibiotics for use in	_		
	your farm?			
P12	Do you usually ask a	Yes ( <b>Go to 16</b> )	_yes	1
	veterinarian's	Sometimes	_sometimes	0
	prescription when you	No	_no	0
	buy antibiotics for			
	your farm?			
240	I sed to the second	Non-use of Prescription		1 /0
P13	Why do you not seek	It is easy to buy directly from the store	_yes/no	1/0
(a-e)	professional advice in	(P13a)	yas/na	1/0
	buying antibiotics? (Select all that apply)	There is no veterinarian/para- veterinarian in my village (P13b)	_yes/no	1/0
	(Select all that apply)	There are veterinarians/para-	_yes/no	1/0
		veterinarians but are hard to seek	yes/110	1/0
		advice (P13c)		
		I don't see the need for seeking advice	_yes/no	1/0
		(P13d)		1,0
		Others: ( <b>Please specify</b> )	_*input*/no	1/0
		(P13e)		
P14	When you decide to	A(P14a)	_*input name*	1
(a-c)	buy antibiotics	B(P14b)	_*input name*	1
	without a	C(P14c)	_*input name*	1
	veterinarian's	D. Can't remember	can't remember	0

	prescription, which ones do you use?			
P15	How do you ensure	Check expiry date (P15a)	_yes/no	1/0
(a-e)	the quality of	Make sure I got it from the pharmacy	_yes/no	1/0
( ,	antimicrobials such as	(P15b)		, ,
	antibiotics that you	I go for certain brands (P15c)	_yes/no	1/0
	bought? ( <b>Select all</b>	I go for the seller's recommendations	_yes/no	1/0
	that apply)	(P15d)		
		I go for other's recommendations	_yes/no	1/0
		(family members, friends, neighbors,		
		etc.) (P15e)		
		None of the above (P15f)	_yes/no	0/1
		Length of Administration		
P16	When using	As prescribed or as per	_as presc	1
	antibiotics, how long	manufacturer's recommendations		
	do you use it in your	More than what was prescribed or	_more presc	0
	farm?	manufacturer's recommendations		
		Before the end of the prescribed	_before end	0
		course or manufacturer's		
		recommendations		
		For as long as I feel suitable	_as feel	0
		Others:	_*input*	0
P17	What records do you	Vaccination record (P17a)	_yes/no	1/0
(a-f)	keep in managing your	Animal population (P17b)	_yes/no	1/0
	farm? (Please select all	Antibiotics administered/used (P17c)	_yes/no	1/0
	that apply)	Disinfectant records (P17d) Sales records (P17e)	_yes/no _yes/no	1/0 1/0
		Others: (P17f)	*input*/no	1/0
		Storage and Disposal		1/0
P18	Do you keep the	Yes (Go to Q20)	Voc	1
L 10	excess antibiotics?	No (Go to <b>Q21)</b>	_yes no	0
P19	Please describe what	No (Go to <b>Q21)</b> Throw in the garbage (P19a)	_yes/no	1/0
(a-g)	you do with excess	Flush in the toilet (P19b)	_yes/no	1/0
(α β)	antibiotics (Select all	Bury in the ground (P19c)	_yes/no	1/0
	that apply)	Burn them (P19d)	_yes/no	1/0
		Give to my neighbors/other farmers	_yes/no	0/1
		(P19e)		, ,
		Keep them for future use (P19f)	_yes/no	0/1
		Others (please specify):(P19g)	_*input*/no	1/0
P20	How long do you keep	1-3 months	_1-3 months	0
	excess antibiotics?	4-6 months	_4-6 months	0
		7-12 months	_7-12 months	0
		More than 12 months	_12+ months	0
		I don't keep excess antibiotics	_don't keep	1
P21	Where do you usually	Cool dry place	_cool	1
	keep your antibiotics?	In the animal's living space	_animal space	0
		Under direct sunlight	_under sun	0

		Moist area	_moist	0			
		Others (please specify):	*input*	0			
Withdrawal Period for Antibiotics							
P22	How long do you stop	1-15 days	_1-15 days	0			
	using antibiotics	16-28 days	_16-28 days	1			
	before selling your	29-60 days	_29-60 days	2			
	animal or animal by- product?	Others (please specify):	_*input*	3			
P23	What do you do with	Bury properly	_bury properly	1			
	the meat of	Burn the dead body	_burn dead body	0			
	slaughtered sick	Sell the meat	_sell meat	0			
	animal?	Others ( <b>please specify</b> ):	_*input*	0			
	Intention to	use antibiotic alternatives and learn	about antibiotics				
l1	If you're using	Yes	_yes	1			
	antibiotics in your	No	_no	0			
	farm, would you be	Not sure	_not sure	0			
	willing to use an						
	alternative instead of						
	antibiotics?						
12	If you're <b>NOT</b> using	Yes	_yes	1			
	antibiotics in your	No	_no	0			
	farm, would you be	Not sure	_not sure	0			
	willing to use						
	antibiotics in the						
	future to protect the						
	health of your						
	animals?						
13	Please rate your	Interested	_interested	1			
	interest in learning	Neutral	_neutral	0			
	more about	Not interested	_not interested	0			
	antibiotics.						

# POLICY, INFORMATION, AND SOCIO-CULTURAL ENVIRONMENT

#	Questions	Answers with choices	Code	
E1	Is there a national policy	Yes	_yes	1
	that specifies the operation	No	_no	0
	of agricultural farms in your	I don't know	_I don't know	0
	country?			
E2	Is there a local ordinance	Yes	_yes	1
	that regulates the operation	No	_no	0
	of agricultural farms?	I don't know	_I don't know	0
E3	Is there a national policy	Yes	_yes	1
	governing sanitary practices	No	_no	0
	of agricultural farms in your	I don't know	_I don't know	0
	country?			
E4	Is there a local ordinance	Yes	_yes	1
	governing sanitary practices	No	_no	0
	of agricultural farms?	I don't know	_I don't know	0
E5	Is there sanitary	Yes	_yes	1
	officer/inspector in your	No	_no	0
	area?	I don't know	_I don't know	0
E6	Does the sanitary inspector	Yes	_yes	1
	visit your farm?	No	_no	0
		I don't know	_I don't know	0
E7	How often does s/he visit	Weekly	_weekly	2
	your farm?	Once a month	_once a month	2
		Once every three months	_every three months	2
		Twice a month	_twice a month	2
		Twice a year	_twice a year	2
		Once a year	_once a year	1
		Never at all	_never at all	0
		Can't remember	_can't remember	0
E8	Can you describe your	Yes	_yes	1
	country's laws on using	No (Go to E10)	_no	0
	prescription veterinary	I don't know (Go to E10)	_I don't know	0
	drugs?			
E9	If yes, please list down the	a	_*insert name*	1
	laws you know or are	b	_*insert name*	1
	familiar with:			
E10	Can you describe your	Yes	_yes	1
	country's laws on	No (Go to E12)	_no	0
	dispensing/disposing	I don't know (Go to E12)	_I don't know	0
	veterinary drugs?			
E11	If yes, please list down the	a	_*insert name*	1
	laws you know or are	b	_*insert name*	1
	familiar with:			

E12	Have you heard about	Yes	_yes	1
	government programs on antimicrobial use in your	No (Go to E14) Not sure (Go to E <b>14</b> )	_no _not sure	0 0
	community?		_1100 3010	0
E13	Can you name these	a	_*insert name*	1
	programs?	b	_*insert name*	1
		C	_*insert name*	1
E14	Have you been to a	Yes	_yes	1
	community assembly where	No (Go to E16)	_no	0
	antimicrobial use was discussed?	Don't remember (Go to E16)	_don't remember	0
E15	Based on what you heard,	a	_*insert name*	1
	please recall the top three	b	_*insert name*	1
	messages that you got from	C	_*insert name*	1
	the assembly.			
E16	Have you encountered	Yes	_yes	1
	information on anti-	No (Go to E18)	_no	0
	microbial use in the media?	Don't remember (Go to E18)	_don't remember	0
E17	Please recall the top three	a	_*insert name*	1
	messages that you got from	b	_*insert name*	1
	the media.	c	_*insert name*	1
E18	Are you a member in farmer	Yes	_yes	1
	organizations in your	No	_no	0
	community?			
E19	Do you join farmers'	All the time	all the time	2
	assemblies/seminars/field	Often	often	1
	days/field school?	 Rarely	_ _rarely	0
	days/ field selloof:	Not at all	_not at all	0
E20	Do you discuss farm	Yes	_yes	1
	management practices with	No	_no	0
	other farmers?			
E21	Do you know of a farmer	Yes	_yes	1
	scientist or model farmer in	No	_no	0
	your community?	Don't know	_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)

		Aver	ours/per da	y)	
Source	Rank (1-3)	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)

Average time (hours/per day) More Source Rank (1-3) Less than 1 1-2 than 2-4 hours hour hours 4 hours Television Radio Newspaper Internet Social media Others: ...1 C3 Which Television (C3a) yes/no (a-f) media/informational Radio (C3b) \_yes/no ...1 sources do you \_\_Internet (C3c) \_yes/no ...1 usually seek \_\_SNS (C3d) \_yes/no ...1 \_yes/no information on Animal health worker (C3e) ...1 \_\*input/no animal health \_Other: \_\_\_\_\_ (C3f) ...1 issues? (Select all that apply) C4 From the following list, rank the top three information materials you find most useful for providing information on animal health/farm issues. (a-c) Source Rank (1-3) Posters Leaflets

Brochures				
Booklets				
Village	c/community billboards			
Others	s:			
Poster	-S			
C5	From whom do you	Fellow farmers	_fellow farmers	0
	prefer to learn	Community leaders	_community leaders	1
	about antimicrobial use and	Agricultural technicians of the government	_gov agri-technicians	2
	antimicrobial resistance?	Health authorities (i.e., veterinarians, medical doctors, etc.)	_health authorities	3
		Agri-suppliers and agents Others ( <b>please specify</b> ):	_agri-suppliers and agents	4
			_*input*	5
C6	What do you want	a	*input*	1
(a-c)	to know more about	b	*input*	1
	antimicrobial	c	*input*	1
	resistance and antimicrobial use?			

### 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\_aveentrtime1-3 | less than 1 hr, 1-2 hrs, 2-4 hrs, 4+ hrs)

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

Rank (C3\_1-3 | tv, radio, internet, sns, animal health worker, \*other\*)