

Additional File 2. RACSMEI Questionnaire

This document presents the full RACSMEI household and individual questionnaire as provided in the Supplementary Information of the study protocol. Questions are organized by thematic modules. Skip patterns are indicated where applicable. The questionnaire was administered by trained interviewers using electronic data capture tools.

Target Population and Module Structure

Target Population	Modules Covered	Key Focus Areas
Household Respondent Only	A, B, C, D I4-I6	Identification, Socio-demographics, Housing, Domestic Animals, Environmental Exposures
All Individuals (2–75 years)	E, F2, F3, F4, F5, F6 (except F6.3)	Health, Recent Illness, Travel History, Individual Animal Contact, Mobility
Adults Only (18 years)	F1, F6.3, G, H	Occupational Exposures, Raw Blood Consumption, Knowledge/Attitudes/Practices (KAP), Climate Perceptions
Animal Sampling (Sub-sample)	I	Animal Roster, Specimen Collection, Biosecurity

Module A – Identification (All Level)

Code	Question	Response options	Variable type	Skip logic
A0	Selected persons for interview	HH / Adult / Children	Categorical (single)	None
A1	Interviewer ID	Dropdown (team list)	Text	None
A2	Interview date	DD/MM/YYYY	Date	None
A3	Start Time		Time	None
A4	End time		Time	Last of question
A5	Province name	Text	Text	None
A6	District name	Text	Text	None
A7	Commune name	Text	Text	None
A8	Village name	Text	Text	None
A9	Household unique ID	Alphanumeric	Text	None
A10	Sample ID	Link with the sample ID on the tube		None
A11	Respondent name	Text	Text	None
A12	Mobile Number	Text	Text	None
A14	Household Referent Confirmation	0. Yes / 1. No	Binary	If No → Go to Module E If Yes → continue

Module A – Socio-demographics (Household Level)

Code	Question	Response options	Variable type	Skip logic
A15	Total Number of household members	Count	Integer	If A14=Yes
A16	Number of eligible household members sleeping in the house at least 4 nights/week [2-75 years old] (including head)	Count	Numeric	If A14=Yes
A17	For how many years, your family has been living in this village?	Count (in years)	Numeric	If A14=Yes
A18	Main Religion of the family	Buddhism / Christianity / Islam / No religion / Prefer not to answer / Other	Categorical (single)	If A14=Yes
A19	Main Ethnicity of the family	Khmer / Khmer Muslim / Vietnamese / Chinese Lao / Vietnamese / Minority ethnics / Prefer not to answer / Other	Categorical (single)	If A14=Yes
A20	Main sources of income	Agriculture, Livestock, animal production/ Fishing, aquaculture /Small business, trade /Salaried employment (public or private) / Daily labor (casual laborers, helpers) / casual work /Remittances (family support) / Social assistance / government support / Other	Categorical (multiple)	If A14=Yes
A21	Household income (monthly)	Amount (USD): under 250 / [250-500[/ [500-1000[/ [1000-1500[/ [1500-2500[/ > 2500	Categorical (ordinal)	If A14=Yes

Module B – Housing, Environment, and Water/Sanitation (Household Level)

Code	Question	Response options	Variable type	Skip logic
B1	Type of house	Apartment, Condo, Flat / Villa / Barn, Cottage / Traditional grounded wooden house / Traditional houses on pillars / Villa modern house / Floating House / Other	Categorical (single)	None
B2	Number of rooms (including kitchen)	Count	Integer	None
B3	Main roofing material	Tile, fibrocement / Brick, stone, concrete / Metal sheets / Thatch, bamboo, palm leave / / Other	Categorical (single)	None
B4	Main wall material	Brick, Stone, Concrete / Wood / Thatch, Bamboo, Palm leave / Other	Categorical (single)	None
B5	Main floor material	Wood / Cement, Brick, Stone / Tiles / / Earth, gravel / Other	Categorical (single)	None
B6	Main source of lighting	Solar panels/ Public Grid / Private generator / Battery / None	Categorical (single)	None
B7	Main cooking heat sources	Wood, Firewood / Charcoal / Gas / Biogas / Electricity / Other	Categorical (single)	None

B8	Which equipment do you have in your household?	Agricultural land / Motorbike / Carts / Tuktuk / Fridge / Air Conditioning / Fan / Phone /	Categorical (multiple)	None
B9	Do you have tap Water Access	0. Yes / 1. No	Binary	None
B10	Water source for drinking	Piped / Borehole / Protected well / Surface water (river, lake, pond) / Rain / Bottled Water / Other	Categorical (single)	None
B11	Do you treat the water you drink?	No treatment / Filtered / Chlorine / Alum / Boil / Other	Categorical (multiple)	None
B12	Water source for washing	Piped / Borehole / Protected well / Surface water (river, lake, pond) / Rain / Other	Categorical (single)	None
B13	Water storage containers present	0. Yes / 1. No	Binary	None
B14	If yes, are containers covered?	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single)	If B13=Yes
B15	Toilet facility available	0. Yes / 1. No	Binary	None
B16	Type of toilet	Indoor toilet / Pit latrine (outdoor) without septic tank / Outdoor collective toilet room with connection to septic tank / Toilet over water or directly connected to the river/lake / Other	Categorical (single)	If B15=Yes
B17	Is there a shower/bathroom inside the house	0. Yes / 1. No	Binary	None
B18	How does your household mainly dispose of its solid waste?	Collected by municipality / Burned near house / Buried / Dumped in open area / Thrown in river/canal / Other	Categorical (multiple)	None
B19	Presence of wastewater or dirty water near your household (within 20 meters)	None / Animal manure / Household waste / Plastic waste / Stagnant wastewater / Others	Categorical (multiple)	None
B20	Distance to nearest health facility	Km	Numeric	None
B21	Distance to nearest school	Km	Numeric	None

Module C – Domestic Animals (Household Level)

Code	Question	Response options	Variable type	Skip logic
C1	During the past 12 months, has your household raised any animal?	0. Yes / 1. No	Binary	None

C2	Which animal species have you raised in your household during the past 12 months? How many per species?	Dog / Cat / Cow / Buffalo / Chicken / Other (specify)	Categorical (multiple)	If C1=Yes
C3	How many have died of illness per species during the past 12 months	Dog / Cat / Cow / Buffalo / Chicken / Other (specify)	Categorical (multiple)	If C1=Yes
C4	Current number of dogs	(Male, Female <1 year) Male, Female >=1 year)	Numerical	If C2_Dogs>0
C5	Have you ever vaccinated your dogs against rabies?	0. Yes, all / 1. Yes, Some / 2. None	Categorical (single)	None
C6	If yes, how did you get the vaccine?	Community Campaign / Own Initiative/Other (specify)		If C5=Yes, all OR Yes, Some
C6.1	Currently, how many of your dogs have been vaccinated less than one year ago against rabies?	Count	Numerical	If C5=Yes, all OR Yes, Some
C7	Current number of cats	(Male, Female <1 year) Male, Female >=1 year)	Numerical	If C2_Cats>0
C8	Have you ever vaccinated your cats against rabies?	0. Yes, all / 1. Yes, Some / 2. None	Categorical (single)	None
C9	If yes, how did you get the vaccine?	Community Campaign / Own Initiative / Other (specify)		If C8=Yes, all OR Yes, Some
C10	Currently, how many of your cats have been vaccinated less than one year ago against rabies?	Count	Numerical	If C8=Yes, all OR Yes, Some
C11	What do you do with cow/buffalo feces?	Left on ground / Collected & reused / Collected & discarded / Other	Categorical (single)	If C2: Cows >0 OR Buffalo >0
C12	What do you do with pigs feces?	Left on ground / Collected & reused / Collected & discarded / Other	Categorical (single)	If C2: pigs >0
C13	What do you do with chicken/duck feces?	Left on ground / Collected & reused / Collected & discarded / Other	Categorical (single)	If C2: Cows >0 OR Buffalo >0
C14	Location of animal housing	Inside house / Adjacent / Separated >50m / Free roaming	Categorical (single)	If C1=Yes
C15	Frequency of cleaning animal enclosure	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single)	If C1=Yes
C16	Did you have any veterinary visits in the past 12 months?	0. Yes / 1. No	Binary	If C1=Yes
C16.1	What type of veterinary professional visited your household?	Provincial veterinarian/ Private veterinarian/ Village animal health worker / NGP, Project staff /Other (Specify)	Categorical (multiple)	If C16=Yes
C17	How many visits did your household have in the past 12 months?	Once / 2-3 times / 4-6 times / More than 6 times / Don't know	Categorical (single)	If C16=Yes
C18	In the last 12 months, have you given antibiotics to any of your animals (pets or livestock)?	0. Yes / 1. No/ 2. Don't know	Categorical (single)	None
C19	What were the reasons for these visits?	Vaccination / Parasite treatment / General health check-up / Injury, wound /Respiratory disease / Diarrhea, digestive problems / Skin care, ectoparasites / Reproductive issues	Categorical (Multiple)	If C16=Yes

		(pregnancy birth problems) / Sudden death of an animal / Animal not eating, weakness / Other		
C20	Are animals vaccinated (other than dogs and cats)?	0. Yes / 1. No/ 2. Don't know	Categorical (single)	If C1=Yes
C21.1	If yes, for which disease(s)?	Cattle, cows, buffalo: Foot and mouth disease / Haemorrhagic speticemia / Brucellosis / Anthrax / Other	Binary (Multiple)	If C20=Yes
C21.2	If yes, for which disease(s)?	Pigs: Classic swine fever / Foot and mouth disease / Other	Binary (Multiple)	If C20=Yes
C21.3	If yes, for which disease(s)?	Poultry: Avian Influenza / Newcastle disease / Other	Binary (Multiple)	If C20=Yes
C21.4	If yes, for which disease(s)?	Sheep/goats: Foot and mouth disease / Peste des petits ruminants / Other:	Binary (Multiple)	If C20=Yes

MODULE D — VECTOR & ENVIRONMENTAL EXPOSURES (HH LEVEL)

D0 — General Environmental Context

Code	Question	Response options	Variable type	Skip logic
D0.1	Is your household located near (within 100 meters) of any of the following environments?	Forest or large park /Paddy, rice field / Fruit or crop plantations, plantations / River stream, pond, lake / Flood-prone area / Market, wet market/ Waste disposal area /Animal farms (poultry, pigs, cattle) / Pagoda or temple area / Slum, informal settlement / Other (specify)	Categorical (multiple)	None
D0.2	During the past 12 months, has your household experienced flooding?	0. Yes / 1. No	Binary	None
D0.3	If yes, how many times?	Number <i>Count</i>	Numeric	If D0.2=Yes
D0.4	Was the house inundated?	0. Yes / 1. No/ 2. Partially	Categorical (single)	If D0.2=Yes

D1 — Mosquito Exposure & Biting Risk

Code	Question	Response options	Variable type	Skip logic
D1.1	Do you notice mosquitoes inside your house?	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (ordinal)	None
D1.2	Do you notice mosquitoes outdoors around your house?	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (ordinal)	None

D1.3	At what time of day are mosquitoes most present in your environment?	Morning / Afternoon / Evening / Night / All day / Don't know	Categorical (single)	None
D1.4	At what moment of the year?	Dry season / Rainy season / Throughout the year	Categorical (single)	None
D1.5	What measures does your household use to reduce mosquitoes around the home?	Removing standing water / Covering water containers / Cleaning water jars/tank regularly / Using larvicides / Using 7-coulour fish, guppy / Installing bednet/ window screens or door screens / Fans or air circulation / Using Insecticide spraying / Using mosquito coils or electric diffusers / Cleaning vegetation, bushes near the house / No specific measures / Others	Categorical (multiple)	None
D1.7	Have you seen stagnant water around your house in the past 2 weeks?	0. Yes / 1. No	Binary	None
D1.8	What types of containers hold water around your house?	Cement jars / Buckets / Tires / Ponds / Drums / Flower pots / Construction materials / Other	Categorical (multiple)	If D1.7=Yes

D2 — Rodent Exposure

Code	Question	Response options	Variable type	Skip logic
D2.1	How often have you observed rodents in or around your household in the past 3 months?	Never during the last 3 months / Rarely (1-2 times in 3 months) / Sometimes (1-3 times per month) / Often (1-3 times per week) / Very often (daily or almost daily) / Don't know, not sure	Binary	None
D2.2	Where were rodents observed?	Inside the kitchen / Inside the house / Food and grain storage / Yard, garden / Waste disposal areas / Animal enclosures / Market area / Other (specify)	Categorical (multiple)	If D2.1>Never
D2.3	Do rodents damage food, cables, or stored items in or around your house?	0. Yes / 1. No	Binary	If D2.1=Yes
D2.4	Do you take measures to control rodents?	Traps / Poison / Cats / Sealing holes / None / Other	Categorical (multiple)	If D2.1=Yes

D3 — Tick Exposure / Domestic animals / Forest work

Code	Question	Response options	Variable type	Skip logic
D3.1	Has any household member been bitten by ticks in the last 12 months?	0. Yes / 1. No / 2. Don't know	Categorical (single)	If No → D3.2
D3.2	Where do tick bites usually occur?	During farming / Forest work / Handling animals / Around the home / Other	Categorical (multiple)	D3.1=Yes
D3.3	Have you seen ticks on any of your household animals or in their surroundings in the past 3 months?	No / Yes, on household animals / Yes, around the animals (in their enclosure) /	Categorical (single)	None

		Yes, in the household environment (yard garden, near house) / Don't know		
D3.4	Have you applied any tick control to household animals?	0. Yes / 1. No / 2. Don't know	Categorical (single)	If C1=Yes

D4 — Water & Aquatic Exposure

Code	Question	Response options	Variable type	Skip logic
D4.1	Do household members swim or bathe in rivers/lakes/ponds?	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (ordinal)	None
D4.2	Do household members fish in natural waters?	0. Yes / 1. No	Binary	None
D4.3	Do children play in floodwater or puddles?	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (ordinal)	None

D5 — Other Environment Exposures

Code	Question	Response options	Variable type	Skip logic
5.1	Are there livestock farms nearby (<500m)?	0. Yes / 1. No	Binary	None
D5.2	Are pesticides used in or around your home?	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Ordinal	None
D5.3	Is there open garbage near your home?	0. Yes / 1. No	Binary	None
D5.4	Is there an open sewage canal or waste water near your home?	Yes, at 50m / Yes, at 100m / Yes at 500m / No	Categorical (single)	None

MODULE E — HEALTH & ILLNESS (INDIVIDUAL LEVEL)

E1 — Recent Fever & Acute Illness (Last 4 Weeks)

Code	Question	Response options	Variable type	Skip logic
E1.1	Have you had fever in the last 4 weeks?	0. Yes / 1. No / 2. Don't know	Categorical (single)	If No → E2
E1.2	If yes, how many days did the fever last?	Number	Numeric	If E1.1=Yes
E1.3	Did you have any of the following symptoms?	Rash / Joint Pain / Muscle Pain / Headache / Nausea, Vomiting / Diarrhea / Cough, sore throat / Shortness of breath, Bleeding (nose, gums, vomit, stool) / None of the above	Categorical (multiple)	If E1.1=Yes

E2 — Health-Seeking Behavior

Code	Question	Response options	Variable type	Skip logic
E2.1	Did you seek care for your recent illness/fever?	0. Yes / 1. No	Binary	If E1.1=Yes If No → E3
E2.2	Where did you first seek care?	Health center / Private clinic / Hospital / Pharmacy / Traditional healer / Did not seek care	Categorical (single)	If E2.1=Yes
E2.3	Did you receive any medicines?	0. Yes / 1. No	Binary	If E2.1=Yes
E2.4	Which medicines did you receive? (multiple)	Paracetamol / Antibiotics / Antimalarials / Herbal remedies / Other	Categorical (multiple)	If E2.3=Yes
E2.4a	Did you complete the full course of the antibiotics you received	0. Yes / 1. No / 2. Don't know	Categorical (single)	If E2.4 antibiotics=Yes
E2.4b	If you stopped taking the antibiotics before finishing the course, what was the main reason?	Felt better / Had side effects / Forgot, missed doses / Too many pills, too long treatment / Ran out of money / Did not think it was necessary / Other (specify)	Categorical (multiple)	If E2.4a=No antibiotics=Yes
E2.5	Did you get a diagnostic test?	0. Yes / 1. No / 2. Don't know	Categorical (single)	If E2.1=Yes
E2.6	Which test(s) did you receive?	Dengue test / Malaria test / Blood test / Ultrasound / X-ray / Other	Categorical (multiple)	If E2.5=Yes

E3 — Hospitalization & Severe Symptoms

Code	Question	Response options	Variable type	Skip logic
E3.1	Were you hospitalized for this illness?	0. Yes / 1. No	Categorical (single)	If E1.1=Yes If No → Skip E3.4
E3.2	How many days were you hospitalized?	Number	Numeric	E3.1=Yes
E3.3	Did any doctor mention a suspected disease?	Dengue / Influenza / Pneumonia / Malaria / Typhoid / Don't know / Other	Categorical ?	E3.1=Yes
E3.4	Did you receive a diagnostic result for this illness?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E3.5	If yes, what was the diagnosis given?	Dengue / Influenza / Pneumonia / Malaria / Typhoid / Viral Infection / Other (Specify) / Don't know	Categorical (single)	If E3.4=Yes

E4 — Past Medical History (Chronic Diseases)

Code	Question	Response options	Variable type	Skip logic
E4.1	Do you have any chronic diseases?	Hypertension / Diabete / Heart disease / Chronic lung disease / Chronic Kidney or liver disease / Immune deficiency / None / Don't know	Categorical (multiple)	None

E5- Vaccination History

Code	Question	Response options	Variable type	Skip logic
E5.1.1	Have you ever received Diphtheria vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.2	Have you ever received Tetanus vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.3	Have you ever received Pertussis vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.4	Have you ever received Measles vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.5	Have you ever received Mumps vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.6	Have you ever received Rubella vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.7	Have you ever received Varicella vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.8	Have you ever received Meningitis by Menigococcus type A vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.9	Have you ever received Streptococcus pneumoniae vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.10	Have you ever received Yellow fever vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.1.11	Have you ever received Human papillomavirus (HPV) vaccine?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.2	Have you received an influenza vaccine in the past year?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.3	Have you ever received a JE vaccine in the past year? (Japanese Encephalitis)	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.4	Have you ever received Covid-19 vaccine in the past year?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.5	Have you ever received Rabies vaccine in the past year?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E5.6 (Other)	Other vaccines	Free text	Text	None

E6- Past Infections (Pathogens-specific History)

Code	Question	Response options	Variable type	Skip logic
E6.1	Have you ever been diagnosed for Dengue by a health professional?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E6.2	Have you ever been diagnosed for Zika by a health professional?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E6.3	Have you ever been diagnosed for Chikungunya by a health professional?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E6.4	Have you ever been diagnosed for Malaria by a health professional?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None

E6.5	Have you ever been diagnosed for Japanese Encephalitis by a health professional?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E6.6	Have you ever been diagnosed for Influenza A/B by a health professional?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E6.7	Have you ever been diagnosed for Leptospirosis by a health professional?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
E6.8	Other Infections	Free Text	Text	None

MODULE F—INDIVIDUAL EXPOSURES (ACTIVITIES, OCCUPATIONS, TRAVEL, ANIMAL CONTACT)

F1- Occupational Exposure

Code	Question	Response options	Variable type	Skip logic
F1.1	Do you work with animals as part of your job/occupation?	0. Yes / 1. No	Binary	If Age > 17
F1.2	If yes, which type of animals?	Dog / Cat / Pig / Cattle / Buffalo / Chicken / Duck / Goat / Sheep / Horse / Birds / Other	Categorical (multiple)	If Age > 17 & F1.1=Yes
F1.3	Do you slaughter animals?	0. Yes / 1. No	Binary	If Age > 17
F1.3.1	If yes, which kind of animals	Dog / Cat / Pig / Cattle / Buffalo / Chicken / Duck / Goat / Sheep / Horse / Birds / Other	Categorical (multiple)	If F1.3=Yes
F1.4	Do you farm aquatic animals (fish, shrimp, lobster, crocodile, snail)?	0. Yes / 1. No	Binary	None
F1.5	Do you handle raw meat regularly?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	If F1.3=Yes or F1.1=Yes
F1.6	Are you in contact with animal blood?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	If F1.3=Yes
F1.7	Do you work in forests, plantations, or fields?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
F1.8	Do you sleep overnight at worksites (forest, fields)?	0. Yes / 1. No	Binary	If F1.7=Yes

F2- Daily Activities & Mobility

Code	Question	Response options	Variable type	Skip logic
F2.1	How much time do you spend outdoors daily?	1h /]1–3]h /]3–6]h / >6h	Categorical (single ordinal)	None
F2.2	Do you perform agricultural activities?	0. Yes / 1. No	Binary	None
F2.3	Which agricultural activities?	Planting / Harvesting / Irrigation / Weeding / Pesticide application / Other	Categorical (multiple)	If F2.2=Yes
F2.4	Do you personally bathe, swim or wash in natural waters?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
F2.5	Do you play/work near stagnant water areas?	0. Yes / 1. No	Binary	None

F3- Individual Animal Contact & Handling

Code	Question	Response options	Variable type	Skip logic
F3.1	Do you personally take care or handle animals at home?	0. Yes / 1. No	Binary	None
F3.2	Which animals do you handle?	Same exhaustive list as Module C / Other	Categorical (multiple)	If F3.1=Yes
F3.3	Do you feed animals?	0. Yes / 1. No	Binary	If F3.1=Yes
F3.4	Do you clean animal enclosures?	0. Yes / 1. No	Binary	If F3.1=Yes
F3.5	Do you collect eggs or milk?	0. Yes / 1. No	Binary	If F3.1=Yes
F3.6	Do you ever assist animal births or handled placenta or aborted fetuses?	0. Yes / 1. No	Binary	If F3.1=Yes
F3.6a	For which animal?	Cattle / Buffalo / Goats / Sheep / Pigs / Dogs / Cats / Poultry / Other (specify)	Categorical (multiple)	If F3.6= Yes
F3.7	Have you been scratched or bitten by any animal in the last 12 months?	0. Yes / 1. No	Binary	None
F3.8	If yes, specify animal species	Same species list including dogs/cats	Categorical (multiple)	If F3.7=Yes
F3.9	Did you seek care after the bite/scratch?	Yes, medical consultation / Yes, rabies vaccine/ Did not seek care	Categorical (multiple)	If F3.7=Yes

F4- Travel History

Code	Question	Response options	Variable type	Skip logic
F4.1	Have you traveled outside your village in the last 3 months?	0. Yes / 1. No	Binary	None
F4.2	If yes, destinations?	District / Province / Phnom Penh / Other country	Categorical (multiple)	If F4.1=Yes
F4.3	Purpose of travel	Work / Family visit / School / Market / Health care / Religious activities / Other	Categorical (single)	If F4.1=Yes

F4.4	What was the typical duration of your stays outside the village?	<1 day / 1–7 days / 7–30 days / >1 month	Categorical (single ordinal)	If F4.1=Yes
F4.5	During these trips, did you sleep away from home?	0. Yes / 1. No	Binary	If F4.1=Yes

F5 – Individual Environmental Exposures (micro-level)

Code	Question	Response options	Variable type	Skip logic
F5.1	Have you been bitten by a mosquito in the last 7 days?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
F5.2	Where are you exposed to the most?	Inside the house / Houseyard around the house / During agriculture works away from home / During works linked to forest / Workplace away from home / School / Others	Categorical (multiple)	None
F5.3	Have you seen rats or mice near your workplace or school?	0. Yes / 1. No	Binary	None
F5.4	Do you walk barefoot outdoors?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
F5.5	Do you collect water from natural sources?	0. Yes / 1. No	Binary	None

F6 – High-Risk Behaviors

Code	Question	Response options	Variable type	Skip logic
F6.1	Do you consume raw or undercooked meat?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
F6.2	Do you consume raw or unpasteurized milk?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
F6.3	Do you consume raw blood dishes (prahok/plea/lab)?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
F6.4	Do you frequently visit markets with live animals?	Daily / Weekly or several times a week / Monthly or several times a month /	Categorical (single ordinal)	None

		Yearly or less frequently than once a year / Never		
F6.5	Do you burn waste inside or near the house?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None

MODULE G — Knowledge, Attitudes & Practices (KAP)

G1 – General Infectious Disease Knowledge

Code	Question	Response options	Variable type	Skip logic
G1.1	Have you heard about infectious diseases before this survey?	0. Yes / 1. No	Binary	None
G1.2	How do people commonly become infected? (multiple)	Mosquito bites / Animal contact / Drinking unsafe water / Eating unsafe food / Airborne / Person-to-person / Don't know / Other	Categorical (multiple)	None
G1.3	Can healthy-looking people carry microbes/germs?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
G1.4	Do you believe diseases can pass from animals to humans?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
G1.5	Do you believe diseases can pass from environment to humans?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
G1.6	Do you believe diseases can pass from mosquitoes to humans?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None

G2 – Mosquito-Borne Disease Knowledge

Code	Question	Response options	Variable type	Skip logic
G2.1	Have you heard of the following diseases?	Dengue Yes / No Chikungunya Yes / No JEV Yes / No Zika Yes/No Malaria Yes/No	Binary (multiple)	None
G2.2	How is dengue transmitted?	By Mosquito bites / By Dirty water / By Food / Person-to-person / Don't know	Categorical (single)	If G2.1=Yes (Dengue)
G2.3	Can a mosquito become infected by biting a sick person and then transmit the disease to others?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None

G2.4	How can dengue be prevented?	Using bed nets/Using repellents/Eliminating standing water / breeding sites/Cleaning shrubs / vegetation/Using mosquito coils or fans/Vaccination/Medicines (incorrect belief)/Don't know/Other	Categorical (multiple)	None
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G3 – Zoonotic Disease Knowledge

Code	Question	Response options	Variable type	Skip logic
G3.1	From which animals can humans get sick?	Dogs / Cats / Chickens / Ducks / Pigs / Cattle / Rodents / Bats / Don't know / Other	Categorical (multiple)	If G1.5=Yes
G3.2	Have you heard about rabies?	0. Yes / 1. No	Binary	None
G3.3	What should you do after a dog/cat bite?	Wash wound / Go to health facility / Do nothing / Traditional healer / Don't know	Categorical (Multiple)	If G3.2=Yes
G3.4	Have you heard of leptospirosis?	0. Yes / 1. No	Binary	None
G3.5	How can leptospirosis be prevented?	Avoid floodwater / Boots / Hygiene / Don't know	Categorical (multiple)	If G3.4=Yes

G4 – Food & Water-Borne Disease Knowledge

Code	Question	Response options	Variable type	Skip logic
G4.1	Can unsafe water cause disease?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
G4.2	What diseases can come from unsafe water?	Diarrhea / Cholera / Typhoid / Hepatitis A/E / Don't know / Other	Categorical (multiple)	If G4.1=Yes
G4.3	Can raw/undercooked meat make people sick?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
G4.4	Which foods are risky?	Raw meat / Raw fish / Uncooked vegetables / Unboiled water / Street food / Don't know / Other specify	Categorical (multiple)	None

G5 – Respiratory Disease Knowledge

Code	Question	Response options	Variable type	Skip logic
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G5.1	Have you heard of flu/influenza?	0. Yes / 1. No	Binary	None
G5.2	How does flu spread?	Coughing / Sneezing / Close contact / Mosquitoes / Don't know	Categorical (multiple)	If G5.1=Yes
G5.3	What prevents flu?	Masks / Handwashing / Staying home / Vaccination / Mosquito Repellents / bednets / Don't know	Categorical (multiple)	If G5.1=Ye

G6 – Attitudes Toward Health-Seeking Behavior

Code	Question	Response options	Variable type	Skip logic
G6.1	If you or a family member feels sick, where do you go first?	Health center / Hospital / Private clinic / Pharmacy / Traditional healer / Self-treatment / It depends on the symptoms / Other	Categorical (single)	None
G6.2	Do you think visiting a health facility is affordable?	Yes / No / Sometimes	Categorical (single)	None
G6.3	What prevents you from seeking care? (multiple)	Cost / Distance / Lack of transport / No time / Fear / Not serious / Other	Categorical (multiple)	None
G6.4	Do you trust health workers?	0. Yes / 1. No / 2. Partially	Categorical (single ordinal)	None

G7 – Preventive Practices

Code	Question	Response options	Variable type	Skip logic
G7.1	Do you sleep under a mosquito net personally?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
G7.2	Are your nets treated?	0. Yes / 1. No / 2. Don't know	Categorical (single)	If G7.1 ≠ Never
G7.3	Do you use mosquito repellent?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
G7.4	Do you wash hands regularly with soap?	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None
G7.5	Do you boil or filter drinking water?	Daily/ Weekly or several times a week/ Monthly or several times a month /	Categorical (single ordinal)	None

		Yearly or less frequently than once a year / Never		
G7.6	Do you properly cover stored food?	Daily/ Weekly or several times a week/ Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None

G8 – Information Access & Communication Channels

Code	Question	Response options	Variable type	Skip logic
G8.1	Where do you get health information?	TV / Radio / Social Media / Health center / Village chief / School / Family / Posters / Other	Categorical (multiple)	None
G8.2	Which sources do you trust most?	TV / Radio / Social Media / Health center / Village chief / School / Family / Posters / Other	Categorical (multiple)	None
G8.3	Have you ever received messages about mosquito prevention?	0. Yes / 1. No	Binary	None
G8.4	Which messages do you remember?	Free Text	Text	If G8.3=Yes

MODULE H — CLIMATE PERCEPTIONS

H1 – Perceived Climate Changes

Code	Question	Response options	Variable type	Skip logic
H1.1	Have you noticed changes in the climate over recent years?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
H1.2	If yes, what kind of changes have you noticed?	Hotter temperatures / More frequent heatwaves / More rain / Less rain / More floods / More droughts / More storms / Irregular seasons / Don't know / Other	Categorical (multiple)	If H1.1=Yes
H1.3	Are seasons today different from when you were younger?	Yes, a lot / Yes, a little / No / Don't know	Categorical (single ordinal)	None
H1.4	Do you feel temperatures have increased in the last 10 years?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None

H2 – Climate Health Link Perception

Code	Question	Response options	Variable type	Skip logic
H2.1	Do you think climate affects human health?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
H2.2	Which health issues increase with high temperatures? (multiple)	Fever / Dehydration / Heatstroke / Mosquito-borne diseases / Skin diseases / Don't know / Other	Categorical (multiple)	If H2.1=Yes
H2.3	Which health issues increase with heavy rains or floods? (multiple)	Mosquito-borne diseases / Diarrhea / Leptospirosis / Skin infections / Rodent-borne diseases / Don't know / Other	Categorical (multiple)	If H2.1=Yes

H2.4	Do you think climate change increases mosquito populations?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
H2.5	Do you think changes in rainfall affect the risk of infectious diseases?	Yes, a lot / Yes, a little / No / Don't know	Categorical (single ordinal)	Non

H3 – Household Adaptation Practices

Code	Question	Response options	Variable type	Skip logic
H3.1	Do you have any strategy to protect against heat?	0. Yes / 1. No	Binary	None
H3.2	If yes, what changes? (multiple)	Staying indoors at noon / Increasing water intake / Using fans / Using AC / Wearing lighter clothes / Avoiding fieldwork at peak heat / Other	Categorical (multiple)	If H3.1=Yes
H3.3	Do you have any strategies to reduce impacts of floods/storms?	0. Yes / 1. No	Binary	None
H3.4	If yes, what strategies?	Avoiding walking in floods / Moving animals / Protecting water containers / Cleaning surroundings / Other	Categorical (multiple)	If H3.3=Yes

H2 – Climate Health Link Perception

Code	Question	Response options	Variable type	Skip logic
H4.1	Has your village/community experienced climate-related events recently?	Floods / Drought / Storms / Crop losses / Livestock deaths / None / Don't know	Categorical (multiple)	None
H4.2	During these events, who provided help or information?	Village chief / Health center / NGO / Radio / Social Media / Family / Nobody / Other	Categorical (multiple)	None
H4.3	Do you receive climate or weather warnings?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
H4.4	If yes, through which channels?	TV / Radio / Social Media / Messaging apps / Village chief / Loudspeaker / Other	Categorical (multiple)	If H4.3=Yes
H4.5	Do you trust the information you receive about climate risks?	Yes completely / Yes somewhat / No / Don't know or don't receive any info on climate risks	Categorical (single ordinal)	None
H4.6	Do you feel your community is prepared for future climate-related events?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None

MODULE I — ANIMAL SAMPLING (SUBSET HOUSEHOLDS)

I0 – Eligibility (Household Filter)

Code	Question	Response options	Variable type	Skip logic
I0.1	Is this household selected for animal sampling?	0. Yes / 1. No	Binary	If No → End Module I
I0.2	Was the household informed about animal sampling during consent?	0. Yes / 1. No	Binary	Must be Yes

I1 – Animal Roster Confirmation (Based on Module C Data)

Code	Question	Response options	Variable type	Skip logic
I1.1	According to Module C, the household owns the following animal species:	Auto-generated list	Display	None

I2 – Selections of Animals for Sampling

Code	Question	Response options	Variable type	Skip logic
I2.1	Number of animals available for sampling per species	Auto + Numeric	Mixed	None
I2.2	Total number of animals selected / species	Dog: Number / Chicken: Number / Duck: Number/ Pig: Number / Cattle: Number / Goat: Number / Sheep: Number	Numeric	None
I2.3	Individual IDs assigned to sampled animals	Text/ID codes	Text	None

I3 – Animal Level Characteristics (One form per selected animal- REDcap repeating instrument)

Code	Question	Response options	Variable type	Skip logic
I3.1	Animal ID	Text	Text	None
I3.2	Species	As per species list	Categorical (single)	None
I3.3	Sex	Male / Female / Unknown	Categorical (single)	None

I3.4	Age	<3 months / 3–12 months / >1 year / Don't know	Categorical (single ordinal)	None
I3.5	Purpose	Meat / Eggs / Breeding / Guard / Pet / Transport / Other	Categorical (multiple)	None
I3.6	Housing type	Free roaming / Confined / Tied / Enclosure / Indoors	Categorical (single)	None
I3.7	Does the animal mix with other species?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
I3.7a	With which other species	Text	Text	If I3.7=Yes
I3.8	Frequency roaming near water bodies	Daily / Weekly or several times a week / Monthly or several times a month / Yearly or less frequently than once a year / Never	Categorical (single ordinal)	None

I4 – Animal Health Status (Observed + Owner Report)

Code	Question	Response options	Variable type	Skip logic
I4.1	Is the animal healthy today?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
I4.2	If not healthy, what signs?	Fever / Weakness / Diarrhea / Coughing / Skin lesions / Neurological signs / Reduced appetite / Other	Categorical (multiple)	If I4.1=No or I4.1=Not sure
I4.3	Has the animal been sick in the last 12 months?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
I4.4	Has the animal been vaccinated?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None
I4.5	If yes, which vaccines?	Rabies / FMD / PPR / NDV / CSF / Other	Categorical (multiple)	If I4.4=Yes
I4.6	Has the animal been dewormed in the last year?	0. Yes / 1. No / 2. Don't know	Categorical (single)	None

I5 – Specimen Collection (per sampled animal)

Code	Question	Response options	Variable type	Skip logic
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I5.1	Blood sample ID	0. Yes / 1. No	Binary	<i>If No → I5.3</i>
I5.2	Blood sample volume collected	mL Numeric	Numeric	<i>If I5.1=Yes</i>
I5.3	Were swabs collected?	Oral / Rectal / None	Categorical (multiple)	Only for pigs and poultry (I3.2)
I5.4	Were ectoparasites collected on the animal?	0. Yes / 1. No	Binary	None
I5.5	Sample label/barcode?	Text	Text	<i>If I5.1=0 or (I5.3 contient Oral ou Rectal) OR I5.4=0</i>
I5.6	Any sampling complications?	None / Minor / Major	Categorical (single)	None

I6 – Biosecurity & Handling Practices

Code	Question	Response options	Variable type	Skip logic
6.1	Did the sampler wear protective equipment?	Gloves / Mask / Boots / No PPE	Categorical (multiple)	None
I6.2	Was the procedure performed safely?	0. Yes / 1. No / 2. Partially	Categorical (single)	None
I6.3	Were animals restrained appropriately?	0. Yes / 1. No	Binary	None
I6.4	Was the sampling area cleaned after the procedure?	0. Yes / 1. No	Binary	None
I6.5	Any incidents or injuries during sampling?	0. Yes / 1. No	Binary	If Yes → describe