

Questionnaire Code

<i>Questionnaire number</i>	<i>Interviewer Initials</i>	<i>Sub-district</i>

Mosquito Knowledge, Attitude and Practices by Communities in the Serowe, Palapye and Bobirwa Sub-districts, Botswana.

Household Questionnaire

GENERAL

Respondent name(s):	Surname: _____ First name: _____
Date :	____/____/____
Interviewer Name:	____ Interviewer ID _____
	Sub-district: _____
Location ID :	Village/ Town: _____
	GPS Coordinates _____

SECTION 1.0 DEMOGRAPHICS

1.1	What is your gender? 1= Male, 2= Female	
1.2	What is your age range? 1=18- 29 years, 2=30-39 years, 3=40- 49 years, 4= 50- 59 years, 5= ≥60 years	
1.3	What is your marital status? 1= Married, 2= Divorced, 3= Widowed, 4= single (never married), 5= Other (specify).....	
1.4	Are you disabled? 1= Yes, 2= No, 3= Prefer not to say	
1.5	Are you literate? 1= Yes, 2= No, 3= Prefer not to say	
1.6	What is your highest level of education? 1= None, 2= Primary, 3= JC, 4= Form 4-5 (senior), 4= vocational, 5= Tertiary, 6= Prefer not to say, 7= Other (Specify).....	

Questionnaire Code

--	--	--

Questionnaire number Interviewer Initials Sub-district

1.7	What is your profession? 1= Farmer, 2= Self-employed, 3= Entrepreneur, 4= Employee, 5= Not working, 6= Other (Specify).....	
1.8	How do you access information about mosquitoes and mosquito-borne diseases? (May select more than one). 1= Audio/visual source (Radio/TV), 2=Health professionals, 3=Print media (newspapers and others), 4= Electronic sources (Cellphone, computers and others) 5= Friends/ family/ relatives, 6 = Own experience, 7 = Other (Specify).....	
1.9	How many of you are staying on the property? 1= 1-2, 2= 3-5, 3= 5-10, 4= >10	
1.10	Which of the following are found in your property? (May give more than one) 1= JoJo tank, 2= flowerpots, 3 = gutter, 4 = old tyres, 5= indoor containers, 6= None of the above, 7= Other artificial containers (Specify).....	
1.11	If your answer is 2 in 1.10, where are the flowerpots located? (If no, continue to 1.12) 1= In the house, 2= Outside in the veranda/ porch/ terrace/ balcony, 3= Outside around the house, 4= Outside distant from the house, Other (Specify).....	
1.12	Do you have a pit latrine in your yard? (If no, continue to 1.15) 1= Yes, 2= No	
1.13	If yes to 1.12, are there signs of mosquitoes in it? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
1.14	Do you think it encourages mosquito breeding? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
1.15	Is there a drainage system in your yard? (If no, continue to 1.18) 1= Yes, 2= No	
1.16	If yes to 1.15, do you think it has an effect on mosquito breeding? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
1.17	Are there signs of mosquitoes in the drainage system? 1=Yes, 2=No, 3= Not sure, 4= Don't know, 5= Did not check	
1.18	Do you have stagnant waters in the yard, either 'natural'/artificial? (If your answer is 2,3 or 4, continue to 2.1) 1=Yes, 2=No, 3= Not sure, 4= Don't know	
1.19	If yes to 1.18, are there signs of mosquito activity? 1=Yes, 2=No, 3= Not sure, 4= Don't know	

SECTION 2.0 KNOWLEDGE

2.1	Do you know mosquitoes? 1= Yes, 2= No, 3= Not sure, 4= I don't know	
------------	---	--

Questionnaire Code

--	--	--

Questionnaire number Interviewer Initials Sub-district

2.2	How do you identify them? 1= Colour, 2= Size, 3= Sound, 4= body parts, 5= Taxonomy key, 6= Specify.....	
2.3	How many types of mosquitoes do you know? 1=0, 2=1, 3=2, 4=3, 5=4, 6= >5	
2.4	Can you identify the different types of adult mosquitoes? 1= Yes, 2= No, 3 =Not sure, 4= Don't know	
2.5	Have you seen an adult mosquito in the last 3 months? 1= Yes, 2= No, 3= Not sure	
2.6	If yes to 2.5, what is the colour of the mosquito(es) you have seen? 1= Light brownish, 2= black and white, 3= Not sure, 4= Other (Specify).....	
2.7	Do you know mosquitoes go through different developmental stages? 1= Yes, 2= No, 3= Not sure, 4= I don't know	
2.8	Have you ever seen the following developmental stages of mosquitoes apart from adults? (If no to all, continue to 2.10) 1. Eggs Yes.....No..... 2. Larvae Yes.....No..... 3. Pupae Yes.....No.....	
2.9	If yes to 2.8, where did you see them?	
2.10	Did you experience a mosquito bite in the last summer (October to March) in your village? 1= Yes, 2= No, 3= None, 4= Not sure, 5= Don't know	
2.11	If yes to 2.10, how many bites in a day? 1= Too many to count, 2= Many, 3= Moderate, 4= Few, 5= Very few	
2.12	Did you experience in your village, a mosquito bite in winter (April to July)? 1= Yes, 2= No, 3= None, 4= Not sure, 5= Don't know	
2.13	If yes to 2.12, how many bites in a day? 1= Too many to count, 2= Many, 3= Moderate, 4= Few, 5= Very few	
2.14	Where did you get bitten by the mosquito? 1= Indoors, 2= Outdoors, 3= Both indoors and outdoors, 4= I don't know	
2.15	What time of the day did you normally experience mosquito bites? 1= Morning, 2= Noon, 3= Afternoon, 4= Evening, 5= Night, 6= Other (Specify).....	
2.16	Which part of the body received lots of bites? 1= head, 2= neck, 3= chest, 4= back area, 5= arms, 6= legs, 7= Other (Specify)	
2.17	Do you think mosquitoes can transmit HIV during blood feed? 1= Yes, 2= No, 3= None, 4= Not sure, 5= Don't know	

Questionnaire Code

--	--	--

Questionnaire number Interviewer Initials Sub-district

2.18	What time of the year are mosquitoes abundant? (May choose more than one) 1= Winter, 2= Spring, 3= Summer, 4= Autumn, 5= All year round, 6= Not sure, 7= Other (Specify).....	
2.19	Do mosquitoes get plenty when it is hot or cold? 1= Hot, 2= Cold, 3= Both Hot and Cold, 4= Not sure, 5= Don't know	
2.20	In your opinion, what is the general trend of mosquito abundance over the past 10yrs? 1= increasing, 2= decreasing, 3= No change, 4= Don't know	
2.21	If your answer to 2.20 is 1, what do you think is the main contributing factor? 1= Temperature, 2= Precipitation, 3= hosts, 4= I don't know, 5= Other (Specify).....	
2.22	Which diseases do you think mosquitoes may spread?	
2.23	Do you know signs and symptoms of any diseases you mentioned? 1= Yes, 2= No, 3= None, 4= Not sure, 5= Don't know	
2.24	If yes in 2.23, state one disease and its signs and symptoms. Disease.....	Signs & symptoms
2.25	Do you know: a (i) Yellow fever? 1=Yes, 2=No, 3= Not sure, 4= Don't know..... a (ii) what vectors itand its parasite?..... b (i) Dengue fever? 1=Yes, 2= No, 3= Not sure, 4= Don't know..... b (ii) what vectors itand its parasite?..... c (i) human malaria? 1=Yes, 2= No, 3= Not sure, 4= Don't know..... c (ii) what vectors itand its parasite?..... c (iii) how is it diagnosed locally? d (i) Elephantiasis? 1=Yes, 2=No, 3= Not sure, 4= Don't know..... d (ii) what vectors itand its parasite?..... e (i) avian malaria? 1=Yes, 2= No, 3= Not sure, 4= Don't know..... e (ii) what vectors it?and its parasite?.....	
2.26	Have you ever suffered from a mosquito-borne disease? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
2.27	Do you know anyone who suffered from a mosquito-borne disease? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
2.28	If your answer to 2.26 and 2.27 is yes. Which diseases?	

Questionnaire Code

Questionnaire number	Interviewer Initials	Sub-district

	
2.29	Are there any new types of mosquito species in your area that were not here before? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
2.30	Do you have cattle in your area/ village? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
2.31	If yes to 2.30, are there reared in fenced farms or unfenced communal areas? 1= Fenced farms, 2=Unfenced communal areas, 3= Not sure, 4= Don't know	
2.32	As far as Cattle interact with the environment, do you think this may have an effect in mosquito numbers? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
2.33	Do you think cattle dung (and other waste products) dropped in water bodies can be a good resource for breeding mosquitoes? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
2.34	If water is contaminated with dung, what effect do you think it has on the numbers of breeding mosquitoes? 1= Increase, 2= Decrease, 3= Same, 4= Not sure, 5= I don't know	

SECTION 3.0 ATTITUDE

3.1	What do you think about the 'economic' significance of mosquitoes in your area? 1= No concern, 2= Pose a health risk, 3= Nuisance 4= Other (Specify)	
3.2	Could one mosquito bite be of any health risk? 1=Yes, 2=No, 3=Not sure, 4= Never	
3.3	After being bitten by a mosquito, what do you do? 1= Nothing, 2= consider protective measures, 3= wait for fever symptoms, 4= visit a clinic, 5= Other (Specify).....	
3.4	How can you rate your concern on a mosquito-borne infection? 1= Strongly concerned, 2= concerned, 3= Less concerned, 4= Not concerned	
3.5	What do you do to discourage mosquito breeding and resting habitats in your property? (May choose more than one) 1= Land clearing, 2=eliminating water holding containers, 3= Nothing, 4= Other (Specify).....	
3.6	What mosquito training do you need? 1= Biology, 2= Identification, 3= Ecology, 4= I do not want, 5= Other (Specify).....	

SECTION 4.0 PRACTICES

Questionnaire Code

--	--	--

Questionnaire number Interviewer Initials Sub-district

4.1	Which method do you use to protect against mosquitoes indoors? 1= Spray with insecticides, 2= Physical kill when spotted, 3= Use bed nets, 4= Electric fan, 5= Mosquito coil, 6= Burning cow dung, 7= Window gauze 8= Nothing, 9= Other (Specify).....	
4.2	If your answer to 4.1 is either 1, 2, 3, 4, 5, 6 or 7, which one(s) are most effective?	
4.3	How do you and your family protect yourselves from mosquito bites? 1= Stay indoors in the evening, 2= Wear long cloths/ sleeves, 3= Apply repellents, 4= Nothing, 5= Other (Specify).....	
4.4	If your answer to 4.3 is either 1, 2 or 3, which one (s) are most effective?	
4.5	Is the government spraying your houses to control mosquitoes? (If no, continue to 4.10) 1=Yes, 2= No, 3=Not sure, 4= I don't know	
4.6	If yes to 4.5, which chemicals are used for spraying? _____	
4.7	Do you think indoor residual spraying (IRS) is effective in controlling indoor resting mosquitoes? 1= Yes, 2=No, 3= Not sure, 4= I don't know	
4.8	After spraying, what happens to mosquito population densities indoors? 1= Increase, 2= Reduce, 3= Same, 4= Not sure, 5= I don't know.	
4.9	After spraying, what happens to mosquito biting rates? 1= Increase, 2= Reduce, 3= Same, 4= Not sure, 5= I don't know.	
4.10	Are there certain parts of the village where mosquitoes are more than others? 1=Yes, 2=No, 3=Not sure, 4= I don't know	
4.11	If yes to 4.10, where and why?	
4.12	Do you know of any animals/ organisms that eat adult mosquito? 1 = Yes, 2=No, 3 = Not sure	
4.13	If yes to 4.12, do you know which ones?.....	
4.14	Do you know any animals/ organisms that eat mosquito juveniles (egg-pupa)? 1= Yes, 2=No, 3 = Not sure	
4.15	If yes to 4.14, Which ones?	

Questionnaire Code

--	--	--

Questionnaire number Interviewer Initials Sub-district

4.16	Cross boarder trading that traverse Serowe, Palapye and/or Bobirwa sub-districts have the risk of imported mosquito-borne infections. Do you agree with this notion? 1= Strongly agree, 2= Agree, 3= Disagree, 4= Strongly disagree, 5= Don't know	
4.17	Do you think cross-border screening of infectious diseases and foreign biological samples effectively carried out? 1=Yes, 2=No, 3= Sometimes, 4= Not sure, 5= Never, 6 Don't know	
4.18	Have you ever travelled to malaria endemic district/ sub-districts (Okavango, Ngamiland, Boteti, Chobe, Tutume, and Bobirwa)? If no continue to 4.21. 1=Yes, 2=No, 3= I can't remember	
4.19	If yes to 4.18, how long was your stay? 1= less than one week, 2= up to two weeks, 3= more than two weeks	
4.20	Did you take any prescribed medication to these malaria endemic districts? 1=Yes, 2=No, 3= I can't remember	
4.21	Do you know any indigenous/ exotic plant that is used to repel mosquitoes? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
4.22	If yes to 4.21, which one(s)?.....	
4.23	Do you know any indigenous/ exotic plant that treats mosquitoes-borne diseases? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
4.24	If yes to 4.23, specify which.....	
4.25	Is there sufficient and available diagnosis and treatment for mosquito-borne diseases in your locality? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
4.26	Is information sharing and awareness practices on mosquitoes and control measures sufficient in your area? 1=Yes, 2=No, 3= Not sure, 4= Don't know	
4.27	If no to 4.26, what can be done to better the situation? 1= Public education, 2= Community training, 3= Workshops, 4= Campaigns, 5= Not sure, 6= Other (Specify).....	