

Ambio

Electronic Supplementary Material

Title: **The drivers and extent of poison use by Namibia’s communal farmers: Implications for averting the African vulture crisis**

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Supporting Information

S1. Survey questions

(Questions in italics represent data which has been/will be included in separate publications)

Survey number_____ **Interviewer**_____

Date_____ **Time**_____ - _____ **Consent given** _____

1.) Gender: Male___Female___ **Consent translated**_____

2.) Ethnic group

Damara	Himba	Ovambo	Mixed
Nama	Herero	Kavango	Other
San	Caprivian	Tswana	

3.) Age_____

4.) How long have you farmed in this area?_____

5.) How many people are in your household? _____

6.) What is your household’s main source of income?_____

7.) Do you belong to a conservancy? Yes___ No___

If yes: 8.) Do you and your household benefit from belonging to the conservancy? Yes___ No___

*,If yes..how do you benefit (a)?*_____

Livestock

9.) In the last 12 months what is the main cause of livestock loss?

Drought	Disease	Injury	Other
Stolen	Lost	Unknown	
Predator	Stillborn	Fell down hole	

10.) Livestock numbers and losses to predators (in the last 12 months)?

Type of Livestock	Number lost	Replacement cost	Predator	Compensation (Yes/No)?

a.) Were you able to vaccinate your animals this year? If not what prevented you from vaccinating?

11.) When last did you lose livestock? _____

12.) What is the best way to prevent livestock from being predated? _____

13.) I am going to say a statement: Strongly agree, somewhat agree, neutral, somewhat disagree, strongly disagree

- a.) Game animals are a valuable resource to my community _____
- b.) Game belong in national parks and not in the farmlands _____
- c.) Predators are a valuable resource to my community _____
- d.) Predators belong in national parks and not in the farmlands _____
- e.) Predators that kill livestock should be killed _____

Crops

14.) In the last year were any of your household's crops damaged by wildlife? Yes _____ No _____

15.) Which crops? _____

16.) What animal was mainly responsible? _____

17.) Did you get compensation for these damages? Yes_____ No_____ Not Yet_____

Infrastructure

18.) In the last year were any of your household's infrastructures (water pipes, buildings,fences) damaged by wildlife? Yes_____ No_____

19.) What infrastructure?_____

20.) What animal was mainly responsible?_____

Vultures: beliefs, knowledge and attitudes

I am going to say a statement: Strongly agree, somewhat agree, neutral, somewhat disagree, strongly disagree

21.) I like to see vultures in this area _____

a.) "Can you tell me why you agree/disagree with this?" _____

22.) Vultures are useful to have in this area _____

a.) "Can you tell me why you agree/disagree with this?" _____

23.) Are there any beliefs about vultures in your culture?_____

24.) Do vulture body parts have any uses in your culture? _____

a.) If yes... What for?_____

25.) What is the main thing that you see vultures eating?_____

26.) In the last five years have the number of vultures in this area:

Decreased:_____ Increased:_____ Stayed the same:_____

a.)Why do you think this is?_____

27.) In the last five years have you seen any dead vultures in this area?

a.) Yes_____ No_____ b.) How many?_____ c.) How did they die?_____

Other farmers in your province

28.) In your province what do you think is the most popular method used by farmers to control predators?

Trap	Shoot	Other:
Poison	Snare (wire)	

29.) How often do you think farmers in your province over the past year use poison to kill predators?

Often	Sometimes	Never	Don't know
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30.) Why do you think farmers in your province use poison rather than other predator control methods?_____

31.) What poisons do they use?_____

a.)How do they use them?_____

b.)Where does the poison come from?_____

Randomised response technique*

*We used a technique called the randomised response technique (RRT) to ask farmers direct questions about poison, this technique gave the farmers some protection to answer honestly without us knowing. It works like this:

We will have a bag with 10 balls in it:

8 are white

1 is yellow

1 is blue

The farmer should take a ball out of the bag without showing us what colour they have. We will ask them a question and they should answer according to which ball they get. They should answer as follows

White: give a TRUE answer

Blue: Say NO regardless of what their true answer is

Yellow: Say YES regardless of what their true answer is

This way if a farmer says yes to one of the questions we won't know whether it was because they are telling the truth or because they got a white ball

RRT questions

32.) *In the last year did you or someone in your household kill any predator?*_____

33.) In the last year did you or someone in your household use poison to kill any predator?_____

34.) Would you consider using poison to kill a predator, if your household lost livestock to predators?_____

35.) *In the last year did you or anyone in your household kill any vultures by accident?*_____

Commercial vs. Communal

36.) We conducted this study in commercial areas and found that many commercial farmers use poison. It appears that communal farmers do not use poison as often, why do you think this is?