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Appendix 2

Table 1: Estimated Regional Losses in 1989 due to East Coast fever in 11 African Countries affected by the Disease*.

Item	Quantity (t)	Loss in US\$ thousand	Percentage of total loss
Beef loss, total (t)	19 428	20 607	12
- Mortality loss (t)	16 246	17 232	-
- Morbidity loss (t)	3 182	3 375	-
Milk loss, total (t)	97 482	78 697	47
- Mortality loss (t)	9 284	7 495	-
- Morbidity loss (t)	88 198	71 202	-
Animal traction loss (ha)	488 000	21 306	13
Manure loss (t)	701	66	-
Treatment	-	8 114	5
Acaricide application	-	33 008	20
Research and extension	-	6 550	4
Total loss, US\$	-	168 402	100

* Burundi, Kenya, Malawi, Mozambique, Rwanda, Sudan, Tanzania, Uganda, Zaire, Zambia and Zimbabwe.

Source: (Mukhebi and Perry, 1992: 109)

Table 2: Demographics and Socio-Economic Characteristics of the Respondents.

Characteristics	Vyeboom	Malongana	Guyuni	Matshena	Dzanani	Tshifudi	Average
Household size	7	8	7	8	7	8	7.5
Age of cattle owners	65	56	68	52	56	57	59
Years of farming	38	22	28	18	22	25	26
	Percentages (%)						
Male cattle owners	88	87	91	87	100	94	91
Female cattle owners	12	13	9	13	-	6	9
Marital status							
Married	88	87	87	87	91	88	88
Widowed	12	13	13	9	6	12	10
Single	-	-	-	4	6	-	2
Residential status							
Employed – home	6	26	-	26	9	18	14
- away	-	13	-	13	5	-	7
Unemployed	6	26	4	30	14	35	19
Self employed	12	4	17	4	14	-	9
Pensioners	77	30	78	26	59	47	53
Educational qualifications							
Primary	53	26	39	30	18	77	38
Secondary	18	13	17	9	32	12	17
Tertiary	-	4	4	-	-	-	2
Never attended	29	57	39	61	50	12	43

Table 3: Respondents Preferred Breed of Cattle for Future Use.

Breed	Vyeboom	Malongana	Guyuni	Matshena	Dzanani	Tshifudi	Total	Percentage
Brahman	1	6	1	7	2	3	20	16
Nguni	4	11	20	13	17	8	73	58
Afrikaner	8	2	1	-	2	1	14	11
Bonsmara	-	2	-	-	-	1	3	2
Simmentaler	-	-	-	2	-	1	3	2
Friesland	-	-	-	-	1	1	2	2
Crossbreed	2	-	1	-	-	-	3	2
Brahman + Nguni	2	2	-	-	-	-	4	3
Afrikaner + Nguni	-	-	-	-	-	2	2	1
Simmentaler + Afrikaner	-	-	-	1	-	-	1	1
Total	17	23	23	23	22	17	125	100

Appendix 3

QUESTIONNAIRE

Instructions

Please:

-Write legibly.

-Comment, fill in and circle the correct letter where choice is given (remember one question might have multiple answers applicable to you).

-All the information provided will be kept confidential.

Date.....

Area:.....

A DEMOGRAPHIC INFORMATION

A.1. Gender

- 1 Male
- 2 Female

A.2. Marital status

- 1 Married
- 2 Divorced
- 3 Widowed
- 4 Single

A.3 Residential status

- 1 Employed
 - a) at home
 - b) elsewhere
- 2 Unemployed
- 3 Self employed
- 4 Pensioner

A.4 Educational Qualification

- 1 Primary education
- 2 Secondary education
- 3 Tertiary education
- 4 never attended

A.5 Estimated age Years

A.6 Composition of household members

<u>Age</u>	<u>Males</u>	<u>Females</u>
< 20	A.6.1	A.6.2
20—30	A.6.3	A.6.4
31—40	A.6.5	A.6.6
41—50	A.6.7	A.6.8
51—60	A.6.9	A.6.10
> 60	A.6.11	A.6.12

A.7 Dependants educational profile

	Male	Female
At primary level	A.7.1	A.7.2
At secondary level	A.7.3	A.7.4
At tertiary level	A.7.5	A.7.6
At home (young)	A.7.7	A.7.8

A.8 Number of household members.....

B. CATTLE PRODUCTION INFORMATION

B.9a Breed of cattle kept

- 9.1 Nguni
- 9.2 Afrikaner type
- 9.3 Brahman type
- 9.4 Other (specify).....

9b What type of cattle breed would you prefer?.....

9c And why do you prefer such a breed?.....

9d What colour do you prefer and why?.....

9e For how long have you been in farming?.....years

B.10 a) How many cattle do you have now?.....

b) How many cattle did you have in the household last year (1996)?.....

B.11.a Herd composition and sales (1996)

Herd	number	number sold
Cows	B.11.1	B.11.2
Heifers	B.11.3	B.11.4
Oxen	B.11.5	B.11.6
Bulls	B.11.7	B.11.8
Calves(<6 month)	B.11.9	B.11.10

(The total of herd composition should be equal with the total in question 10b)

11.b For cattle sold, why did you sell them?.....
.....
.....

11.c What is the value (in rand) of your adult cattle? R.....

11.d To whom did you sell the animal?
 1 Auction
 2 local butchery
 3 Friend for ceremonial purposes
 4 other (specify).....

11.e Were any animals sold to raise money for bride wealth(Lobola)?.....

B.12a Cattle purchased (1996)

Herd	Number	Amount/head in rand	if non purchased, indicate the willingness to pay in rand /head
Cows	B.12.1	B.12.2	B.12.3
Heifers	B.12.4	B.12.5	B.12.6
Oxen	B.12.7	B.12.8	B.12.9
Bulls	B.12.10	B.12.11	B.12.12
Calves (<6 month)	B.12.13	B.12.14	B.12.15

12b Why did you purchase these animals?.....
.....
.....

B.13.a Cattle slaughtered (1996)

Herd	Number
Cows	B.13.1
Heifers	B.13.2
Oxen	B.13.3
Bulls	B.13.4
Calves (< 6 month)	B.13.5

13.b Did you sell some of the meat?.....

13.c If yes, how much per kilogram? R.....

13.d What did you do with the money received?

- 1 Savings
- 2 Household purchases
- 3 Payment of school fees
- 4 other (specify).....

13.e When do you normally sell your cattle and why?.....
.....
.....

B.14.a Were any of the animals slaughtered in question 13a used for ceremonial purposes?

(Ceremonies such as funeral, wedding, tombstone etc).....

Other ceremonies e.g. Christmas, birthday (specify).....

14.b If yes, give details below

Herd	Number	type of ceremony
Cows		
Heifers		
Oxen		
Bulls		
calves (<6 month)		

B.15 What happened to the number of your cattle for the past three years?

- 1 Decreased
- 2 Increased
- 3 Constant

B.16.a If increased, why?

.....

.....

16.b If decreased, why?

Cause	
Diseases	
Drought	
Sold	
Slaughter	
Theft	
Insufficient grazing	
other(specify).....	

16.c If died of diseases, which diseases?

.....

16.d How many of these died (1996)?

Herd	Number
Cows	
Heifers	
Oxen	
Bulls	
calves (<6 month)	

16.e For the animals that died did you use their meat?

16.f If yes, how ? Explain briefly.

.....

16.g If no, please indicate what did you do with the animals?.....
.....
.....

B.17a What is the most common problem(s) within your cattle?

- 1 Theft
- 2 Road accidents
- 3 Diseases
- 4 other (specify).....

17b What diseases?.....

17c Do you have a problem with ticks?.....

17d What is the most common tick problem within your livestock?

- 1 Loss of condition (Tick worry)
- 2 Tick wounds
- 3 Tick damage (e.g. teat loss)
- 4 other (specify).....

17e Do you associate any disease with ticks?.....

17F If no, do you know any of these diseases?

- 1 Red water
- 2 Galsickness
- 3 Sweating sickness
- 4 Heart water
- 5 Mastitis

B.18 a) How do you control ticks?

- 1 Dipping tank system
- 2 Engine oil
- 3 Hand picking
- 4 Biological control (e.g. using chickens)
- 5 Hand spraying
- 6 Do not control at all
- 7 Pour on
- 8 Spray race
- 9 Handdressing

18b if you also use hand spraying, how do you apply it?.....

18c) Why do you control ticks in the way(s) indicated above ?.....
.....
.....

18d Are you satisfied with the way in which ticks are controlled?

18e If not, what do you think should be done ?.....
.....
.....
.....
.....

18f When normally do you experience tick problems?

- | | |
|----------|----------|
| 1 Summer | 3 Spring |
| 2 Winter | 4 Autumn |

B.19. What's your attitude towards ticks?

- 1 Positive
- 2 Negative
- 3 Neutral

B.20.a How often do you currently control ticks?

- 1 Once per week
- 2 Once per two weeks
- 3 Once per month
- 4 Other (specify).....

20.b How many times would you like to control ticks?.....

B.21. Why do you control ticks?.....

.....

.....

.....

.....

.....

.....

B.22. What (if applicable) did you spend in 1996 on

- | | |
|-------------------------------|--------|
| 1 Purchased worms remedies | R..... |
| 2 Labour for herding | R..... |
| 3 Vaccination | R..... |
| 4 Tickicides (tick medicines) | R..... |
| 5 Medicines | R..... |
| 6 Feed | R..... |
| 7 Licks | R..... |

B.23.a) Are your cattle herded?.....

23.b) Who does the herding ?

- 1 An employee
- 2 Your son/ daughter
- 3 Yourself
- 4 Grandson/ daughter
- 5 Other(specify).....

23.C Are they kraaled daily at night?.....

B.24. Does the household have animals belonging to other relatives not normally living in the household?.....

B.25 Do you share your kraal with other household?.....

B.26.a) Are animals ever paid as fines or compensation in e.g. adultery in this

community?.....

26.b) Does any cattle symbolises any ancestral spirit?.....

C. ECONOMIC ROLE

C.27. What are the main reasons why the household keeps cattle?

Purpose	
sell cattle, meat, milk	
milk (home consumption)	
Lobola	
Wealth	
meat (home consumption)	
Prestige	
Plough	
Rituals	
other (specify).....	

C.28.a Do you use manure from your cattle kraals on your land?(including the homeyard)

28.b) If yes, why ?.....

28.c) Do you ever sell manure to others?.....

28.d) If yes, how much are you paid/per ton /other? R.....

28.e) Do you also use cattle manure as a supplementary fuel?.....

28.f) Do you use fertiliser on your land?.....

C.29.a) Do you use dung for floor preparation or as a way of decoration?.....

29.b) Do you also sell dung to others for decoration purposes?.....

29.c) If yes, how much do you charge? R.....

C.30. a) Do you use animals for ploughing ?.....

30. b) if yes, what type?.....

30 c)If no, why are traction animals not used in this community?.....

30d) Do you hire other peoples animal for ploughing ?.....

- 30e) If yes, how many?.....
 30f) Do you hire out your own animals for ploughing to others ?.....
 30g) If yes, what do you charge per animal/ span/day? R.....
 Other(specify).....
 30h) Do you use cattle for transport?.....

C.31. For the slaughtered cattle (indicated in question 14) indicate what do you do with skins and hides.

Purpose	
Sell	
Keep them	
Discard them	
Give to friends	
Used for cultural purposes(specify).....	

- If you sell skins and hides, at what price? R.....
 C. 32.a) Do you milk your cows for household consumption?.....
 32 b) If not, why.....

 32 c) How often do you milk your cow/day/ month?.....
 32 d) If yes, on average how much milk per day/ cow does your household usually receive..... litres
 32e) On average how many litres of milk per day does your household usually consume.....
 32f) If you sell, at what price per litre? R.....
 32g) To whom do you sell your milk?.....
 32h) Do you buy milk?.....
 32i) If yes, from whom do you buy?.....
 32j) At what price per litre/ 500ml (specify).....
 C.33 a. Is there a better way of investing money than in cattle?.....
 33.b If yes, what is better?.....
 C.34a Are there any other by-products that you use or sell from your cattle?(Please specify)

 34b If any, indicate the value of the by-product that you sell? R.....

D. OTHER LIVESTOCK OWNED

D.35.

Livestock	Number	Owner (e.g. wife, children etc)
Goats		
Sheep		
Chicken		
Pigs		
Donkeys		
Dogs		
Other(specify).....		

C.36. Which member of the household can make the decision concerning the selling or purchasing of the above mentioned livestock?.....

E. CROP PRODUCTION INFORMATION

E.37 a) Beside cattle farming do you practice crop farming?.....

37 b) If yes, how many hectares?.....

37 c) Which crop do you normally cultivate?.....

37d) How did you obtain the land?

- 1 bought
- 2 given by the chief
- 3 rented
- 4 inherited

37e) In harsh times do you feed your cattle with crop remnants?.....

37f) Do you graze your cattle on the land after harvesting?.....

F. OTHER INFORMATION

F.38.a Do you have any animal health based extension officer in your area?

- 1 Yes
- 2 No
- 3 I do not know

38b If yes, is there continuity in communication between farmers and veterinary services or other sources of advice in your area?

- 1 Good
- 2 Average

