

APPENDIX S1

Questionnaire reference: _____(Version 2:13/09/09)

[All instructions to interviewer are given within square brackets]

[Introduce the study and the questionnaire. Refer to separate notes.]

Interviewer name: _____ Date of interview: _____

SECTION 1: Personal information

1a. What is your name? _____

1b. What is your position in the household? _____

1c. What is your age? _____

1d. What is the name of the village? _____

1e. How long have you lived here? _____

1f. What is your first language? _____

1g. Level of education *[None, Primary, Secondary, Tertiary]* _____

1h. Record names of all people present at interview:

[Record GPS location of household: _____]

2a. How many people are in your household?

Position in household	Age	Sex	Living at home?
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

2b. How many houses make up the household? _____

3a. How many of the children attend school? _____

3b. How many meals does the household usually eat per day? _____

3c. How many times per week does the household eat meat? _____

Questionnaire reference: _____(Version 2:13/09/09)

4. What are the household's sources of livelihood? Please list all, giving the largest/most important first.

[List responses in code, using key below]

1 = Livestock 2 = farming of crops 3 = Regular employment (please specify) 4 = Casual labour (please specify)	5 = Arts and crafts 6 = Other small business (please specify) 7 = hunting 8 = photographic tourism	9 = money sent home from abroad 10 = Other (please specify)
--	---	--

5. What do you think is the greatest threat to your livelihood? _____

[code using key below]

1 = Crop raiding 2 = Predators killing livestock 3 = Disease of livestock 4 = Natural deaths of livestock	5 = Accidental deaths of livestock 6 = Drought 7 = Lack of government assistance 8 = Theft of livestock	9 = Malnutrition of family 10 = Disease of family 11 = Other (specify)
--	--	--

SECTION 2: Crop husbandry

[ignore this section if crops not listed as source of income in question 4]

6a. Which crops do you grow?

[List all in the table below, using key below]

1 = Maize 2 = Cotton	3 = Millet 4 = Vegetables (specify which)	5 = Other (specify)
-------------------------	--	---------------------

6b. What quantities of each crop do you grow? *[use information to complete table below]*

6c. When do you plant each crop? *[use information to complete table below]*

6d. When do you harvest each crop? *[use information to complete table below]*

6e. What measures do you take to protect each crop?

[List all in the table below, using key below]

1 = Fences 2 = Children guarding	3 = Adults guarding 4 = Repellents (specify)	5 = Other (specify)
-------------------------------------	---	---------------------

Response grid

a. Crop	b. Amount (bags)	c. When planted	d. When harvest	e. Steps to protect	Comments <i>[use if code 5 appears in grid]</i>

Questionnaire reference: _____(Version 2:13/09/09)

7. In what months is it most important to protect your crops?

8a. How do you till your land?

Tractor		Hand hoe		Plough		Other (specify):	
- own		- own		- own		- own	
- hire		- hire		- hire		-hire	

8b. Who is responsible for tilling the land? _____

SECTION 3: Livestock husbandry

[ignore this section if livestock not listed as source of income in question 4]

9. What livestock does your household own?

Cattle: _____ Oxen: _____ Donkeys: _____ Goats: _____ Sheep: _____

Poultry: _____ Dogs: _____ Other (specify): _____

10. What livestock has the household acquired in the last 12 months, and how was it acquired?

	Bought	Born	Traded	Gifts	Other (specify)
Cattle					
Oxen					
Donkeys					
Goats					
Sheep					
Dogs					
Poultry					
Other (specify):					

11a. What do you do to protect your livestock? *[encourage respondent to list all measures]*

11b. Where do livestock drink? *[include distance from homestead]* _____

Questionnaire reference: _____(Version 2:13/09/09)

12a. How do your livestock usually graze: *[use code below to record response for each type of livestock kept]*

Cattle		Goats		Poultry	
Oxen		Sheep		Other (specify):	
Donkeys		Dogs			

1 = Unattended

2 = Herded by children (go to Q12b)

3 = Herded by adults (go to Q12b)

4 = Guarded by dogs (go to Q12c)

12b. Are the guards armed in any way? *[circle appropriate answer]*

No / Yes

If yes, what are they armed with _____

12c. If guarded by dogs, how many? _____

12d. If guarded by dogs, do you use your dogs for any other purpose?

No / Yes

If yes, what purpose(s) _____

13. Do you have a boma?

No (go to Q17)

Yes (go to Q14)

14a. What livestock do you put into your boma? *[circle all that apply]*

1 = Cattle

2 = Oxen

3 = Donkeys

4 = Goats

5 = Sheep

6 = Dogs

7 = Other (specify) _____

14b. What are the reasons for using your boma in the wet season? *[list all reasons in order of importance]*

14c. What are the reasons for using your boma in the dry season? *[list all reasons in order of importance]*

15a. Do you use your boma more: *[circle appropriate answer]*

1= in the wet season than in the dry season

2= in the dry season than in the wet season

3= use same amount in wet and dry season

Questionnaire reference: _____(Version 2:13/09/09)

15b. How often do you put your livestock into your boma in the wet season? *[circle appropriate answer]*

5 = Every night (Go to Q16)

4 = More than once a week

3 = Less than once a week

2 = Rarely

1 = Never

15c. How often do you put your livestock into your boma in the dry season? *[circle appropriate answer]*

5 = Every night (Go to Q16)

4 = More than once a week

3 = Less than once a week

2 = Rarely

1 = Never

16. Can we see the boma?

[Inspect boma and complete all sections of Q16 – do not ask respondent]

16a. What is the distance to the nearest human habitation in meters? _____

16b. Where is the boma situated in relation to village? _____

16c. What is the boma made of?

1 = Poles

2 = Thorn bushes

3 = Piles of sticks

4 = Wire

5 = Other (specify) _____

16d. Write a brief description of the boma, detailing how it is constructed and mentioning the complexity of the design.

16e. How big is the boma, in terms of internal area? *[circle closest answer]*

Small (5 x 5m)

Medium (10m x 10m)

Large (20m x 20m)

16f. Are there gaps in the boma?

No

If no, go to Q16f

Yes

If yes, go to Q16e

Questionnaire reference: _____(Version 2:13/09/09)

16g. Approximately what size are these gaps?

Small (10 cm – 20 cm)

Medium (20 cm – 50 cm)

Large (50 cm – 100 cm)

16h. How tall is the boma at its lowest point (in meters)? _____

16i. How thick are the boma walls on average (in meters)? _____

16j. What is the visibility through boma? [circle closest answer]

5 = No visibility

4 = 25% vis

3 = 50% vis

2 = 75% vis

1 = 75%+vis

16k. Which of the descriptions below best matches the construction of the boma?

5 = Strong poles

4 = Thick branches

3 = Medium branches

2 = Small branches

1 = Small hedge

16l. What is the condition of the poles? [circle as appropriate]

Treated / Untreated

Brittle / Strong

16m. How stable are the poles? [circle as appropriate]

Stable / Unstable

16n. If constructed of wire, please specify construction:

1 = Diamond mesh on poles

2 = Barbed wire (specify number of strands) _____

3 = Other (please specify) _____

[questions below to be directed to respondent]

17. If you don't bring livestock home at night, do you have: [circle appropriate answer]

1 = Armed adults sleeping with them

2 = Unarmed adults sleeping with them

3 = Armed children sleeping with them

4 = Unarmed children sleeping with them

5 = Dogs guarding them

6 = Satellite bomas

7 = No protection (left to roam)

8 = Other (specify) _____

Questionnaire reference: _____(Version 2:13/09/09)

18a. What is the furthest distance from your homestead that you graze the following livestock in the wet season? (km)

Cattle _____ Oxen _____ Donkeys _____ Goats _____

Sheep _____ Other (specify) _____

18b. What is the furthest distance you graze the following livestock in the dry season? (km)

Cattle _____ Oxen _____ Donkeys _____ Goats _____

Sheep _____ Other (specify) _____

18c. Do you graze your livestock in wildlife areas?

No / Yes If yes, which livestock? _____

In what months? _____

And, where and how far? [*distance from homestead*] _____

19. Do you graze all your livestock in one herd?

No / Yes

20. Do you group your livestock with other people's livestock?

No / Yes If yes, with how many livestock? _____

21. Do you dip your livestock?

No / Yes If yes, which livestock? _____

How frequently? _____

22. Do you vaccinate your livestock?

No / Yes If yes, which livestock? _____

How frequently? _____

And, against what? _____

23. Do you collect and dry maize/grass for winter stock feed?

No / Yes

24. How often do you count/take stock of your livestock?

5 = every day	4 = More than once a week	3 = Less than once a week	2 = Rarely	1 = Never

Questionnaire reference: _____(Version 2:13/09/09)

25. Do any of your livestock wear bells?

No / Yes If yes, what livestock and how many?

26. How did your forefathers look after their livestock?

27. Do you think that practices have changed?

No / Yes If yes, why?

SECTION 4: Wildlife in the area

28. Please tell me all of the wild animals that live in this area that you can think of:

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15

[Show each animal picture card and ask the following questions:]

29a. What animal is this? *[If identified incorrectly, record response]*

29b. How regularly do you see this animal in your village?

29c. When was the last time you saw it?

[Use the table below to record responses]

Questionnaire reference: _____(Version 2:13/09/09)

31. How much do you like the following animals, and why?

Species	5 = strongly like	4 = quite like	3 = neither like nor dislike	2 = quite dislike	1 = strongly dislike	Why?
Hyaena						
Elephant						
Lion						
Leopard						
Baboon						
Bushpig						
Genet						
Serval						
Caracal						
Python						
Wild dog						
Jackal						
Cheetah						
Kudu						
Buffalo						
Vervet						
Porcupine						

32. What would you like to see happen to the numbers of the following animals in the area around your village, and why?

Species	Increase	Decrease	Stay the same	Don't know	Why?
Hyaena					
Elephant					
Lion					
Leopard					
Baboon					
Bushpig					
Genet					
Serval					
Caracal					
Python					
Wild dog					
Jackal					
Cheetah					
Kudu					
Buffalo					

Questionnaire reference: _____(Version 2:13/09/09)

33. How important do you think it is to protect wildlife in Hwange National Park?

5 = very important	4 = quite important	3 = neither impt or unimpt	2 = quite unimportant	1 = very unimportant

34. How important do you think it is to protect wildlife in the communal lands?

5 = very important	4 = quite important	3 = neither impt or unimpt	2 = quite unimportant	1 = very unimportant

35. How do you feel about having predators in your area?

5 = very positive	4 = quite positive	3 = indifferent	2 = quite negative	1 = very negative

36. Why do you feel this way?

37. How often are you bothered by each of the following?

37a. When was the last time you were bothered by each of the following?

Species	1=Daily	2=Weekly	3=Monthly	4 = Rarely	5= Never	Last bothered
Hyaena						
Elephant						
Lion						
Leopard						
Baboon						
Bushpig						
Genet						
Serval						
Caracal						
Python						
Wild dog						
Jackal						
Cheetah						
Kudu						
Buffalo						

Questionnaire reference: _____(Version 2:13/09/09)

39b. Can you tell me a bit about the animals you lost to predators?

[please complete table below – one row for each animal lost to a predator:]

Animal lost	Age of animal	Sex of animal	Predator	Month of loss	GPS of incident
1					
2					
3					
4					
5					
6					
7					
8					
9					

40. Do you think that killing of livestock by predators has increased, decreased or stayed the same over the past 12 months?

Increased	Decreased	Stayed the same

41. How many of each animal would you be willing to lose to predators in a year before you would take action against the predator responsible?

Cattle	Oxen	Donkeys	Goats	Sheep	Dogs	Poultry

42. Who do you think is responsible for your losses to predation, and why?

43. How do you think livestock can be better protected against predation?

44. Do you use these methods?

No / Yes If no, why not? _____

SECTION 7: Crop losses

48a. How much of each crop have you lost to each of the following causes in the last 12 months (in bags)? *[for each loss reported, please record which month loss occurred]*

Crop	Maize	Millet	Cotton	Veg	Other (specify)	Month(s)
Trampled by animals						
Eaten by animals						
Disease						
Drought						
Theft						
Other (specify)						

48b. Can you tell me a bit more about the crops you lost to animals, through being eaten or trampled?

[please complete table below – one row for each crop (or part of crop) lost:]

Crop	Amount Damaged	Trampled or eaten	Animal responsible	Month of loss	GPS of incident
1					
2					
3					
4					
5					
6					
7					
8					
9					

49. Do you think that the number of crops lost to animals has increased, decreased or stayed the same over the past 12 months?

Increased	Decreased	Stayed the same

50. How much of each crop would you be willing to lose to animals in a year before you would take action against the animal responsible?

Maize	Millet	Cotton	Veg	Other (specify)

51. Who do you think is responsible for your crop losses to animals, and why?

52. How do you think crops can be better protected against animals?

53. Do you use these methods?

No / Yes

If no, why not? _____

54. What action do you think should be taken after crops are lost to animals? Who do you think should take such action?

SECTION 8: Conservation

55a. Are you aware of the existence of Hwange National Park?

No / Yes

If yes, what do you think of it?

5=Strongly like	4=quite like	3=neither like nor dislike	2=quite dislike	1=strongly dislike

55b. Why?

56. What is the purpose of Hwange National Park? Why does it exist?

57. Have you ever had someone from Hwange National Park come and talk to you about the Park?

No / Yes

If yes, describe the encounter:

58. Do you benefit from the presence of Hwange National Park?

No / Yes

If yes, how? _____

59. Have you heard of the CAMPFIRE scheme?

No / Yes

60. What is the function of this scheme?

61. Have you ever benefited from the CAMPFIRE scheme?

No / Yes

If yes, when/how often: _____

How: *[select from options below]*

	<i>Amount</i>	<i>When? [Year]</i>	<i>Where?</i>
Financial (specify when & amount)			
Meat (specify when & amount)			
Building schools (When? Where?)			
Building roads (When? Where?)			
Drilling boreholes (When? Where?)			
Other (specify, include amount, when & where)			

62. Have you ever received compensation for the loss of livestock?

No / Yes

If yes, from whom?: _____

When?: _____

How much?: _____

For what loss?: _____

Questionnaire reference: _____(Version 2:13/09/09)

63. How much compensation (in US \$) do you think is appropriate for the loss of a:

Cattle	Oxen	Donkey	Goat	Sheep	Dog	Poultry

64. Have you ever received compensation for the loss of crops?

No / Yes

If yes, from whom?: _____

When?: _____

How much?: _____

For what loss?: _____

65. How much compensation (in US \$) do you think is appropriate for the loss of an acre of:

Maize	Millet	Cotton	Vegetables	Other (specify)

66. In your opinion, are there any positive aspects of having wild animals in your area?

No / Yes

If yes, what?

67. In your opinion, are there any negative aspects of having wild animals in your area?

No / Yes

If yes, what?

68. Do you feel the benefits of having predators in your area outweigh the negative aspects?

No / Yes

Why?

Questionnaire reference: _____(Version 2:13/09/09)

69. Do you think it is necessary to control the predation of livestock by wild animals?

No / Yes

If yes, which of the following methods do you think are appropriate?

[if more than one, please rank your choices, 1 for the most preferred and so on]

Method	Rank
Improving methods for protecting livestock	
Avoiding areas with high risks	
Financial compensation	
Removing problem animals	
Eradication of predators	
Fencing the Park	
Other (specify):	

70. Do people in this household ever need to take action to control wild animals?

No / Yes

If yes, what action? _____

How often? _____

If no, why not? _____

71. Have you ever killed a wild animal yourself?

No / Yes

If yes, what kind? _____

How many? _____

When? _____

Where? _____

72. Has anyone else in the household ever killed a wild animal?

No / Yes

If yes, what kind? _____

How many? _____

When? _____

Where? _____

[Thank the respondent and give information about how and when he will know the results of the study – refer to separate notes]

APPENDIX S2

South Rift Attitudinal Survey

I. Respondent Information:

Respondent Name:	Interviewer Name:

Survey number	Date (day, month, year)	Group Ranch	Sub location

Age (years)	Age Set	Sex	Community (Tribe)	Clan

Marital Status	Main Occupation	Main Source of Household Income	Religion	Education*

(*Education level completed - none, primary, secondary, or tertiary.)

II. Introduction

1. Kaia ilarin litobiko te le ale?

0-5 years	6-10 years	10-20 years	21-30 years	30+ years

2. Kaji apa inguaa dee ilotu ele ale?

Where did you come from when you came to this group ranch?

--

3. Kainyo pee indurra?

4. Ilyiolo Kainyo eji eramatare oongwesi?

Yes	No
-----	----

Tolimu (Define):

5. Ke ngai oas eramatare oongwesi? (Tick which applies and list any others mentioned in the blank spaces)?

Communities	Government	KWS	Researchers	Tourists	Conservation organizations		
-------------	------------	-----	-------------	----------	----------------------------	--	--

--	--	--	--	--	--	--	--

II. Lion Conservation

6. Toliki iyook entoki nyito niyiolo torquak loormaasai o lowuarak

7. Kama ilowuarak toolarin tomon ootulusiote Keteporiari enaa kuti keba enaa oshiake? (indicate which one)?

Increased	Decreased	Stayed the same	Don't know	Haven't been here for 10 years

Kianyoo:

8. Kegirai aramat ilowuarak ena murua inyi (Tena kegirai tolimu iltunganak arashu inkapumnini ngaira aramat?)

Yes	No
-----	----

List:

9. Kebaa duputo natumi teneramati ilowuarak tooleto toonguesi tolosho lekenya (Tick which applies) ?

Very important	Quite Important	neither important or unimportant	quite unimportant	very unimportant

10. Kebaa duputo natumi teneramati ilowuarak toonkuapi inyi (Tick which applies)?

Very important	Quite Important	neither important or unimportant	quite unimportant	very unimportant

11. Tolimu iturruri oogira aadupore ilowuarak tolosho lekenya (List all below).

12. Keetay aikae oltungani oyewuo aliki intay eramatata oolowaurak?

Yes	No
-----	----

Tenaa Keetay kangay kanu katiiai neia kainyoo orkilikuai (for where 1=community meeting/baraza, 2= school visit, 3= Boma visit, 4 =Visit following conflict, 5=Other)

Who	When	Where	Message

13. Kebaa dupoto natumiko emurua inyi tena ramatata oolowuarak?

No benefits	Small benefits	Not sure	Big benefits	Very big benefits

14. Kangay otumito dupoto temurua inyi toolowuarak (tolimu ilurruri pookin ootumito dupoto naa kaabilaa / dupototo)?

Group	Benefit	Whom

15. Kebaa dupoto nitumitumito iyie tooluwuara ootii ena nurua ino?

No benefits	Small benefits	Not sure	Big benefits	Very big benefits

16. Kababla edupoto inato naa katengay inoto?

Group	Benefit	Whom

17. Kainyao intokiting nemesida teramatata ooluwurak tenamurua inyi?

IV. Human-Lion Interactions

18. Itaduaa aikata olowuaru?

Yes	No
-----	----

19. Kii toi inkuna pee itaduaa olowaru (tick all that apply)?

Never	
When herding livestock	
Visits to national parks or conservancies	
Around the Boma at night	
When walking in the bush	
Other:	

20. Kii inko teningadi ileon olowuaru?

21. Kii inko teningadie inkishu inonnok ilowuarak?

22. Amaa enyamali nagira ilowuarak ayau tenaria murua ketopnari ketadoiyie enaa keba oshiake toolarin tomon ootulusoitie (Tick which applies.)

Increased	Decreased	Stayed the same	Don't know	Haven't been here for 10 years

23. Kainyoo? Kainyoo naibelekenya?

24. Tolimu orkilikwai loolowurak oinosa inkishu inonok toolari otulusoyie:

	Lion	Cheetah	Leopard	Hyaena	African wild dog
Was it at this household or elsewhere?					
When (year and month if possible)					
Season (dry/wet)					
In bush, or at boma?					
Time of day					
Livestock type					
No. livestock present					
No killed					
No. injured but not killed					
Who was with the livestock?					
Was there a dog with the stock?					
Were any adults present?					
Did anyone see the attack?					
Number of predators					
Sex/age of predators					
What happened to the predator					

25. Kanu apa ebyaie ilowarar entaarakilena nuura inyi (kainyoo peetaraki ,naakaja, eikunakaki enarata) ?

26. Kaja iyieu nidol egira esiana oolowurak aikunari naa kainyoo?

Increase	Decrease	Disappear completely	Stay the same	Don't know	Why?

27. Kamaa ilowurak ootii ena murua ino karkulengay toi?

APPENDIX S3

South Rift Attitudinal Survey

I. Respondent Information:

Respondent Name:	Interviewer Name:

Survey number	Date (day, month, year)	Group Ranch	Sub location

Age (years)	Age Set	Sex	Community (Tribe)	Clan

Marital Status	Main Occupation	Main Source of Household Income	Religion	Education*

(*Education level completed - none, primary, secondary, or tertiary.)

II. Introduction

1. How long have you lived in this group ranch?

0-5 years	6-10 years	10-20 years	21-30 years	30+ years

2. Where did you come from when you came to this group ranch?

--

3. Why did you move?

4. Do you know what conservation is?

Yes	No
-----	----

Define:

5. Who does conservation? (Tick which applies and list any others mentioned in the blank spaces)?

Communities	Government	KWS	Researchers	Tourists	Conservation organizations		

II. Lion Conservation

6. Tell us a personal story about Maasai and lions.

7. Have lion numbers in your group ranch decreased, increased, or stayed the same over the last ten years and why (indicate which one)?

Increased	Decreased	Stayed the same	Don't know	Haven't been here for 10 years

Why:

8. Are lions protected in your group ranch (if yes, list the people and organizations that help protect them)?

Yes	No
-----	----

List:

9. How important do you think it is to protect lions in Kenya's National Parks (Tick which applies)?

Very important	Quite Important	neither important or unimportant	quite unimportant	very unimportant

10. How important do you think it is to protect lions on community lands (Tick which applies)?

Very important	Quite Important	neither important or unimportant	quite unimportant	very unimportant

11. Name all the groups that benefit from lions in Kenya (List all below).

12. Have you ever had someone come and talk to you about lion conservation?

Yes	No
-----	----

If yes who, when, where and what was the message (for where 1=community meeting/baraza, 2=school visit, 3= Boma visit, 4 =Visit following conflict, 5=Other)

Who	When	Where	Message

13. How much benefit do you think **your group ranch** receives from the presence of lions in this area?

No benefits	Small benefits	Not sure	Big benefits	Very big benefits

14. Who gets the benefits from lions in **your group ranch** (list all groups and type of benefit and from whom it came)?

Group	Benefit	Whom

15. How much **personal benefit** do you receive from the presence of lions in this area?

No benefits	Small benefits	Not sure	Big benefits	Very big benefits

16. What types of benefit have **you** received and from whom (list all groups and type of benefit and from whom it came)?

Group	Benefit	Whom

17. What are the disadvantages of lion conservation in your area (list below)?

IV. Human-Lion Interactions

18. Have **you** ever seen a lion?

Yes	No
-----	----

19. Under what circumstances have you seen lions (tick all that apply)?

Never	
When herding livestock	
Visits to national parks or conservancies	
Around the Boma at night	
When walking in the bush	
Other:	

20. How do you protect yourself from lions?

21. How do you protect your livestock from lions?

22. Do you think the problems caused by lions in this group ranch have increased, decreased or stayed the same over the past 10 years? (Tick which applies.)

Increased	Decreased	Stayed the same	Don't know	Haven't been here for 10 years

23. Why? What has changed?

24. Please give the following information about the carnivore attacks on **your** livestock that occurred in the last year:

	Lion	Cheetah	Leopard	Hyaena	African wild dog
Was it at this household or elsewhere?					
When (year and month if possible)					
Season (dry/wet)					
In bush, or at boma?					
Time of day					
Livestock type					
No. livestock present					
No. killed					
No. injured but not killed					
Who was with the livestock?					
Was there a dog with the stock?					
Were any adults present?					
Did anyone see the attack?					
Number of predators					
Sex/age of predators					
What happened to the predator					

25. When was the last time lions were killed on this group ranch (give details of killings when it occurred, the number of lions, how they were killed)?

26. What would you like to see happen to the numbers of lions in this area, and why?

Increase	Decrease	Disappear completely	Stay the same	Don't know	Why?

27. Who do the lions in your area belong to?

APPENDIX S4

Research permit 2005-301-ER-97-20 Version Dec 2012 Survey number _____

Boma (mzee) name _____ Respondent name _____

1. Survey number		2. Date (day, month, year)		3. Interviewer(s)		4. Village		5. Subvillage	
6. GPS S			7. GPS E			8. Waypoint		9. GPS used	
10. Age (years)	11. Sex	12. Ethnic group	13. When did you settle at this household?		14. Religion	15. No. people at this household		16. No. adult dogs at this household	

17. Have you been interviewed by this project before? Yes / No

18. During the last year, have you or anyone in your family at this household received any income from:

	Yes	No	Rank (if needed)	Notes
Selling/exchanging livestock				
Selling crops/vegetables/grain				
Trophy hunting				
Photographic tourism				
Other (specify)				

19. How many livestock do you own? Cattle/calves _____ Smallstock _____ Donkeys _____ Other _____

20. Please fill in this information for stock at this household, for the last month? Month _____

	No. at start	No. sold	No. slaughtered	No. given away	No. stolen	No. killed by large carnivores	Large carnivores responsible	No. died from disease	No. died from other causes	What were other causes
Cattle										
Smallstock										
Donkeys										
Other										

21. Is it a good or bad thing for you, to have large carnivores living in this area (within 1 day's walk of boma)?

Very bad	Bad	Not sure	Good	Very good
----------	-----	----------	------	-----------

Why? _____

22. Is it a good or bad thing for you, to have the Ruaha Carnivore Project working in this village? (select one)

Very bad	Bad	Not sure	Good	Very good
----------	-----	----------	------	-----------

Why? _____

23. Is the presence of Ruaha National Park good or bad for you? (select one)

Very bad	Bad	Not sure	Good	Very good
----------	-----	----------	------	-----------

Why? _____

24. Have you ever experienced any of the following? (circle the appropriate response)

Wildlife DVD night from RCP? Yes / No When? _____
 Household visit from RCP? Yes / No When? _____
 Gone on a Park visit with RCP? Yes / No When? _____
 Given noisemaker from RCP? Yes / No When? _____
 Had a wire boma made by RCP? Yes / No When? _____
 If yes, how useful do you think it has been? Useful / Not useful / Don't know
 Other help or input from RCP? Yes / No Details if yes _____

Have you heard of the Lion Guardians programme? Yes / No
 Any involvement with Lion Guardians? Yes / No Details if yes _____
 If yes, how do you feel about the Lion Guardian programme? Like / Dislike / Don't know

25. How much personal benefit do you receive from the presence of large carnivores in this area?

No benefits	Small benefits	Not sure	Big benefits	Very big benefits
-------------	----------------	----------	--------------	-------------------

What are these benefits (if there are any)? _____

26. How much benefit does your household receive from the presence of large carnivores in this area?

No benefits	Small benefits	Not sure	Big benefits	Very big benefits
-------------	----------------	----------	--------------	-------------------

What are these benefits (if there are any)? _____

27. How much benefit do you think your village receives from the presence of large carnivores in this area?

No benefits	Small benefits	Not sure	Big benefits	Very big benefits
-------------	----------------	----------	--------------	-------------------

What are these benefits (if there are any)? _____

28. Do you think the benefits of large carnivores to local people in this village have increased, decreased or stayed the same over the past 5 years?

Increased / Decreased / Stayed the same / Don't know

Why? What has changed? _____

29. Do you think the problems caused by large carnivores in this village have increased, decreased or stayed the same over the past 5 years?

Increased / Decreased / Stayed the same / Don't know

Why? What has changed? _____

30. Overall, how much of a problem do you think large carnivores pose to you?

A big problem / A small problem / No problem / Don't know

Attitudes and knowledge

31. Can you sort these pictures into animals that are a big problem, small problem or no problem to you, and explain why? (show picture cards):

	Identification		Do you know the animal?	Does species occur here? (1 days walk?)	Problem?			Why is it a problem?
	Right Y/N	Species confused with			Big	Small	No problem	
Giraffe								
Elephant								
Hippo								
Lion								
Leopard								
Cheetah								
African wild dog								
Spotted hyaena								
Striped hyaena								
Impala								
Tiger								
Serval								
Rhino								
Crocodile								
Snake								
Buffalo								
Jackal								
Wildebeest								
Warthog								
Zebra								

32. Which animal (even if it has not been mentioned so far) causes the biggest problems to you in this area? Why (if it hasn't been explained above)?

33. What do you think has happened to the numbers of the following animals in this area (1 day's walk), in the time period since you came to this boma?

	Increased	Decreased	Stayed the same	Don't know
Lion				
Cheetah				
Leopard				
Spotted hyaena				
African wild dog				

34. What would you like to see happen to the numbers of the following animals in this area, and why?

	Increase	Decrease	Disappear completely	Stay the same	Don't know	Why?
Lion						
Cheetah						
Leopard						
Spotted hyaena						
African wild dog						

35. Please give the following information about the most recent carnivore attacks on your livestock:

	Lion	Cheetah	Leopard	Spotted hyaena	African wild dog
When (year and month if possible)					
Season (dry/wet)					
In bush, or at boma?					
GPS location					
Time of day					
Livestock type					
No. livestock present					
No killed					
No. injured but not killed					
Who was with the livestock?					
Was there a dog with the stock?					
Were any adults present?					
Did anyone see the attack?					
Number of predators					
Sex/age of predators					
What happened to the predator					

36. Has there ever been a large carnivore attack on a human at your household? Yes / No

37. Year of attack _____ Species of carnivore _____ Age of person attacked _____

38. No. of people killed _____ 39. No. of people injured _____

40. If your livestock is killed by a predator what is your normal response? (allow to respond, do not suggest – then circle response)?

**Report to game scout (0) Hunt/kill animal (1) Poison animal (2) Scare animal (3) Build fence (4)
Change husbandry techniques (5) Leave area (6) Do nothing (7) Other (8)**

41. Attitudes (circle one response)	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. I feel lions have the same rights as livestock to live on this land					
b. I would be happier if there were no lions					
c. I feel that lions are beautiful animals					
d. God would want me to protect all the wildlife					
e. Lions deserve protection					
f. Lions have a right to exist					
g. It is important to me that my grandchildren see lions					
h. I think there are too many lions					

42. Killing Attitudes/Subjective Norms/Behavioral Intentions	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
a. Killing a lion for prestige/status is acceptable?					
b. If lions are a problem, it is acceptable to use poison on them?					
c. Most people important to me think that killing lions is admirable?					
d. Among my majarani, most would agree that it is a good to kill lions?					
e. Many people important to me would disapprove of me killing lions?					
f. If my cow was killed by a lion I will kill the lion?					
g. I will kill a lion to defend my property?					
h. If a family member was injured by a lion I would kill it?					
i. If a lion entered my boma I would kill it?					
j. When I see a lion in the bush I will kill it?					

43. Have you ever killed a large carnivore? Yes / No

44. How many have you killed? Lions _____ Cheetahs _____ Hyaenas _____ Wild dogs _____ Leopards _____

45. When was the last time you killed a large carnivore? _____

46. Why did you kill it? _____

47. How did you kill it? _____

48. Would you be willing to engage in monthly monitoring with us? Yes / No

Thank you for your participation!