

## Additional File 2

*Questionnaire for dairy farmers*

**Farm ID:**

**Date:**



**Survey Questionnaire: BSv1.6**

### **Prevalence and Risk Factors for Foot-and-Mouth Disease in Small Scale Dairy Farmers in Nakuru County and its Environs**

#### **Baseline Data**

1. Position at the farm: (please circle the correct choice)
  - a. Owner
  - b. Employee
  - c. Milker
  - d. Herdsman
  - e. Manager
  - f. Other \_\_\_\_\_
  
2. GPS coordinates: longitude \_\_\_\_\_ latitude \_\_\_\_\_
  
3. Age in years: \_\_\_\_\_
  
4. Level of education?
  - a. None
  - b. Primary
  - c. Secondary
  - d. Certificate
  - e. Diploma
  - f. Degree
  - g. Post graduate
  
5. How many years have you been doing dairy farming? \_\_\_\_\_
6. What is the size of farm (where the cattle are) in acres? \_\_\_\_\_
7. What other species are found in your farm (state number):
  - a. Goats \_\_\_\_\_
  - b. Sheep \_\_\_\_\_
  - c. Pigs \_\_\_\_\_

- d. Donkeys\_\_\_\_\_
8. How many cattle are currently on the farm? \_\_\_\_\_
- Please complete the following grid to give the sex and age categories for cattle on the farm

Age of cow	Male	Female
< 6 months		
6-12 months		
1-2 years		
>2 years		

### Risk factors

9. What grazing methods do you use for your animals?
- Stall feeding
  - Semi grazing (Animals allowed to graze but additional food is given by stall feeding)
  - Pasture grazing only
10. Do you use communal grazing fields to feed your animals?
- Yes
  - No
  - Don't know

Please complete table showing how grazing varies for each species:

Species	Grazing method 1 = Zero; 2 = semi grazing; 3 = pasture only	Communal grazing? Y=Yes; N=No
Cattle		
Sheep		
Goat		
Pigs		

11. Do you use communal watering facilities to water your animals?
- Yes
  - No
12. If you do semi or full time grazing, do you ever graze your animals in (yes or No):
- Forests\_\_\_\_\_
  - Within towns\_\_\_\_\_
  - By roadsides\_\_\_\_\_
  - Near livestock markets or slaughterhouses\_\_\_\_\_
13. Do you buy unprocessed animal feeds (hay, grass etc.) from outside your farm?

- a. Yes
  - b. No
14. Do you share workers with other surrounding farms?
- a. Yes
  - b. No
  - c. Don't know
15. Do employees commute from outside the farm?
- a. Yes (go to question 16)
  - b. No (go to question 17)
  - c. Don't know (go to question 17)
16. If yes to the question above, do any of the commuting workers own animals?
- a. Yes
  - b. No
  - c. Don't know
17. Do you share equipment with surrounding farms?
- a. Yes
  - b. No
  - c. Don't Know
18. Is your farm next to a road (where animals and/or people pass through)?
- a. Yes
  - b. No
19. In the surrounding areas have there been reports of presence of buffaloes, antelopes, wild pigs or other wild animals? Please complete grid,

Species	Yes/ No
Buffalo	
Antelope	
Wild pigs	
Other (please state)	

20. Where do you get your replacement stock?
- a. Buying from cattle markets
  - b. Buying from surrounding farms
  - c. From my own animals
  - d. Other (please state)
21. If you buy your replacement stock, what number of cattle did you buy in the last 1 year?
- \_\_\_\_\_

**Knowledge and occurrence of FMD**

22. Have you heard of foot and mouth disease?
- a. Yes (go to question 23)
  - b. No (go to question 24)
23. What signs do you see in animals affected with foot-and-mouth disease?
- a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
  - e. \_\_\_\_\_

24. Do you call a veterinarian/animal health assistant when there is a case of foot and mouth disease on your farm?
- Yes
  - No
  - Don't know
25. When there is a foot and mouth disease case do you report it to the veterinary authorities?
- Yes
  - No
  - Don't know
26. Have you had any cases of foot and mouth disease in the farm in the last 6 months?
- Yes
  - No
  - Don't know
27. When did you last have a case of FMD in your farm? (Month/year)
- \_\_\_\_\_/\_\_\_\_\_
  - Can't remember
28. How many animals did you have at the time (if don't know, write "DK")? \_\_\_\_\_
29. How many animals were affected (if don't know, write "DK")? \_\_\_\_\_
30. Were the affected animals being milked at the time?
- Yes (If yes, how many \_\_\_\_\_)
  - No
  - Don't know

31. Of the animals affected how many were:

	Male	Female
< 6 months		
6-12 months		
1-2 years		
>2 years		

32. When was the last time you heard of any foot and mouth disease case in your village?  
 \_\_\_\_\_ weeks/months/years ago (delete as appropriate)
33. Do you undertake any activities to prevent entry of FMD into your farm?
- Yes (go to question 31)
  - No (go to question 33)
34. What activities do you normally undertake to prevent foot and mouth disease occurring at your farm (when there is **no outbreak** in the area)?
- \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_
35. What additional activities do you undertake when **there is an outbreak**?
- \_\_\_\_\_
  - \_\_\_\_\_
  - \_\_\_\_\_

- d. \_\_\_\_\_
  - e. \_\_\_\_\_
36. Do you usually vaccinate your animals for FMD?
- a. Yes
  - b. No (go to question 34)
  - c. Don't know (go to question 34)
37. How many times in a year do you usually do this? \_\_\_\_\_
38. At what age (in months) do you start vaccinating your animals? \_\_\_\_\_ months
39. Who usually vaccinates your animals?
- a. Private veterinarian
  - b. Private animal health assistant
  - c. Government veterinarian
  - d. Government animal health assistant
  - e. Other (please state) \_\_\_\_\_
40. When did you last vaccinate for FMD? (mm/yy)? \_\_\_\_\_ / \_\_\_\_\_

### **Milk Production and Delivery**

41. How much milk did your farm produce today? \_\_\_\_\_ litres
42. How much of this did you (or will you) sell? \_\_\_\_\_ litres
43. Do you sell milk to a cooperative society?
- a. Yes - please provide name \_\_\_\_\_
  - b. No
  - c. Don't know
44. How is the milk transported from the farm?
- a. Farmer delivers direct to dairy
  - b. Farmer leaves at a collection point
  - c. Milk is collected at farm gate by dairy
  - d. Milk is collected at farm gate by hawker
  - e. Other (please state) \_\_\_\_\_
45. How do you preserve the milk until delivery to the dairy?
- a. Refrigeration
  - b. Addition of chemicals. If so which ones? \_\_\_\_\_
  - c. Immersion in cold water.
  - d. No action taken
46. What do you do with the milk during a foot and mouth disease outbreak?
- a. Sell it to the cooperative society
  - b. Consume it at home
  - c. Sell it to others
  - d. Dispose of it
  - e. Other (please specify) \_\_\_\_\_