

QUESTIONNAIRE - IVMP

The researcher(s) is /are from the University of Cape Coast, School of Biological Sciences, Department of Conservation Biology and Entomology who is conducting a research to determine the status of vulture population and threats facing them in Ghana. Please spare a few minutes of your valuable time to answer these questions on vultures as far as can. All responses would be treated as confidential and will be used strictly for the purpose of this project and nothing else. Thank you.

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Project Director

Date

A. DEMOGRAPHY OF RESPONDENTS

1. Personal Details of Respondents

Name

2. Age

- <20 years
- 21 – 40 years
- 41 – 60 years
- 61 - 80 years
- > 80 years

3. Gender

- Male
- Female

4. Religion

- Christian
- Islam
- Traditional
- Others (Specify)

5. Name of Community

6. How long have you lived in this community?

- 1-5 years
- 11-15 years
- 16-20 years
- >20 years

7. Place of birth

8. Hometown

9. Level of Formal Education

- Primary
- Secondary
- Tertiary
- None

10. Occupation

B. KNOWLEDGE OF VULTURES

11. Do you know what a vulture is?

- Yes
- No

12. Have you seen a vulture before?

- Yes
- No

13. How do you call vultures in your community?

14. What do you think of vultures?

- Dirty
- Evil
- Bad Omen
- Nuisance

15. What do you know about vultures?

- They are scavengers (feed on dead animals)
- They have good sense of smell and sight
- They prevent spread of diseases
- Others (Specify)

16. How did you get to know of vultures?

- Stories
- Church
- School
- Friends
- Traditionalist
- Personally see them in nature

17. When was the last time you saw a vulture?

- ≤ 4 week
- ≤ 6 week
- ≤ 11 month
- 1 - 5 years
- 5 - 10 years
- > 10 years

18. How many of them did you see?

- 1 - 5
- 6 -10
- 11 - 15
- 16 - 20
- > 20

19. Where did you see them?

- Slaughter House
- Landfill site
- Market
- Behind your house
- In flight
- On a tree
- Farm
- Community

20. Which of the vultures do you know? Please tick as many as applicable. (Show each Pictures)

- Hooded Vulture (*Necrosyrtes monachus*)
- Palm-nut Vulture (*Gypohierax angolensis*)
- Egyptian Vulture (*Neophron percnopterus*)
- African White-backed Vulture (*Gyps africanus*)
- White-headed Vulture (*Trigonoceps occipitalis*)
- Ruppell's Griffon Vulture (*Gyps rueppellii*)
- Eurasian Griffon Vulture (*Gyps fulvus*)
- Lappet-faced Vulture (*Torgos tracheliotus*)

C. CULTURAL AND SPIRITUAL IMPORTANCE OF VULTURES

21. Do you think vultures are important spiritually?

- Yes
- No

22. If yes, how are they important?

- Witchcraft
- Sign of bad omen
- Have spiritual powers
- Devil
- Others (Specify)

23. Do vultures have any cultural importance?

- Yes
- No

24. If yes, what are they?

- Totem
- Strength
- Patience
- For sacrifice
- Others (Specify)

25. Do you know any tribe that has vultures as their totem in Ghana?

- Yes
- No

26. If yes, name it.

27. What does it mean to this tribe?

D. IMPORTANCE OF VULTURES

28. Do you think vultures are important?

- Yes
- No

29. For each statement, please mark one response that indicates you Agree or Disagree. The scale ranges from Agree, Neutral and Disagree

	Agree	Neutral	Disagree
Vultures dispose of human and animal waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vultures prevent the spread of disease to humans	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vultures reduce interactions and spread of disease between other scavengers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vultures serve as ecosystem indicators	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vultures clean the environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Vultures are important source of protein	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E. VEGETATION ASSOCIATION

30. Where do vultures that you see perch?

- Roof
- Trees
- Ground
- Others (Specify)

31. Have you seen a vulture nest before?

- Yes
- No

32. If yes, where did you see the nest?

- On a tree
- On the ground
- Others (Specify)

33. What type of trees do you normally see vultures perch?

- Ceiba (Onyina)
- Odum
- Coconut
- Ofram
- Others (Specify)

34. What is the size of the trees you normally see vultures roost?

- 1 - 20 cm DBh
- 20 - 40 cm DBh
- 40 - 60 cm DBh
- 60 - 80 cm DBh
- 80 - 100 cm DBh
- > 100cm DBh

35. How tall is the tree?

- 1 - 10 m
- 10 - 30 m
- 30 - 50 m
- 50 - 70 m
- >70 m

F. BEHAVIOUR AND INTERACTIONS

36. Have you seen a vulture feeding before?

- Yes
- No

37. Where was it feeding?

- Landfill
- Dumpsite
- Abbatoir
- Slaughter house
- Slaughter slab
- Road
- Others (Specify)

38. What was it feeding on?

- Dead animal
- Pecking on remains
- Others (Specify)

39. Were there other animals or scavengers in the company of the vultures?

- Yes
- No

40. Which type of animals were they?

- Crows
- Yellow-billed Kites
- Egrets
- Feral dogs
- Human
- Sparrows
- Others (Specify)

41. How were the other scavengers relating to each other and the vultures?

- Crows were chasing kites
- Kites were chasing crows
- Kites were chasing vultures
- Vultures were chasing kites
- Crows restricting vultures from feeding
- Vultures were restricting crows from feeding
- Crows were chasing vultures
- Others (Specify)

G. TRADITIONAL MEDICINE

42. Are you aware that vultures are being used in traditional medicine?

- Yes
- No

43. If yes, how did you get to know that?

- Through relatives
- Through friends
- Personal encounter
- Others (Specify)

44. Which part of the vulture is needed for traditional medicine?

- Head
- Feathers
- Legs
- Brain
- Eggs
- Others (Specify).....

45. Which type of vulture species is being used in traditional medicine?

- Hooded vulture (*Necrosyrtes monachus*)
- Palm-nut vulture (*Gypohierax angolensis*)
- Egyptian vulture (*Neophron percnopterus*)
- White-backed vulture (*Gyps africanus*)
- Rueppell's griffon (*Gyps rueppellii*)
- White-headed vulture (*Trigonoceps occipitalis*)

46. What features do traditionalist use to identify the specific species of vulture(s) needed for medicinal purposes?

- Colour of the vulture
- Flight mode
- Habitat
- Size

47. Which type of disease(s) are they used to heal?

- Stroke
- Epilepsy
- Curse
- Hypertension
- Madness
- Barrenness
- cancer
- Others (specify)

48. Are the outcomes of the healing process positive?

- Yes
- No

49. Any side effect after use of vulture/vulture part in traditional medicine?

- Yes
- No

50. If yes what was the effect on the victim?

- Death
- Madness
- Abnormality
- Others (Specify).....

51. Are vulture parts used for other purposes except medicine?

- Yes
- No

52. If yes what are they used for?

- Money rituals
- Incantation
- Food
- Others (Specify)

53. Which tribe(s) in your area use vultures for traditional medicine?

- Ga
- Akans
- Ewes
- Dagombas
- Daguwa
- Nigerians
- Togolese
- Others (Specify)

54. Do you know any of these traditionalist involved personally?

- Yes
- No

55. How long has the traditionalist been operating in this community?

- 1-5 yrs
- 6-10 yrs
- 11-15 yrs
- 16 - 20 yrs
- > 20 years

H. THREATS TO VULTURES

56. Do you keep livestock at home?

- Yes
- No

57. If yes, what type of livestock do you keep at home?

- Fowl
- Sheep
- Goat
- Cattle
- Others (Specify)

58. What are the common diseases that affect livestock in your community?

- Coccidiosis
- Foot and mouth disease
- Foot rot
- Ringworm
- Anthrax
- Pneumonia
- Others (Specify)

59. Do you send your livestock for veterinary attention?

- Yes
- No

60. If yes, what type of veterinary drugs do you use?

- Chlormphenicol
- Diclophenac
- Fluconazole
- Others (Specify)

61. If your livestock dies how do you dispose of it?

- Bury
- Dumpsite
- Burn
- Consume
- Others (Specify)

62. Do you own a farm?

- Yes
- No

63. How do you get rid of pest (rats) on your farm?

- Trap them
- Poisoned baits
- Others (specify)

64. Have you seen vultures feeding on dead animals since you started your pest control measures in the farm?

- Yes
- No

65. Have you seen a reduction in tree cover in your community?

- Yes
- No

66. How much do you think tree cover has reduced?

- ≤ 10%
- ≤ 20%
- ≤ 30%
- ≤ 50%
- ≤ 80%
- ≤ 100%

67. What type of trees have you lost?

- Ceiba
- Odum
- Wawa
- Coconut

68. What is accounting for the loss of trees?

- Deforestation
- Selective logging
- Construction of roads
- Construction of power lines
- Illegal logging
- Mining
- Farming

69. Have you seen a dead vulture before?

- Yes
- No

70. If yes, where did you see it?

- On the road
- Electric pole
- Farm
- Permanent waterhole
- Others.....

71. How many dead vultures did you see?

- 1-5
- 6-10
- > 10

72. Did you find any other dead animal apart from the vulture?

- Yes
- No

73. If yes, what other animal was it?

- Feral dogs
- Insects
- Kites
- Crows
- Others (Specify)

I. TRADE AND TRAFFICKING OF VULTURES

74. Are you aware or heard someone selling vultures/vulture parts?

- Yes
- No

75. If yes, who is that person?

- Friend
- Trader
- Hunter

76. Where was the vulture/vulture part being sold?

- Main market
- Friends house
- Black market
- On demand
- Others(specify).....

77. How easy can you get to buy a vulture/vulture part?

- Very easy
- Easy
- Difficult
- Very Difficult
- Any time on demand

78. What is the average price of vulture part?

- 1-5 GHC
- 5-10 GHC
- 10-50 GHC
- 50-100 GHC

79. How lucrative is the sale of vulture/vulture parts?

- Very lucrative
- Neutral
- Not lucrative

J. POPULATION TREND (PAST AND CURRENT)

80. In the past 10 years were you seeing alot of vultures?

- Yes
- No

81. How many could you see at a time?

- 10 vultures
- 20 vultures
- > 50 vultures

82. Do you think the number of vultures has decreased within the past 5 years?

- Yes
- No

83. How would you compare the recent vulture population to that of the past?

	No Idea	Very Low	Low	High	Very High
5 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
> 10 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

84. If yes, what do you think is the cause? Tick as many as applicable.

- Habitat loss and removal of large trees
- Starvation
- Direct or indirect poisoning
- Vehicle Collision
- Persecution
- Hatred
- Improved slaughter house hygiene and waste disposal
- Others(Specify).....

K. CONSERVATION OUTLOOK FOR VULTURES

85. Do you think vultures are important and need to be protected?

- Yes
- No

86. What do you think can be done to protect vultures?

Agree

Neutral

Disagree

Education and creating public awareness among local people on issues concerning vultures

Avoiding indiscriminate disposal of veterinary drugs

Reduce speed when driving past vultures feeding on roads

Stop indiscriminate felling of trees

Participate in conservation education programmes

We should conserve vultures for the future generation

It is important to protect breeding sites of vultures